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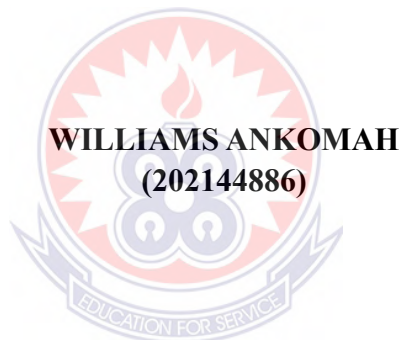
CAPITAL STRUCTURE AND FIRM PERFORMANCE: THE MODERATING ROLE OF CORPORATE GOVERNANCE OF FIRMS IN GHANA.

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CAPITAL STRUCTURE AND FIRM PERFORMANCE: THE MODERATING ROLE OF CORPORATE GOVERNANCE OF FIRMS IN GHANA.

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OCTOBER 2022

DECLARATION

Candidate's Declaration

I, **Williams Ankomah**, hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Signature: ....

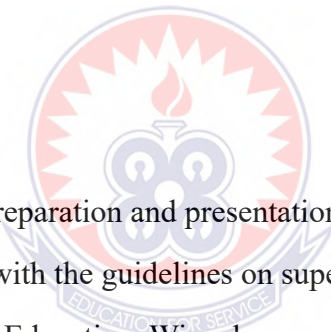**Date:** …………………...................................

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Education, Winneba.

Dr. Jonas Ladime (Supervisor)

Signature: ………..............................

Date: ………......................................

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I am extremely grateful to God for his guidance and divine security during this academic exercise. I sincerely acknowledge individuals who have been instrumental during this period.

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To you all, I say God Richly bless you.

DEDICATION

I dedicate this work to my entire Family.

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LIST OF ABBREVIATION

BS   Board Size

BGD   Board Gender Diversity

BC   Board Composition

ROA   Return on Asset

ROE   Return on Equity

TQ   Tobins Q

TDTA   Total Debt to Total Asset

BSTDTA   Board Size Total Debt to Total Asset

BCTDTA   Board Composition Board Size Total Debt to Total Asset

BGDTDTA Board Gender Diversity Board Size Total Debt to Total Asset

CG   Corporate Governance

CSR   Corporate Social Responsibility

GSE   Ghana Stock Exchange

ABSTRACT

Capital structure has been proffered to influence the performance of companies whilst the corporate governance measures ensured by companies can also influence the performance of companies. This study sought to investigate the relationship between capital structure and financial performance of companies, to find the relationship between corporate governance and financial performance of companies and to examine whether corporate governance moderate the capital structure-performance relationship. The study used causal research design and quantitative research approach. Population for the study was 38 listed companies on the GSE, purposive sampling technique was used to select 11 companies.

Multivariate regression method through ordinary Least square estimation was employed. The result showed that capital structure has positive relationship with financial performance. On the other hand, corporate governance mechanisms such as BS, BC, BGD has positive effect on financial performance. Further, the study observed that corporate governance significantly moderates the capital structure-financial performance nexus and in a negative direction except BCTDTA which moderated the relationship in a positive direction. The study recommends industrial players to ensure appropriate corporate governance measures, ensure right combination of equity and debt in their capital mix since its influences financial performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

This study seeks to explore the relationship between capital structure and firm performance by investigating the moderating role of corporate governance practices on firms listed on Ghana stock exchange. The study will relate other empirical studies on capital structure and performance but will focus on investigating the role of corporate governance practices as a moderator. This study provides useful guidelines for the corporate sector, financial institutions, shareholders, depositors and investors as these can help companies to react effectively and efficiently to different economic conditions. This chapter covers the introduction, background of the study, research problem, purpose of the study, research objectives and questions, research significant and limitation of research.

The link between corporate governance and capital structure becomes important when discussing its impact on value creation (Bhagat and Jeffries, 2002). Corporate governance basically has to do with dealing in the interest of corporate investors and stakeholders in a corporation or a firms, to have balancing interest in an organization. This is a way firms adapt to deal with their principal and agent conflict, investors' confidence, firm goodwill, wealth of shareholders and investment opportunities. The direction of the firm and the supervision of the firm is being provided by corporate governance and a change in the debt and equity mix affects the governance activities

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of the firm. There is evidence that corporate governance has a direct relationship with the capital structure based on existing literature. On the one hand, the two have a positive relationship and that is because, **first**, when the board size is large, the decision-making efficiency of the board may decline, which makes it difficult for board members to reach a consensus in the decision-making process, leading to high leverage (Abor & Biekpe, 2007). At the same time, larger board size means more serious agency problems caused by corporate control and ownership and based on agency theory, this means more debt capital is needed to alleviate agency problems. **Second**, creditors have perception that companies with larger boards implement more effective supervision and as a result, the cost of debt goes down (Bokpin & Arko, 2009; Rehman et al., 2010).

Vakilifard et al. (2011) found that board size is negatively associated with leverage, implying that large boards are related to coordination, communication and decision-making issues, and hence, ineffective in avoiding entrenched CEOs from pursuing lower leverage ratio. Another explanation is for companies with a large board, the management will face more supervision pressure, thus forcing them to reduce leverage ratio and improve corporate performance. On the other hand, studies have been done on the effect of capital structure and firm performance too, Nyonna (2012) found significant but negative association leverage (capital structure) and managerial ownership but the moderating role of corporate governance on financial decisions (capital structure) and firm performance has received little attention in Ghana.

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Furthermore, literature of corporate governance and capital mix shows inconsistent results. And the results vary. But main objective of this paper is to carefully examine the relationship between leverage levels and firm performance with moderating role of corporate governance practice of firms in Ghana. A positive and significant relation was reported between board size and debt ratio, while size, director remuneration and tangibility of assets Masnoon and Raif (2013).

Abor (2007) stated the significant and positive impact between corporate governance and financial decisions. Moreover, good cg practice among firms has more opportunities to get debt financing than those who have not executed good corporate governance practice, such firms pay off their dues, interest and debt on time. (Butt & Hasan, 2009) found negative connection between corporate governance measures and performance. (Abor, 2007; Chinaemerem & Anthony, 2012) in their papers showed a negative result between corporate governance and performance. Gallegos Mardones and Ruiz Cuneo (2020) found an inconsistent relationship between financial performance and the elements of capital structure among Latin American companies. They also found mixed results for different countries and companies.

An empirical study by Abdullah and Tursoy (2021) on non- financial firms in Germany over 25 years found a significant positive relationship between capital structure and financial performance. They found out that, the lower cost of issuing debt and tax shield from the interest of the debt was the main course of the positive relationship. Vithessonthi and Tongurai (2015) also found a negative relationship

between leverage and the financial performance of firms in Thailand. Various empirical studies of the capital structure and performance relationship have resulted in an ongoing unanswered question about whether capital structure positively or negatively influences the financial performance of firms. From several results, it can be italicized that the relationship between capital structure and firm performance shows inconsistent results.

Therefore, the author place corporate governance as a moderating factor, so that it can further clarify the relationship. Nowadays, with corporate governance, firms have established a new concept/ approach such as Corporate Social Responsibility (CSR). Corporate Governance has substantial and positive impact on Corporate Social Responsibility (CSR) reporting (Khan, 2010); (Sharif & Rashid, 2014). Moreover, the results also found that corporate social responsibility (CSR) has significant and negative association with the corporate governance element: Foreign Directors (Sharif & Rashid, 2014). The findings of this study have practical importance for regulatory authorities and policymakers in terms of improving markets. Apart from research on the relationship of these variables, the role of the CG mechanism as a moderator is recognized by the relationship between capital structure and firm's financial performance.

In general, this study fills the gap in the literature series by capturing the moderating impact of a corporate governance mechanism on the relation between capital structure and firm financial performance. Although several scholars (Ferrero-Ferrero et al.,

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2012; Ibrahim, 2016; Munisi & Randøy, 2013; Nodeh et al., 2016) have examined the relationship between corporate governance to firm performance, the moderating effect of corporate governance on the relationship between capital structure and firm performance has not been discussed. This study provides useful guidelines for the corporate sector, financial institutions, shareholders, depositors, and investors as these can help companies to react effectively and efficiently to different economic conditions. In addition to, this serves as a good recipe for managers to consider a suitable set of corporate governance models related to the specific firm system in their decision-making process.

1.2 Problem Statement of the Study

First of all, financial institutions play a primary role in the intermediation of savings and investment, as well as in servicing the economic agents with an efficient payment system (Darmadi, 2011). Failure of financial institutions due to poor governance mechanisms will mean that their impact on the economy could be damaging and destabilizing (Delpiano & Chin-Loy, 2014). The systemic risk from` Financial institutions failures need to be avoided and hence the study of the corporate governance of banks takes priority in any economy. While there is extensive research done on the relationship between corporate governance structure and the performance of financial institutions in the advanced economies (Bektas, 2014; Davis, 2012).The collapse therefore of indigenous Ghanaian universal banks has become a setback to the efforts of promoting indigenous Ghanaians to take control of the Ghanaian economy, thereby, building strong local institutions (Akrong, 2017).

The history of bank failures in Ghana is dominated predominantly with local banks with some form of evidence dating as far back the early 2000s (Atuahene, 2016). Arising from high profile bank failures and distresses, coupled with generally poor performance, across the banking sector, the credibility of the existing corporate governance structures has been put into question (Atuahene, 2016). For instance, the collapse of banks in Ghana in the late 2000s was as a result of inadequate corporate governance practices such as ineffective board practices, insider related credit abuses, poor risk appreciation, and internal control failures (Atuahene, 2016).

One would have expected that lessons learnt from our history as far back as the late 2000s would have ensured that no local bank collapse again, but unfortunately that has not been the case as the banking sector recently witnessed the collapse of two local indigenous banks in August 2017, and the consolidation of five other local banks, a year later. (Ghana Banking Survey, 2018). Other deposit taking financial institutions managed by indigenous Ghanaians, and other similar microfinance institutions have further added to the crisis in the financial sector, and this is raising serious concerns about the ability of local individuals to manage indigenous banks (Ghana Banking Survey, 2017). Akrong (2017), argues that the numerous cases of corporate failures are an indictment of the existing corporate governance structures. In the aftermath of the financial crises in 2007, OECD (2014) on the corporate governance lessons from the crises concluded that; "the crises were largely due to failures and weaknesses in corporate governance arrangements which could not serve their purpose to safeguard against excessive risk taking by the financial institutions. The financing decision's

effect on firm profitability has been described as the most confusing. The introduction of debt capital leads to agency costs between the managers and shareholders and between managers and debt holders Jensen and Meckling (1976). Equity holders are much more interested in their business's capital structure as more debt can have detrimental consequences on the return on equity. Increasing debt capital may lead to higher operational risk and a higher interest ratio. Capital structure decisions should be made with an understanding of the risk-return relationship about debts.

Capital structure and its impact on firm performance has been a topic of interest for developing countries, different dimensions of firm performance have been used in these studies by scholars (such as Ferrero-Ferrero et al., 2012; Ibrahim, 2016; Munisi & Randøy, 2013; Nodeh et al., 2016, Khan, 2010 & Sharif and Rashid, 2014). But a few researchers in developing country specifically Ghana have used the Tobin's Q as a measure of firm's performance. On the hand, corporate governance and its relationship with firm performance has been tested, others have researched on capital structure and firm's performance only and the results shown in those studies has been inconsistent (Gallegos Mardones & Ruiz Cuneo 2020; Abdullah & Tursoy 2021; Vithessonthi & Tongurai 2015; Masnoon & Raif 2013 & Abor, 2007) but few have touched or tested corporate governance as a moderating role in the relation of capital structure and firm performance in Ghana. Therefore, to address this gap, a study examines the moderating effect of the corporate governance mechanism on the relationship between leverage and firm performance.

1.3 Purpose of the Study

This study was to determine the relationship between capital structure and firm performance by investigating the moderating role of corporate governance practices on firms listed on Ghana stock exchange. The previous literature generally shows a positive relationship between the characteristics of corporate governance and capital structure. Abor (2007) stated a significant and positive relationship between corporate governance and financial decisions. Besides, companies that practice better governance have a greater chance of obtaining debt financing. On the contrary, Hassan and Butt (2009) found a negative relationship between indicators of corporate governance, namely the size of the board of commissioners and managerial share ownership and capital structure.

1.5 General objectives

This study aimed to examine the moderating role corporate governance has on capital structure and their financial performance of financial institution listed on GSE

1.6 Research Questions

To examine the moderating role of Corporate Governance Practices on the interaction between Firm Performance and Capital Structure, quantitative multiple regression model will be used. The study used a quantitative multiple regression study design in answering the research hypotheses.

Q1. To examine the effect of capital structure and firm performance among firms in Ghana

Q2. To evaluate the effect of corporate governance and firm performance among firms in Ghana.

Q3. To analyze the moderating role of corporate governance on the relationship between capital structure and firm performance in Ghana.

1.7 Significant of the Study

The findings of this study have practical importance for regulatory authorities and policymakers in terms of improving markets. Apart from research on the relationship of these variables, the role of the corporate governance mechanism as a moderator is recognized by the relationship between capital structure and firms in Ghana. In general, this study fills the gap in the literature series by capturing the moderating role of a corporate governance mechanism on the relation between capital structure and firms listed on Ghana Stock Exchange performance. This study provides useful guidelines for the corporate sector, financial institutions, shareholders, depositors and investors as these can help companies to react effectively and efficiently to different economic conditions. Besides, this serves as a good recipe for managers to consider a suitable set of corporate governance models related to in their decision-making process.

1.8 Organization of the Study

The rest of the paper is structured as follows. Chapter 2 containing review of literature both theoretical and empirical on capital structure and firm performance, corporate governance and performance and capital structure and corporate governance. Chapter 3 illustrates the data and methodology. Chapter 4 includes empirical results and discussion. Chapter 5 contains conclusion and findings.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The study sought to explore capital structure and firm performance; the role of corporate governance as a moderating variable. This chapter covers a review of the existing literature on the study. It includes both theoretical and empirical aspects of the study.

2.1 Theoretical Review

Companies' decision in choosing between internal and external financing needs serious attention and this has remained a puzzle in corporate finance theory and financial literatures. Theories have failed to explain the optimal capital mix. Therefore, the choice of capital structure is an important issue for small and large firms. Gill et al. (2011) stressed that, despite the fact that numerous theories attempted to explain the optimal capital structure and it impact on performance, there is still no suitable model to determine the optimal information leakage. This section presents five theories advanced by scholars that is considered relevant to the understanding of capital structure and corporate governance. The theories are Modigliani and Miller (MM) theory, trade-off theory, Pecking order theory, agency theory and market timing theory of capital structure

2.1.1 Miller and Modigliani Theory

Modigliani and Miller (MM) theory, trade-off theory, and Pecking order theory are three related theories of capital structure and agency theory is widely used to demonstrate the relationship between corporate governance and capital structure (Fama and Miller, 1972; Jensen and Meckling, 1976). Based on agency theory, the divorce of ownership and control, the conflict of interest between the principal and the agent results in agency cost, which affects the decision-making of capital structure (Agyei and Owusu, 2014). The common agency conflict is the conflict of interest between management and directors (agent) and shareholders (principals). The agents should take the interests of the principals for decision-making. However, in reality, the management may sacrifice the interests of the shareholders out of opportunism and the consequences suffered by shareholders are defined as agency costs (Jiraporn et al., 2012). Corporate debt policy is an important way to alleviate agency conflict between shareholders and managers because debt financing can solve agency problems by reducing cash flow and increasing the possibility of bankruptcy risk (Haque et al., 2011; Danso et al.,2019; Hussainey & Aljifri, 2012; Muttakin et al., 2020). In addition, another conflict of interest is between controlling shareholders and minority shareholders.

Major shareholders may deprive minority shareholders of their interests, resulting in huge agency problems. Based on the above discussion, we adopt agency theory because the agency problem (separation of ownership and control i.e. corporate governance) will affect the capital structure decision. Therefore, we are investigating

whether corporate governance affects the capital structure decision. Most basic theory for capital structure is the MM theory, the theory says that where there is no income rate, capital structure is irrelevant to the value of the company.

Moreover, the market value of companies that has no debt is similar in value to companies that has more debt in their capital structure by including corporate income tax. According to Modigliani and Miller (1958), when we assume a market is perfect, the capital structure has no influence on the firm's value. Other researchers criticized this theory by coming out with evidence in their research that there is no perfect capital market in reality, later on, M&M revised their earlier theory in 1958 by incorporating tax benefit and argued that under market imperfection where interest payments are tax deductible, value of a firm will improve with the level of financial leverage (Modigliani & Miller, 1963). This trade-off theory concludes that the market value of a company with debt is equal to the value of the company without debt plus the value of the tax shield minus the present value of bankruptcy costs.

This theory goes on to propose that, there is an optimal capital structure, in which the tax shield benefits the most to compensate for losses from debt due to financial difficulties and agency cost. Profitable firms can borrow more up to a certain level, because after that the profitability and the value of the firm will decrease due to interaction of bankruptcy costs and agency costs. However, to expand the MM theory, Jensen and Meckling (1976) developed agency costs theory. According to agency costs theory, the agency problem is caused by a conflict of interest between

shareholders and managers (agency cost of equity) or between shareholders and debt holders (agency cost of debt). Thus, the use of debt will reduce the agency cost since the payment of interest reduces the surplus cash (Suleiman, 2013). In contrast to trade-off theory, Myers and Majluf (1984) introduced the pecking order theory which articulates that optimal capital structure does not exist. They argued that to minimize the problem of asymmetric information between firms' managers and investors, financial pecking order; i.e. an order of financing can begin with retained earnings, which is followed by debt, and finally new stock issues, should be put in place. Similarly, theory that explains business managers' funding decisions.

In meeting their capital requirements, businesses place an order of priority for their funds: first using internal sources, followed by loans, then equity. In a nutshell, the pecking order theory states that internal capital will always take precedence over loans and the use of internal funds will minimize the company's dependence on external firms for fund, increase financial autonomy and reduce internal information leakage. Not long ago, Baker and Wurgler (2002) have recommended a new theory of capital structure; "market timing theory of capital structure" which suggests that managers can increase current shareholder's wealth by timing the issue of securities. Therefore, firms time their equity issues by trading new stocks when the stock price is perceived to be overvalued, and buying back own shares when they are undervalued. From the above discussion, one important thing is obvious that the basic drive of all the theories of capital structure is to recognize whether the capital structure has any impact on firm's performance or not. An optimal capital structure should be adopted

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according to financial theory and literature; however, there is no structure or standard on how to attain an optimal debt-to-equity ratio. Finance theory does not support in understanding the impact of the chosen capital structure on firm value. An optimal capital structure seeks to achieve minimization of cost of capital and makes sure that firm profitability is maximized. The profitability and the value of the firm in the long run are affected when good management of the capital structure have been put in place; financial stress that will definitely lead to bankruptcy will happen when management of capital structure is not done properly.

2.1.2 Conceptual Framework
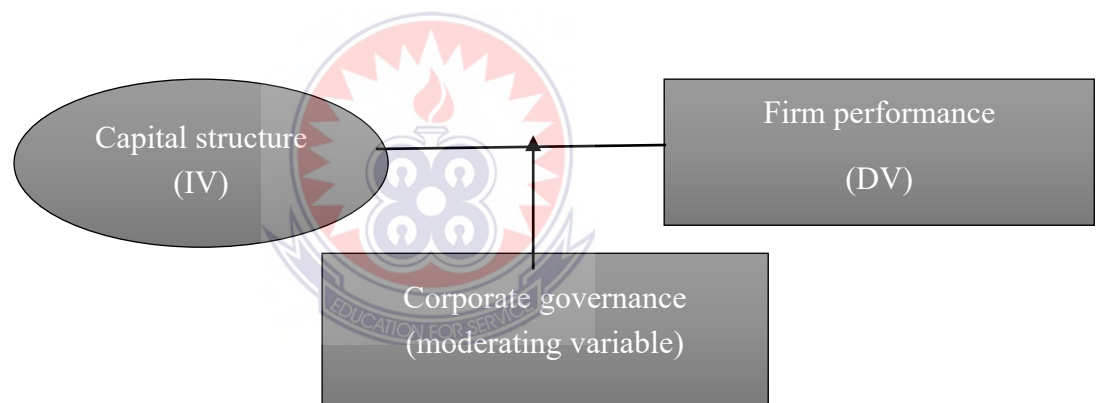
Figure 1: Conceptual framework

From the figure, capital structure is captured by total debt, the performance indicator is captured by Return on Asset (ROA), Return on Equity (ROE) while corporate governance indicators are captured by the board size (BS), gender diversity (GD) and board ownership (BO). The performance indicators are the dependent variables; the capital structure variables are the independent variables while the corporate governance are the moderating variables. In essence, the current study assesses the

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relationship between capital structure and its significant impact on financial performance; the moderating role of corporate governance

2.2 Empirical Review

2.2.1 Capital Structure and Firms' Performance

After Modigliani and Miller's (1958) "irrelevance theory of capital structure", the capital structure theory has been a study of interest to finance economists. Extensive researches have been performed to investigate the relationship between **capital structure and firms' performance** in different countries while Ghana has very little contribution in the literature. Firms' behavior in developed countries could differ from that in developing countries. Since Ghana is a developing country, it would be logical to discuss previous works from developing countries. Some authors found positive relationship; some found negative relationship while others got mixed or no relationship between capital structure and firm's performance. Some of the major contributions in the literature on this topic have been discussed in the below.

According to Kumar et al. (2017), the choice of capital structure is based on several factors, including firm specific factors, industry specific factors, and country specific factors. Firm's profitability shows the efficiency of management in converting the firm's resources to profit (Muya & Gathogo,2016). The trade-off theory suggests that profitability is positively related to leverage (Awan & Amin, 2014). That is because profitable businesses can take on more debts. Previous research on American businesses has shown that tying management and ownership together boosts

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profitability significantly (Akeem et al., 2014). The profitability of a company is determined by the behaviour of its managers; if they are successful, they will reduce the cost of capital and increase the company's efficiency. This is based on the principals' and agents' interests, because managers would often choose to follow their own interests by investing the available free cash flows rather than returning it to shareholders through dividend payments.

Asset Tangibility plays a critical role in the determination of capital structure. The pecking order and trade-off theories predict a positive relationship between asset tangibility and debt-to-equity ratios (Guizani & Ajmi, 2021). As asset tangibility provides collateral value, it is easy for firms with higher tangible assets to have easy access to debt than firms with lower value assets. The positive relationship between assets tangibility and debt-to-equity ratio have been proven empirically in the works of Handoo and Sharma (2014), Nhung et al. (2017), and Nnadi (2017). The trade-off theory dictates an inverse relationship between growth opportunities and capital structure, while the pecking order theory predicts a positive relationship. Marimuthu and Hamzah (2020) summarize the directional relationship between leverage and firm-specific factors per the dictates of both the pecking order and trade-off theory.

Margaritis and Psillaki (2010) observed a significant positive relation between leverage and firm's performance. They used a sample of both low and high growth French firms for the period 2003-2005 and found that leverage have positive effect on firms' efficiency over the entire sample. Using panel data consisting of 257 South

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African firms over the period 1998 to 2009, Samuel (2013) investigated the association between capital structure and firm performance. To test the relationship, he used GMM regression approach and found a positive and significant relation between financial leverage and firm's performance. Aliakbar, Seyed and Pejman (2013) also found a significant positive link between capital structure and firm performance in the Tehran Stock Exchange. Nor and Fatihah (2012) tried to explore the impact of debt and equity financing on the performance of the firms listed in Bursa Malaysia.

Using a sample of 130 firms for the period 2001-2010 combined with multiple regression analysis, they cited a statistically significant negative relation between capital structure and firms' performance. Manawaduge, Zoysa, Chowdhury and Chandarakumara (2011) concluded that most of the Sri Lankan firms employ short-term debt capital as against the long-term debt and firm performance is negatively affected by the use of debt. Similar result was also noticed in Nigeria by Amos and Jeremiah (2013). In addition, they documented that firms use retained earnings first, then debts and finally equity. With cross sectional tie series fixed effect model, Anup and Suman (2010) examined the link between capital structure and firm value in Bangladesh. They found that maximizing the wealth of shareholders demands a perfect mixture of debt and equity, whereas cost of capital has a negative correlation in this choice and it has to be as least as possible. Khairul (2013) also witnessed significant negative relation between profitability and leverage in Bangladeshi firms.

However, some authors revealed mixed results, in this line, Gallegos Mardones and Ruiz Cuneo (2020) found an inconsistent relationship between financial performance and the elements of capital structure among Latin American companies. They also found mixed results for different countries and companies. An empirical study by Abdullah and Tursoy (2021) on non- financial firms in Germany over 25 years found a significant positive relationship between capital structure and financial performance. They found out that, the lower cost of issuing debt and tax shield from the interest of the debt was the main course of the positive relationship. Tianyu (2013) examined the influence of capital structure on firm's performance in both developed and developing markets. A sample of 1200 listed firms in Germany and Sweden and 1000 listed firms in China for the period 2003-2012 has been used in his study.

Applying OLS regression method, he documented that capital structure has a significant negative effect on firm's performance in China, whereas, significant positive effect in two European countries, i.e., Germany and Sweden, before financial crisis in 2008.Using a sample of 237 Malaysian companies during 1995-2011, Salim and Yadav (2012) studied the relationship between capital structure and firm performance. Their analysis revealed that firm performance measured by ROA, ROE and EPS have negative relationship with the capital structure while Tobin's Q has significantly positive relationship with STD and LTD.

2.2.2 Corporate governance and firm performance

On the other hand, the results of Acedo-Ramirez et al. (2017) indicate a positive relationship between growth and debt in high-growth medium-sized businesses, but a negative relationship in small businesses. Moritz Block, and Heinz (2016) discovered a promising relationship between the two, but they cautioned that the results could be distorted by different levels of profitability and innovation" activity. The effect of CG on FP depends on the CG structure and research shows that the positive effect of CG on FP is more evident in countries where investor protection is weak (Lepore et al., 2017).

A large body of literature examines the effect of CG on FP (see, for instance, McCann, 2016, Bhagat and Bolton, 2019, Ciftci et al., 2019 Al-Gamrh et al., 2020) and most results indicate a positive relationship between good CG and FP. For instance, Drobetz et al. (2004) argue that good market performance proxied by Tobin's Q and market-to-book value is associated with better CG practices. Ehikioya (2009) investigates the above relationship for a sample of Nigerian companies and find a positive association between ownership concentration and FP. Several studies focus on specific CG mechanisms such as board size (Haidar, 2019), board composition (Lappalainen and Niskanen, 2012), board leadership or role duality (Wahba and Elsayed, 2010), concentrated ownership by insiders and outsiders (Ehikioya, 2009; Lepore et al., 2017), and multiple directorships (Reguera-Alvarado and Bravo, 2017). Other literatures had negatives results, Azeez (2015) finds that performance enhances when the board size increases, but the contribution of an additional board member

decreases as the size of the corporation increases. Lawrence and Stapledon (1999) report that the proportion of independent directors has a negative effect on performance in terms of shareholder wealth and sales growth. Likewise, Muth and Donaldson (1998) indicate that board independence produces a negative impact on shareholder wealth and sales growth, but not on firm profitability. Hassan (2018) finds that the presence of independent directors on the board leads to higher agency costs, which ultimately affects firm performance.

2.2.3 Corporate governance, capital structure and firm performance

Finally, development of agency theory suggests that CG, together with capital structure decisions, influences the firms value, William (1988) evaluated the relationship between debt and equity in terms of CG and firm performance, and concluded that capital structure is able to influence management activities and performance. Ruan et al. (2011) and Wahba (2014) find a significant relationship between managerial ownership and CS when examining the FP of Chinese and Egyptian firms, respectively. They reveal that managerial ownership mediates and moderates the association between CS and FP.

Okiro et al. (2015) examine the impact of CG and CS on the performance of African listed firms from 2009 to 2013 and find that good CG positively affects a firm's performance when they integrate CS into the governance model. Iqbal and Javed (2017) examine the moderating role of CG in the association between CS and FP, using firms listed in the Karachi Stock Exchange and find that CG positively

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moderates the relationship between CS and FP. Elmagrhi et al. (2018) examine the relationship among trustee board diversity, corporate governance, capital structure, and firm performance in UK charity firms and find that capital structure has a positive effect on firm performance and that this effect is moderated by trustee board diversity and corporate governance. Consistent with the mediating/moderating effect literature (Baron & Kenny, 1986).

2.3 Summary of Empirical Literature and Research Gap

A reasonable conclusion, based on the prior research is that, good CG has a positive effect on capital structure and firm performance but there are other studies that have concluded there is a negative relationship. A number of research gaps arise from the analysis of the issues examined in this chapter. These include firstly, lack of consensus on the effect of CG on firm performance. There are studies who found a positive relationship between CG and firm performance while other studies found a negative relationship between the variables. Therefore, the results from the literature are mixed. Secondly, most of the studies reviewed only look at just a few of the CG variables like board size, board duality and board structure. Thirdly, most of the studies have looked at the accounting method of measuring performance (ROE, ROA only)

2.4 Hypothesis Development

2.4.1 Capital structure and performance

The empirical research has provided mixed results regarding the relationship between capital structure and firm performance. Yegon et al. (2014) found a positive

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relationship between short term debt ratio and profitability of firms in Kenya. Other studies (Sayeed, 2011; Hossain & Ali, 2012; Siddiqui, 2012; Hossain & Hossain, 2015) reported a negative relationship between short term debt ratio and profitability. However, agency cost theory suggests a positive relationship between leverage and profitability as leverage will reduce agency cost. Previous studies on capital structure using long term debt and profitability suggest a negative relationship between the two variables (Hossain & Ali, 2012; Siddiqui, 2012; Anarfo, 2015; Hossain & Hossain, 2015). Most empirical studies provided with pecking order theory (Haidar,2019; Bokhtiar Hasan1, Mainul-Ahsan, Afzalur-Rahaman & Nurul-Alam, 2014; Owusu, 2021; Opoku-Asante, Winful, Sharifzadeh & Neubert, 2022; Musah, 2017). In line with these findings, it is expected that the relationship between capital structure and firm performance is significantly negative;

Hypothesis 1: Capital structure is negatively associated with firm performance.

2.4.2 Cooperate governance and capital structure on performance

Elmagrhi et al. (2018) examine the relationship among trustee board diversity, corporate governance, capital structure, and firm performance in UK charity firms and find that capital structure has a positive effect on firm performance and that this effect is moderated by trustee board diversity and corporate governance. Consistent with the mediating/moderating effect literature (Baron & Kenny, 1986), The results of Acedo-Ramirez et al. (2017) indicate a positive relationship between growth and debt in high-growth medium-sized businesses, but a negative relationship in small

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businesses. Moritz Block, and Heinz (2016) discovered a promising relationship between the two, but they cautioned that the results could be distorted by different levels of profitability

and innovation" activity Wahba (2014) find a significant relationship between managerial ownership and CS when examining the FP of Chinese and Egyptian firms, respectively. They reveal that managerial ownership mediates and moderates the association between CS and FP. It is expected that the relationship between Cooperate governance and capital structure on performance is significantly positive

Hypotheses 2: There is a positive relationship between corporate governance and firm performance.

2.4.2 Corporate governance, capital structure and firm performance

Finally, inconsistent results of capital structure on performance and the theoretical agreement about corporate governance role on performance lead us to propose a moderating variable. Development of agency theory suggests that CG, together with capital structure decisions, influences the firms value, William (1988) evaluated the relationship between debt and equity in terms of CG and firm performance, and concluded that capital structure is able to influence management activities and performance. Ruan et al. (2011) and Wahba (2014) find a significant relationship between managerial ownership (CG) and CS when examining the FP of Chinese and Egyptian firms, respectively. Thus:

Hypothesis 3: corporate governance moderates the relationship between capital structure and firm performance.
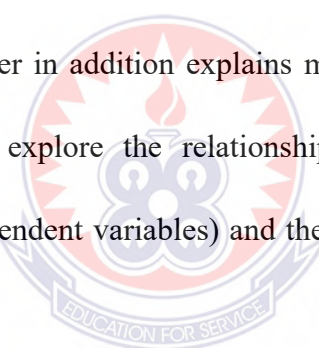
CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter of the study discusses the methodology of the dissertation, the chapter is divided into five sections, they are: introduction, research design, model estimation explanations of variables and the summary of this chapter. In the first section research is discussed. Model and estimation and relevant variable estimation are discussed in the third and fourth sections of this chapter. These variables will be defined, the final chapter explains the statistical analysis used, which includes data analysis technique that is adopted. The chapter in addition explains multiple regression and correlation analysis that is used to explore the relationship between capital structure and performance (severs independent variables) and the moderating role of the cooperate governance respectively.

3.2 Research Design

Findings from the empirical discussion of capital structure and performance have been mix and inconclusive, hence this study introduces cooperate governance as a moderator to ascertain the moderating effect of the cooperate governance on the firms listen on GSE performance since the agency theory states that, agents might play a role of on the capital structure - performance relationship. Basically, this paper attempts to examines the moderation role of cooperate governance and capital structure on banks listed on GSE performance. The epistemology of this research is that to assess the hypothesis,

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which are built from theories and empirical findings. The empirical and scientific test of these hypothesis ensure a much robust test to achieve very comprehensive and objective findings as much possible for the study. The inconclusive and mix findings of capital structure and performance form the fundamental basis for the study ontology. Again, others have used different methodology and have found varying results on capital structure and firm performance. In the meantime, the moderating role of cooperate governance in the relationship between capital structure and firm performance using the Tobin's Q as a measure of personal have not been not been thoroughly examined.

The study therefore, applies the moderating factor of corporate governance effect in the relationship between capital structure and performance to examine the reasons for the mix, no consensus and the inconclusive results of capital structure and performance of firms in Ghana. This dissertation adopts the quantitative technique to critically scrutinize the moderating effect of cooperate governance with respect to capital structure and performance. The study adopts a cross sectional research and longitudinal research survey. The study examines (13) years panel data and a multiple regression model to analyze the relationship of capital structure and performance of the study and as well engages a software for the data running in achieving a better examination of the results. The area of the study is in Ghana and banks listed in the stock exchange.

3.3 Measurements & Variables

The main objective of the study is to examine the moderating role of cooperate governance on the relationship between capital structure and performance. To achieve this objective, this research builds several models. First of all, the capital structure and performance model is to estimate the established model of performance. The model is adopted from previous research. Second is the capital structure-cooperate governance model and correlation analysis.

Furthermore, moderated regression analysis where the cooperate governance is introduced in the regression model and the interaction between the cooperate governance on capital structure and performance is the moderating variable. Following the stream of prior studies (Kang & Ausloos, 2017; Boateng et al., 2017; Saad, 2010; Uwuigbe, 2014 Liu et al., 2011 & Jiraporn et al., 2012), we measure corporate governance (moderating variable) by the board size, board composition and board gender diversity. Capital structure as the independent variable is measured by the total debt (TD) ratio (Mirza et al., 2017). In this study, three dependent variables; i.e., return on equity (ROE) and Return on Asset (ROA).

3.4 Capital Structure and Performance Model

Ordinary least squares regression is the most prevailing technique which is used to measure the relationship between two sets of variables. In line with (Kang & Ausloos, 2017; Boateng et al., 2017; Saad, 2010; Uwuigbe, 2014; Liu et al., 2011 & Jiraporn et al., 2012) the following regression model is estimated to test **hypothesis 1**;

$$FP_{i,t} = \alpha + \beta_1 TDTA_{i,t} + \beta_2 CL_{,t} + \varepsilon_{i,t} \ldots\ldots\ldots\ldots\ldots\ldots(a)$$

$FP_{i,t}$ = firm Performance(ROA and ROE)

TDTA= Total debt to total asset (Ngatno, Endang, Apriatni & Arief-Youlianto, 2021)

$CL_{i,t-1}$ = firm size, firm age, in year t-1. $\varepsilon_{i,t}$ = firm specific errors.

The author uses firm-level control variables to control for the variability of capital structure and long different years. To avoid the reversed causality problem between capital structure and firm performance, the right-hand side variables is lagged by one period in line with (Detthamrong et al, 2017; Kabir & Hai, 2017). As mentioned previously, many studies provided that profitability is more influential determinants of capital structure according to the pecking order theory (the retained earnings is the main source of financing), which means that profitability is negatively associated with financial debt leverage.
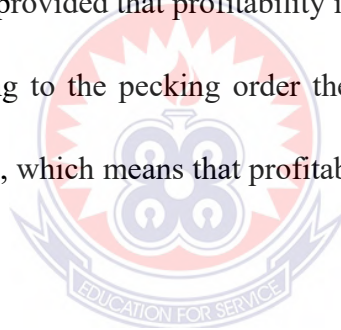
Another reason for the need to lag the independent and control variables is the mechanical correlation between some variables in the model. Regarding the methodology used to test the moderating effect of corporate governance on the relationship between capital structure and firm performance, it is rational to review the methods utilized in prior research to test the moderating effect. First, the topic of this study is rarely investigated through other scholars, hence the evidence is very scarce. Kabir and Thai (2017), examined the moderating effect of corporate governance on the relationship between corporate social responsibility and firm performance, using data sample of 524 listed firms of Vietnam between 2008 and

2013. They used the dynamic Ordinary Least Square (OLS) regression model to test their hypotheses, the moderating variable is identified as the interaction between corporate governance variables (board characteristics, foreign ownership).

According to Cohen et al. (2003), the moderating variable is identified statistically as an interaction, which means a qualitative or quantitative variable that influence the trend and/or the strength of the relationship between explanatory variable and respond variable. According to Baron & Keny (1986), the moderating effect is identified when the moderating variable Z influence the relationship's strength between the independent variable X and the dependent variable Y Following (Kabir & Thai, 2017; Hui & Chang,2013; Harrisons & Coombs, 2012; Kun & Chung, 2012) this study uses OLS regression method to estimate the moderating effect of corporate governance (board size, board composition and board diversity) on the relationship between capital structure and corporate performance as follows in model 2 and 3

1. $FP_{i,t} = \alpha + \beta_1 TDTA_{i,t}*BS_{i,t} + \beta_2 TDTA_{i,t}*BGD_{i,t} + \beta_3 TDTA_{i,t}*BC_{i,t} + \beta_3 CL_{i,t} + \varepsilon_{i,t}$ ....(b)

2. $FP_{i,t} = \alpha + \beta_1 TDTA_{i,t} + \beta_2 TDTA_{i,t} + \beta_3*BGD_{i,t} + \beta_4*BC_{i,t} + \beta_5 TDTA*BS_{i,t} + {}_{B6} TDTA*BGD_{i,t} + \beta_7 TDTA*BC_{i,t} + \beta_{8*}CL + \varepsilon_{i,t,}$ ....(c)

$FP_{i,t}$ = firm Performance ROA, ROE (Haidar, 2019)

TDTA= Total debt to total asset (Ngatno, Endang P. Apriatni & Arief Youlianto, 2021)

Controlsit-1 = firm size, firm age, in year t-1. $\dot{\varepsilon}it$ = firm specific errors.

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3.5 Research Variables

The main objective, this research builds several models. First of all, the capital structure and performance model is to estimate the established model of performance. The model is adopted from previous research. Second is the capital structure-cooperate governance model and correlation analysis. Furthermore, moderated regression analysis where the cooperate governance is introduced in the regression model and the interaction between the cooperate governance on capital structure and performance is the moderating variable. Following the stream of prior studies (Kang and Ausloos, 2017; Boateng et al., 2017; Saad, 2010; Uwuigbe, 2014; Liu et al., 2011&Jiraporn et al., 2012), we measure corporate governance (moderating variable) by the board size, board composition and board gender diversity. Capital structure as the independent variable is measured by the total debt (TD) ratio (Mirza et al., 2017).

3.6 Dependent Variables

Previous studies used two types of measurement in order to measure firm performance; accounting-based measurement which relies on financial statements (i.e., Balance sheet, Income statements); market-based measurement (relies on investor perception) This study employs both measurements, accounting-based measurement represented by return on equity (ROE) following some studies such as, (Kabir &Thai, 2018; Liu et al., 2015; Peng & Yang, 2014). ROE is defined as the net income after extraordinary items divided by the book value of common equity. ROE identify the efficiency of the firm performance in employing the equity capital to generate free cash flows. Financial leverage increases ROE as long as the cost of liabilities is less

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than the return from investing these funds. However, ROE weighs net income only against owners' equity, thus it does not show much how well the company uses its financial leverage. The company might disclose a high ROE without using effectively the shareholders' equity to grow the company. Hence, it is more reasonable for the company to use ROA, return on assets which is defined as the operating income divided by total assets (Berger et al, 2006; Kabir &Thai, 2017, Chiang et al, 2002; Pengand Yang, 2014; Liu et al., 2015).

Total assets equal the sum of liabilities and equity, ROA refers to the operating performance of the firm and measures how effectively the firm uses its assets (or how much euros the firm generates for every euro invested from equity and debt) to produce cash flows. ROA is an indicator for the effectiveness of the investment, so it helps the management and investors to make decisions about the investment, if the value of ROA is more than the capital costs then the investment has net positive value and can be run.

Nevertheless, ROE and ROA provide a good picture together about the health of the company. The market-based measurement proxy of firm performance is defined by Tobin Q which address the market value of equity divided by the replacement value of total assets ((Mak & Kusnadi, 2005; Ruan et al., 2011; Ghoul et al., 2011; Riddiough & Steiner, 2014). Using Tobin's Q is useful to reflect the effect of capital structure on the market value of the firm and to assess future of firm performance, since the nominator of Tobin's Q measure which is the firm value, increases with the decrease

of the cost of capital structure (Servaes & Tamayo, 2013), while ROA and ROE assess the management performance based on accounting measures.

Therefore;

ROA = Net Income Before Tax/Total Asset (Ngatno, Endang P. Apriatni & Arief Youlianto, 2021)

ROE= Net Income Before Tax/Total Equity (Ngatno, Endang P. Apriatni & Arief Youlianto, 2021)

3.7 Independent Variables

In line with (Ngatno, Endang P. Apriatni & Arief-Youlianto, 2021; Javed, 2017), this study uses total debt leverage to represent capital structure, which is the long-term debt divided by the total assets. For the sake of checking for the robustness of the analysis, the total debt ratio is used as alternative measure, which is the sum of long-term and short-term debts divided by total assets. Therefore;

Leverage = Total Debt/Total Asset (Mirza et al & F. Javed, 2017).

3.7 The Moderating Variables of Corporate Governance

The author employs three proxies for corporate governance; Board size (Ngatno, Endang P. Apriatni & Arief Youlianto 2021), board gender diversity (Atta, 2021) and board composition (Okiro, J.Aduda & N.Omoro, 2015).

3.7.1 Board Size

Board size is defined as the natural logarithm of director's number on the board and this is in line with these works (McGuiness et al, 2016; Kabir & Thai, 2017; Detthamrong et al, 2017; Bhagat & Bolton, 2008). Prior research found a positive effect for board size on capital structure and firm performance.

3.7.2 Board Structure

Following the work of (Kang & Ausloos, 2017; Boateng et al., 2017) board structure is defined as the People who comprise the company's board of directors.

3.7.3 Board Gender Diversity

Consistent with the study of (Nekihili et al. 2020; Yang et al, 2019) we measure gender diversity as Number of male and female directors.

3.8 Control Variables

Based on the review of prior research on the relationship between corporate governance,

capital structure and firm performance, different firm characteristics are employed as control variables. These variables are firm age and firm size.

3.8.1 Firm Size

According to trade-off theory, Kraus and Lizenberger, (1973) and Myers, (1989), reported that firm size is positively related to capital structure. Larger firms have more stable cash flows and more diversified activities. Hence, they are less likely to go bankrupt (Haidar, 2019). According to the pecking order theory, large firms have

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lower information asymmetry. Thus, they have easier and better access to the external financing markets than small firms (Degryse et al., 2012; de Haan & Hinloopen, 2003). Moreover, larger firms can obtain cheaper loans due to the advantage of economies scale (Céspedes. et al., 2010). To rescales the data and indicate a better normal distribution of size variable, the logarithm has been used. The measure of total assts has been chosen to control for size effect in this study and to avoid the problem of multicollinearity between independent variables such as growth of sales and logarithm of sales, while the capitalization value was used in the model to measure Tobin's Q.

3.8.2 Firm Age

This variable is measured by the number of years a firm has been in existence since incorporation. The age of firm was counted in year of trading or being in operation.

Table 1 gives an overview of the definition of the variables used in the study

Table 1: Variable, Acronym and Definitions

Variable	Acronym	Definitions and Coding
Dependent (FP)	ROA (Ngatno, Endang P. Apriatni & Arief Youlianto, 2021)	Net income before tax/total asset
	ROE (Ngatno, Endang P. Apriatni & Arief Youlianto, 2021)	Net income before tax/total equity
Independent (CS)	TDTA (Mirza et al., 2017).	Total debt to total asset
Moderating (CG)	BS (Kang & Ausloos, 2017; Boateng et al., 2017)	Number of directors
	BGD	Number of male and female directors
	BC (Kang and Ausloos, 2017; Boateng et al., 2017)	People who comprise the company's board of directors (experience and skills)
Control variable	Firm size	Natural logarithm of Total asset
	Firm age	Natural log of years since the firm was established

Author's construct (2022)

3.9 Sample and Data Collection

Target population as the complete group of units for which the research data are used to make conclusions (Cox, 2010). Hence, the target population refers to units for which the findings of a study are meant to generalize (Lavrakas, 2008). The target population for this study was the listed companies on the Ghana stock exchange. The purposive sampling technique was used to draw eleven (11) banks from the target population of 38 listed firms on GSE over the period of 2008-2021. Selection of the

purposive sampling is justified on the basis that these banks have adequate financials as required by the regulator of the industry. Annual reports of these banks were the main source for collecting the financial data of this study. These banks include Cal Bank (CAL) Ghana, GCB Bank, Fidelity Bank, Ecobank Ghana Limited (EBG), Zenith Bank Ghana Limited (ZBL), Stanbic bank (SBL), Standard Chartered bank GH ltd, Guaranty trust bank, SG-SSB Limited, Prudential Bank Limited (PBL), HFC Bank. The observations that the research is interested in are the board size, board composition, board gender diversity, total debt (TD) ratio, return on equity (ROE), return on asset (ROA) and Tobin's Q.

3. 10 Data Analysis technique

The study employed multivariate regression technique as the procedure for analyzing the data. The estimation technique used Panel Generalized Least Square (PGLS) technique. This technique was chosen due to the study's objective of testing the effect of the dependent variable on the independent variable. Again, the technique was preferred by the study since it has the strength of ensuring that the result for the test is best linear unbiased.

3.11 Ethical Consideration

The study was conducted in accordance with internationally accepted principles regarding conduct of research in the world. These ethical principles observed by the research include acknowledging all sources from which information for the research was obtained, avoiding plagiarism, avoided academic dishonesty, avoid divulging

information regarding the sampled companies as well using any of the company information for profit purposes. Again, the study observed all principles regarding writing of thesis and dissertation in University of Education, Winneba.

CHAPTER FOUR

RESULT AND DISCUSSION

4.1 Introduction

This chapter of the study present the empirical result from various statistical test. Again, findings are interpreted in this chapter in order to allow for comparison with literature.

4.1 Descriptive Analysis

The descriptive statistics of the study variables over the period 2017-2021 related to dependent variable, independent variable and moderating variable are presented in Table 2 below. The data for all the variables data were winsorized at the level 5% in both sides of distribution to avoid the influence of outliers. To deal with the problem of heteroscedasticity, the standard errors were clustered at the firm level. The average ratio of ROA is 3.1, The mean value of ROE was 20.7, which reveal that the banks have a good return or performance during the sample period 2008-2021. On the other hand, total debt to total asset was 4 % (or is not less than 1). Which indicate that most of the companies during the period were highly levered, in consonance with (Shubita & Alsawalhah, 2012).

Regarding corporate governance variables, the average number of board of directors which involves the supervisory and the management boards are 10 members or they usually consist of 10 men, in addition, the standard deviation of board size is relatively large, indicating that the board size fluctuates greatly in this industry. The

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average value of the board composition was 50 % for the period, indicating that, half of the firm's board compositions are made up of directors with unique skill, knowledge and experience. Regarding control variables, the mean value of firm size shows that the average value of total assets is 12.4 million cedis and its standard deviation is around 3.5, which indicates that the total assets among companies fluctuate greatly. The average age of the firms in terms of its existence was 3 years.

Table 2: Descriptive Statistics

	Obs	Minimum	Maximum	Mean	Std. Deviation
ROTA	154	-3.7	7	3.09643	1.87684
ROE	154	-27.4	49.1	20.7154	12.5378
TDTA	154	-1.6051	11.3154	3.82882	3.22801
BS	154	8	14	10.25	1.773
BC	154	0.18	0.81	0.49864	0.16136
BGD	154	0.07	0.6	0.25779	0.1325
FS	154	7	19	12.442	3.5883
FA	154	1	6	2.7381	1.63344

Empirical result (2022)

4.2 Correlation Analysis

Table 3 at shows the correlation coefficient matrix among all the variables. As for the relationship between dependent variables and independent variables, all observational data won at 5% on both sides of the distribution before the correlation matrix was implemented. Financial performance variables (ROA, ROE and TQ) have a significant and high positive correlation at the 1% significance level, which indicates the variable alternation. The correlation coefficient between ROE and ROA is 0.851.

The independent variable of the capital structure represented by TDTA has negative correlation with ROA of -0.001 at the 5% significance level and positive significant with an ROE of 0.042 with a significance level of 5% and then.CG is represented by the size of the board of directors (BS), the board composition (BC), and board gender diversity (BGD). Also, board of directors (BS), and board gender diversity (BGD) have no significant correlation with ROA only board composition has significant to ROA from the matrix.

Finally, the relationship between CG elements shows that the size of the board of directors (BS) has a positive and significant correlation with board composition but a negative correlation with board gender diversity, a positive correlation between BC and BGD. The age of the bank is positively related to return on assets and return on equity of the banks and statistically significant at 1% level. The results suggest that the older the banks, the more efficient and experienced they are thereby improving their profitability. This could also be attributed to early entry advantage. Also, the results could be interpreted to mean that older banks have a better understanding of the banking terrain in Ghana and also have the goodwill and competent staff and personnel to deliver on their mandate and thereby increasing their performance in terms of profitability.

Table 3: Correlation Matrix

	ROA	ROE	BS	BC	BGD	TDTA	FS	FA
ROA	1							
ROE	.851	1						
BS	-0.047	.161	1					
BC	0.022	0.092	0.154	1				
BGD	-0.029	-0.123	-.282	0.037	1			
TDTA	-0.001	0.042	-0.002	-0.032	0.003	1		
FS	-0.065	0.001	-0.109	0.036	-0.062	-0.4	1	
FA	0.079	0.02	.186	-0.087	-0.026	-0.372	-.260	1

Statistical output (2022)

4.3 Regression Analysis

The study conducted a multiple regression analysis between the study's independent variables (TDTA, FS, FA) on financial performance (ROE and ROA).

4.3.1 Effect of leverage on ROA and ROE

The second variable which is total debt ratio had a positive relationship with bank's profitability (ROA, ROE) at a 5% significance level. This result suggests that an increase in debt financing will increase the profitability of banks with all things being equal. The analysis of variance results from the regression analysis on ROTA indicates that the model is significant (F = 0.423, p = 0.000) in explaining change in the dependent variable. This finding suggests capital structure is a predictor of ROA of universal banks on GSE.

Table shows the multiple regression analysis which shows that TDTA (β = 0.485, p = 0.105), firm size (β = -0.245, p = 0.033) and firm age (β = 0.148, p = 0.001). This finding implies that a negative relationship prevails between firm size and ROTA but

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this is insignificant. The study recorded an inverse relationship was found between director equity interests. On the other hand, a positive but insignificant relationship was found in relation to board gender diversity in the multiple regression analysis.

Table 4: Regression on ROTA

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.145516	0.826223	3.038679	0.0003
FS	-0.245982	0.043079	-5.083260	0.0330
FA	0.148195	0.026611	27.40180	0.0001
TDTA	0.485192	0.012964	0.246250	0.0158
Weighted Statistics				
R-squared	0.871392	Mean dependent var		37.81478
Adjusted R-squared	0.867587	S.D. dependent var		25.49184
S.E. of regression	1.092826	Akaike info criterion		2.188280
Sum squared resid	201.8314	Schwarz criterion		2.296787
Log likelihood	-185.4745	Hannan-Quinn criter.		2.232293
F-statistic	229.0136	Durbin-Watson stat		1.074087
Prob(F-statistic)	0.000000			

Statistical output (2022)

4.3.2 Return on Equity

The study conducted a multiple regression analysis between board gender diversity, board size, director equity interest and ROE. Table 4.8 shows the model summary which indicates that the R^2 is 0.146 which means that the model explains 14.6 % variation in ROE.

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Table 5: Regression result on ROE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.51066	0.826223	3.038679	0.0250
FS	0.296282	0.043079	-5.083260	0.0400
FA	0.515195	0.026611	27.40180	0.0300
TDTA	-0.344192	0.012964	0.246250	0.0478

Weighted Statistics			
R-squared	0.146392	Mean dependent var	37.81478
Adjusted R-squared	0.076587	S.D. dependent var	12.62184
S.E. of regression	1.092826	Akaike info criterion	2.188280
Sum squared resid	201.8314	Schwarz criterion	2.296787
Log likelihood	-185.4745	Hannan-Quinn criter.	2.232293
F-statistic	229.0136	Durbin-Watson stat	1.074087
Prob(F-statistic)	0.000005		

Statistical output (2022)

Shows the regression coefficients between firm size, firm age, TDTA and ROE. The findings show that there was a strong relationship between firm size (β = 0.296, p = 0.493), TDTA (β = 0.113, p = 0.047), and financial performance measured by roe. The study findings showed that firm age (β = -0.056, p = 0.030) has a weak effect on roe of banks on GSE.

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Table 6: Moderating role of corporate governance and Financial Performance (ROTA)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.364516	0.826223	3.038679	0.0001
BSTDTA	-0.018002	0.043079	-5.083260	0.0820
BCTDTA	-0.403725	0.026611	27.40180	0.0300
BGDTDTA	0.002792	0.012964	0.246250	0.0278
FS	-0.320225	0.037215	0.289002	0.0251
FA	0.067850	0.258000	0.237215	0.0574

| Weighted Statistics			
R-squared	0.246392	Mean dependent var	37.81478
Adjusted R-squared	0.226587	S.D. dependent var	1.897653
S.E. of regression	1.092826	Akaike info criterion	2.188280
Sum squared resid	201.8314	Schwarz criterion	2.296787
Log likelihood	-185.4745	Hannan-Quinn criter.	2.232293
F-statistic	229.0136	Durbin-Watson stat	1.074087
Prob(F-statistic)	0.000005		

Statistical output (2022).

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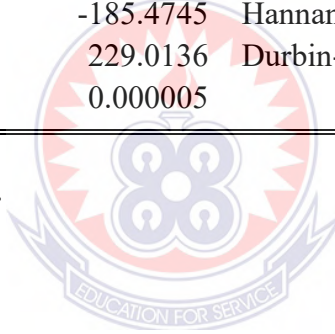
Table 7: Moderating role of corporate governance and Financial Performance (ROE)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.36516	0.826223	3.038679	0.0027
BSTDTA	-0.018002	0.043079	-5.083260	0.7200
BCTDTA	0.485725	0.026611	27.40180	0.0300
BGDTDTA	0.015792	0.012964	0.246250	0.4038
FS	-0.204225	0.037215	0.289002	0.5641
FA	0.569850	0.258000	0.237215	0.0451

|		Weighted Statistics		
R-squared	0.396392	Mean dependent var		37.81478
Adjusted R-squared	0.366587	S.D. dependent var		1.897653
S.E. of regression	2.092826	Akaike info criterion		2.188280
Sum squared resid	201.8314	Schwarz criterion		2.296787
Log likelihood	-185.4745	Hannan-Quinn criter.		2.232293
F-statistic	121.0136	Durbin-Watson stat		1.074087
Prob(F-statistic)	0.000205			

Statistical Output (2022)

4.3.3 The moderating role of BS, BC and BGD on the effect of capital structure on financial performance.

The moderating effect of the BS on the relationship between TDTA with ROA and ROE represented in interactions (TDTA*BS). Moderating effect of BS on the relationship between leverage and performance. Based on the regression results of the interaction (TDTA*BS), it shows that the insignificant results as shown in Table 5 (β = .082; sig. >.10), while the regression results of the interaction between TDTA and BS (TDTA*BS) on ROE shown in Table 5 (β = −.018; sig. >.10). Therefore, the board size (BS) cannot strengthen the relationship between leverage and performance. This implies that BS is unable to moderate the effect of leverage on performance. Thus, the

strength of the effect of leverage on performance does not depend on the amount of BS. These results provide evidence to refute the view that a larger number of directors provide better access to resources than a smaller board. Moreover, the idea that larger boards may have more communication and experience and diversified knowledge and lead to efficient decisions in addition to more monitoring and control on management, resulting in better performance, is also rejected

Moderating effect of BO on the relationship between leverage and performance. The moderating effect of the CS on the relationship between TDTA with ROA and ROE represented in interactions (TDTA*CS). The results showed that the moderating effect of CS on the relationship between TDTA and ROA was positive and significant as shown in Table 5 (β = .403; sig. <.01). The moderating effect of CS on the relationship between TDTA and ROE is shown in Table 6 (β = .485; sig. >.05). The two figures show that the effect of TDTA on ROA is positive if the firm has a large number of CS. This explains that the number of CS that meets the requirements can increase ROE and ROA. The large number of CS can increase the supervision of the director in making decisions related to debt. Therefore, CS is able to moderate the relationship between leverage (as measured by total debt or short-term debt) and firm performance. However, the opposite is not significant if the leverage is measured by long-term debt. This implies that the effect of leverage on performance will be stronger if the amount of CS is larger. The number of commissioners cannot increase the company's performance. This suggests that a growing number of commissioners provide no evidence of improving supervisory performance

The moderating effect of BGD on the relationship between TDTA and ROA is shown in Table 5 (β = .027; sig. >.10), while the moderating effect of BGD on the relationship between TDTA and ROE is shown in Table 4 (β = .015; sig. >.10). the moderating effect of BGD is not significant, show the characteristics that a number female directors has a negative impact on the relationship between TDTA and ROA and ROE. Therefore, in the case of banks on GSE, to strengthen the relationship between TDTA and ROA and ROE, a large number of female directors are not required. Therefore, SS is not able to moderate the relationship between leverage and firm performance. This result implies that SS is unable to moderate the relationship between leverage and performance. In other words, the strength of the relationship between leverage and the performance does not depend on the number of SS. This explains that a greater number of shareholders cannot provide effective control over the company's activities.
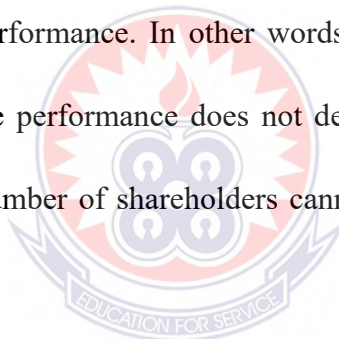
4.4 Discussion of Findings

4.4.1 Capital structure and performance

The study conducted a regression analysis to show the effect of TDTA on financial performance (ROE and ROA). The regression analysis showed that TDTA had a positive effect on ROA. The findings further revealed that TDTA had a weak relationship with ROE and this was insignificant. This study finding supports previous research that showed that an increase in TDTA capital structure had a positive effect on financial performance. This finding does not agree with the findings discovered by the following in their sperate studies that investigated the interaction between the

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performance of firms and capital structure see Sharma (2014), Nhung et al. (2017), and Nnadi (2017). Hasan (2014) findings stating that there is no statistically significant relation exists between capital structure and firm's performance as measured by ROE. They concluded that capital structure has negative impact on firm's performance which is consistent with the proposition of Pecking Order Theory.

The result is also in line or similar to the work of Musah (2017) who found that total debt ratio was positively associated with profitability of banks in Ghana. This study sought to reject the first hypothesis which states that there is a negative relationship between capital structure and performance of the study. The ascertained result between return on total asset and firm size indicate that the older a firm becomes in the industry the lesser its financial performance. Thus, increase in the age of a firm result to declining financial performance. This arises as a result of decreasing return to scale where any extra investment made by the firm does not lead to marginal returns. Again, this can be attributed to saturation of a firm's products and services as well as the use of obsolete asset in operation. This is true because in today's growing technological environment, firms that rely on old method of doing business would be outweighed by their counterpart that adjust quickly to trending and agile ways of doing things in terms of performance.

4.4.2 The moderating effect of board size on capital structure and performance

The study sought to examine the role of board size between capital structure and financial performance. The correlation analysis showed that there was a statistically

insignificant and negatively link between ROA and board size. The linear regression analysis revealed that the interaction of capital structure-board size had a statistically negative effect on ROA. The findings also showed that there was a positive link between interaction of capital structure- board size on profitability as measured by ROE, but this was insignificant, this study contradicts a study by Topal and Dogan (2014) on 136 manufacturing firms also indicated that there was a positive link between ROA and size of the board. In Turkey, Isik and Ince (2016) study on board size, board composition and performance had a positive and significant impact on the financial performance of banks. Adusei (2010) study in Ghana found that the size of the board has an impact on bank performance. The study argued that the smaller board sizes had a positive impact on the performance of the organization where ROE was used as a performance measure.

4.4.3 Interaction of Board gender diversity on capital structure and performance

The study sought to examine the moderating role played by corporate governance as measured by board gender diversity in the relationship between capital structure and financial performance. The interaction of board gender diversity and capital structure on performance was negatively linked to ROA and ROE in the study. This finding discovered by the study contradicts the study of Atta (2021) The regression analysis of the study showed that board gender diversity had a positive effect on ROA. The findings further revealed that board gender diversity had a weak relationship with ROE and this was insignificant and the work of Fan (2012) research on the link between board diversity and organization financial performance among firms listed in

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the Hong Kong Stock Exchange. The study examined both nationality and gender of boards and found evidence to indicate that a board that is diverse is more likely to have better organization independence and organization performance.

4.4.4 Interaction of Board composition on capital structure and performance

The study sought to examine the moderating role played by corporate governance as proxied by board composition in the relationship between capital structure and financial performance. The interaction of board composition and capital structure on performance was negatively linked to ROA. This mechanism was negatively in 4 out of 6 models. The observed interaction implies that corporate governance moderates the nexus between capital structure and financial performance of banks in Ghana.

The number of board members a company keeps reduces the effect of capital structure on the performance of banks. Moreso, the ascertained result implies that the higher the number of board of directors serving on a company's board the less the financial performance of such company. This can be attributed to the phenomenon that any additional board members brought onboard contribute less than proportionate to the progress of the organization. This then leads to less than commensurate total board contribution to the performance of the organization. This study contradicts Boateng et al (2022) finding on board composition, that is, the board composition exhibited only a significant positive effect on financial performance. The divergency in the findings is ascribed to differences in perspective of previous studies, different methodological approach deployed in exploring the concept under discussion.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter serve as the final session of the study and present the summary of the study, conclusions made based on the findings from the empirical test and recommendation for further studies.

5.2 Summary

Capital structure has been proffered by literature to have an effect on the financial performance of a company. The study was conducted to examine the effect of capital structure on financial performance of companies listed on the Ghana stock exchange and explored the moderating role of corporate governance in the relationship between capital structure and financial performance of companies listed on the Ghana Stock Exchange (GSE). Previous studies were reviewed to form the background of the study and ascertained the extent at which the topic under discussion has been explored. The study used causal research design since it tests the effect of capital structure on financial performance, the quantitative research approach was employed premised on the fact that quantitative variables were used, the research was objective toward its exploration without any interference in deriving the variables of the study. The population of the study was the thirty-eight firms (38) firms on the Ghana stock exchange.

The sample for the study was eleven companies, this sample were purposely selected to extract figures of performance indicators and their business financing (capital structure) from audited financial statements over a period of 13 years (2008 - 2021). The dependent variable financial performance was proxied by Return on Asset and Return on Equity. The independent variables capital structure was measured by Total Debt to Total Asset (TDTA), the moderating variable corporate governance was proxied by three distinct measures namely Board Size (BS), Board Composition (BC) and Board Gender Diversity (BGD).

Other control variables like firm size, firm age were also used. Principally, the study sought to establish the extent of financial gearing of the institutions and to test hypotheses; whether capital structure (TDTA) as an independent variable has negative and significant relationship with performance ROA, ROE (the dependent variables) of the firms and also whether corporate governance moderate the relationship between the dependent variable and the independent variable. The quantitative approach was adopted, where descriptive statistics were generated for analysis in line with study objectives. Pearson correlation was used; a 5% margin of error was allowed at 95% confident interval. Therefore, correlation was significant at $p < 0.05$. Upon application of multivariate regression method through the Panel Generalized Least Square estimation technique the study made the following conclusions.

5.3 Conclusion

First, the effect of capital structure on firm performance was tested. The regression results depicted a positive relationship between capital structure represented by total debt to total asset and firm performance represented by ROA and ROE. This led to the rejection of the first hypothesis which states that there is a negative relationship between capital structure and performance. Therefore, the study concludes that financing choice decisions of companies contribute positively to the firm financial performance.

The study proceeded to test the relationship between corporate governance and financial performance of the sampled companies. The multivariate estimation of the effect of corporate governance on financial performance revealed that BC, BS and BGD has positive effect on financial performance. Based on this result, the study fails to reject the null hypothesis that corporate governance has positive relationship with financial performance and concludes that a positive relationship exists between corporate governance and financial performance, meaning that larger boards have diverse communications and experiences which could improve their control and monitoring function on management decisions, hence improving firm financial performance.

The corporate governance variables of board size, board composition and board gender diversity were added to the regression model in order to test the moderating effect of board size, board composition and board gender diversity measured by these interaction (BS* TDTA, BC*TDTA and BGD*TDTA) in the relationship between

capital structure and firm performance. The results showed positive effect of (BS*TDTA) on the relationship between capital structure as measured by TDTA and firm performance financial performance measured by ROA however, the result was negative for ROE and TQ as a measure of financial performance. The statistical result revealed that BS*TDTA and BGD also significantly moderates the relationship between capital structure and financial performance. Owing to this result, the study fails to reject null hypothesis three and concludes that corporate governance practices ensured by a company influences the rate at which capital structure impact financial performance.

5.4 Recommendations

Based on the findings of this research, the study made the following recommendations;

Firms plying their trade in Ghana should make conscious effort to maintain a health and right proportion of equity and debt in their capital structure since right combination would exert a marginal effect on the financial performance of the company. Again, per the ascertained relation between corporate governance and financial performance, companies should ensure they put in place good corporate governance practices by maintaining sizeable number of males and females on their board, adequate number of members constituting a board and includes non-executive independent professionals with reach industrial knowledge on the company's board.

Finally, the study implores regulators of companies to set acceptable corporate governance practices to govern firms in Ghana, industrial players and firms owners are to make conscious effort to comply with considerable and appropriate corporate governance measures formulated by the government to ensure sound operations.

5.5 Recommendations for Further Study

The study recommends for further research among listed commercial banks in Ghana. The study was limited to corporate governance mechanisms of board size, board gender diversity and directors' equity interest. The study recommends for further research on the other corporate governance variables effect on financial performance of commercial banks in Ghana. Corporate governance in this study only takes the element of the CG mechanism; therefore, future studies should include a wider variety of CG variables (board characteristics, ownership structure, takeover and antitakeover mechanisms) to test their moderating effect on the relationship between capital structure and firm performance. This is because CG influence varies according to different political, judicial, social, and economic systems.

5.6 Limitation of the Study

A major Limitation of the study is the unavailability of secondary data or financial data of some companies listed in Ghana. The study is based on secondary data which suffers from its inherent limitations, due to missing data for some firms listed on the exchange, our study could not include all the listed firms on the exchange in our samples.

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