

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND  
TECHNOLOGY, KUMASI**

**CORPORATE SOCIAL RESPONSIBILITY AND FIRM PERFORMANCE:  
THE ROLE OF CORPORATE GOVERNANCE**

**BY**

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## DECLARATION

I hereby declare that this submission is my own work towards the award of the **MSc** and that, to the best of my knowledge, it contains no material previously by another person or any material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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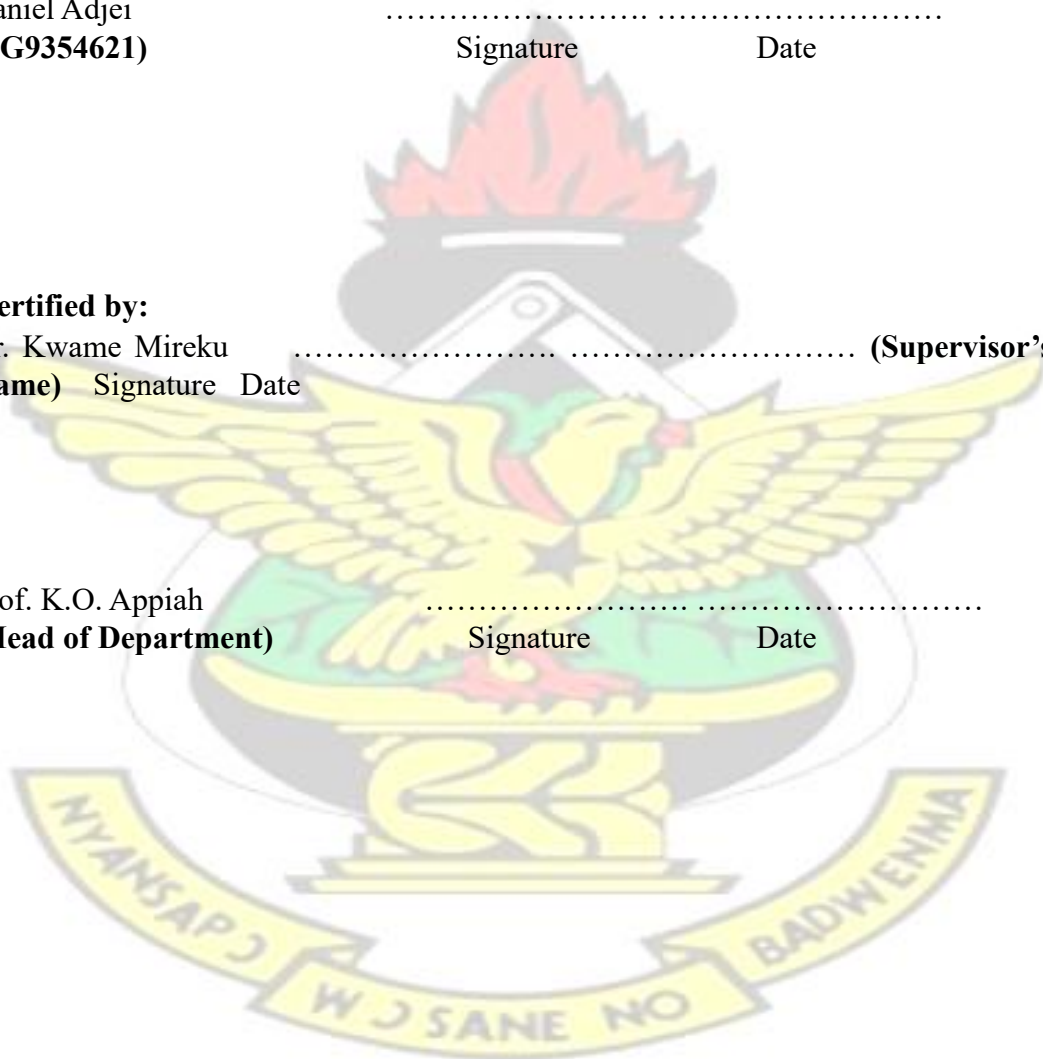
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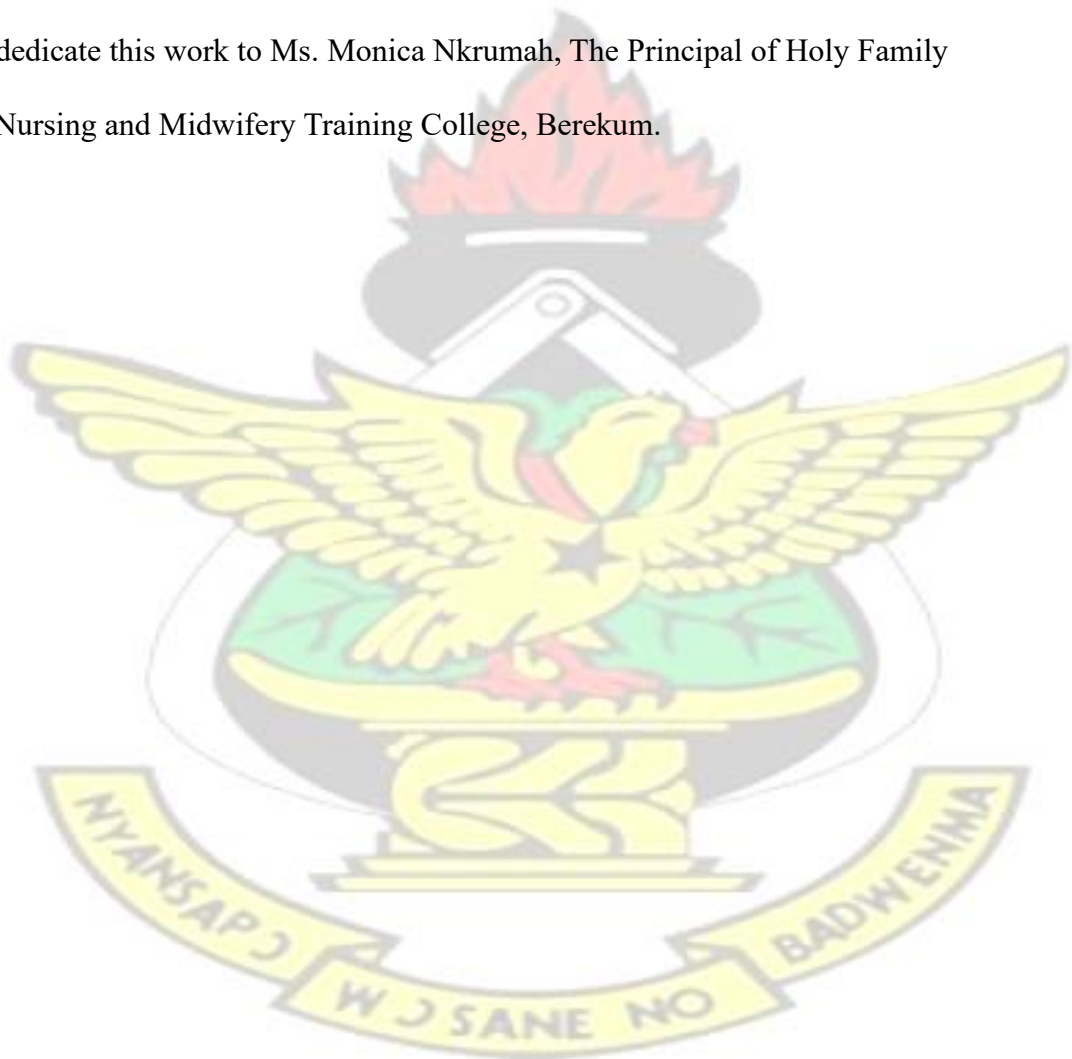
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## DEDICATION

I dedicate this work to the Almighty God to express my gratitude for the wisdom and strength granted me throughout the entire study. I am also grateful to my wife (Fosuhemaa Adjei) and my son (Kendrick Adjei) for the support they have given me throughout my academic life and career life.

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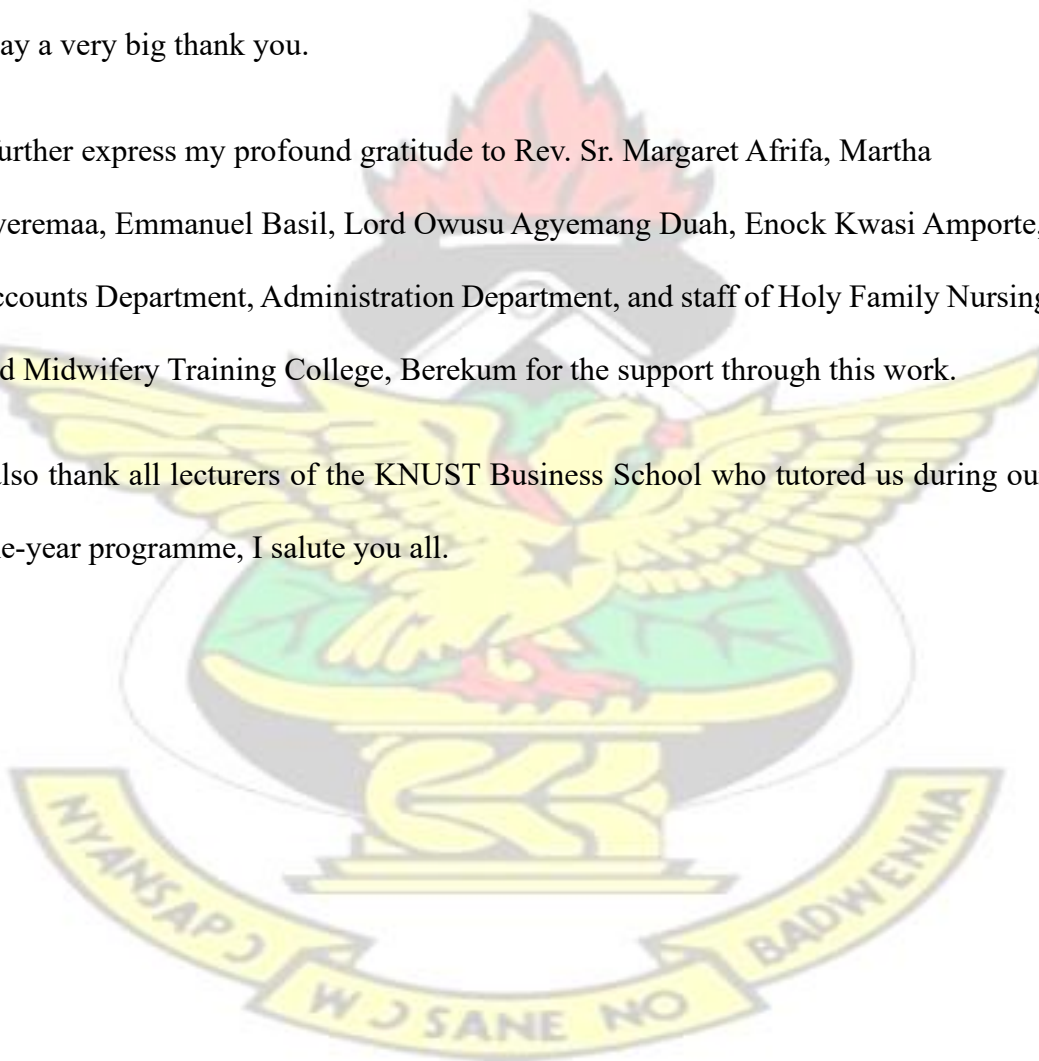
## ACKNOWLEDGMENT

A lot of contributions have come from a number of people since I embark on this program, I feel is time I acknowledge some of these contributors. I will like to express my heartfelt gratitude to all.

My foremost gratitude goes to the Almighty God for sustaining my life to complete this programme. I also acknowledge my able Supervisor - Dr. Kwame Mireku, for his time, guidance, and constructive criticisms which led to the production of this work. I say a very big thank you.

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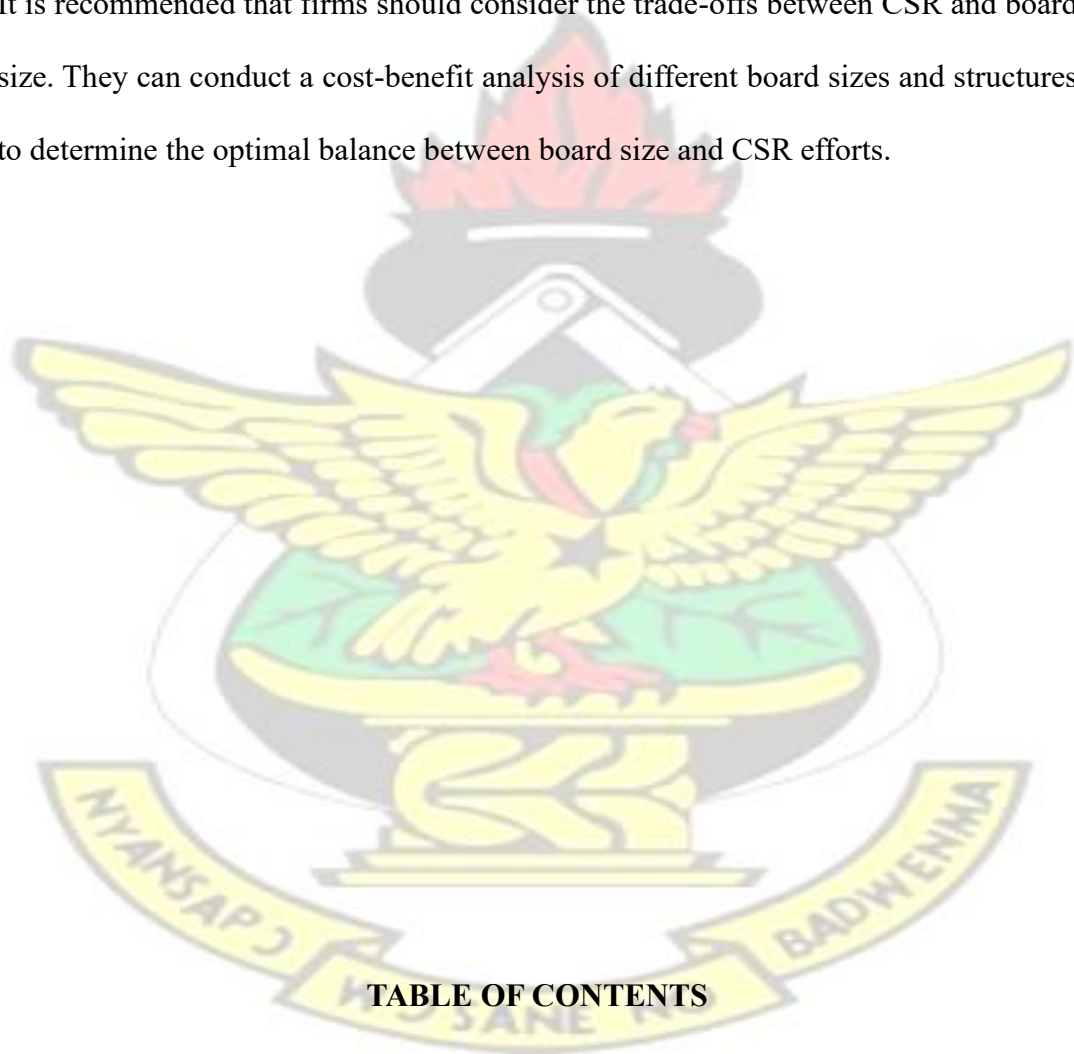
I also thank all lecturers of the KNUST Business School who tutored us during our one-year programme, I salute you all.



## ABSTRACT

The main objective of the study was to examine the moderating role of corporate governance on the relationship between corporate social responsibility and firm performance. The design was quantitative, explanatory, and a desk study. The study

sampled 16 firms listed on the Ghana stock exchange. The data for the study was secondary and was gathered from the annual reports of the firms. The data was analysed using random effect GLS regression. The study found that CSR was positively related to firm performance. Also, board size negatively moderated the positive relationship between CSR and firm performance. Also, the study found that board independence and managerial ownership did not moderate the CSR - firm performance relationship. The findings were robust to the FGLS covariance matrix. It is recommended that firms should consider the trade-offs between CSR and board size. They can conduct a cost-benefit analysis of different board sizes and structures to determine the optimal balance between board size and CSR efforts.



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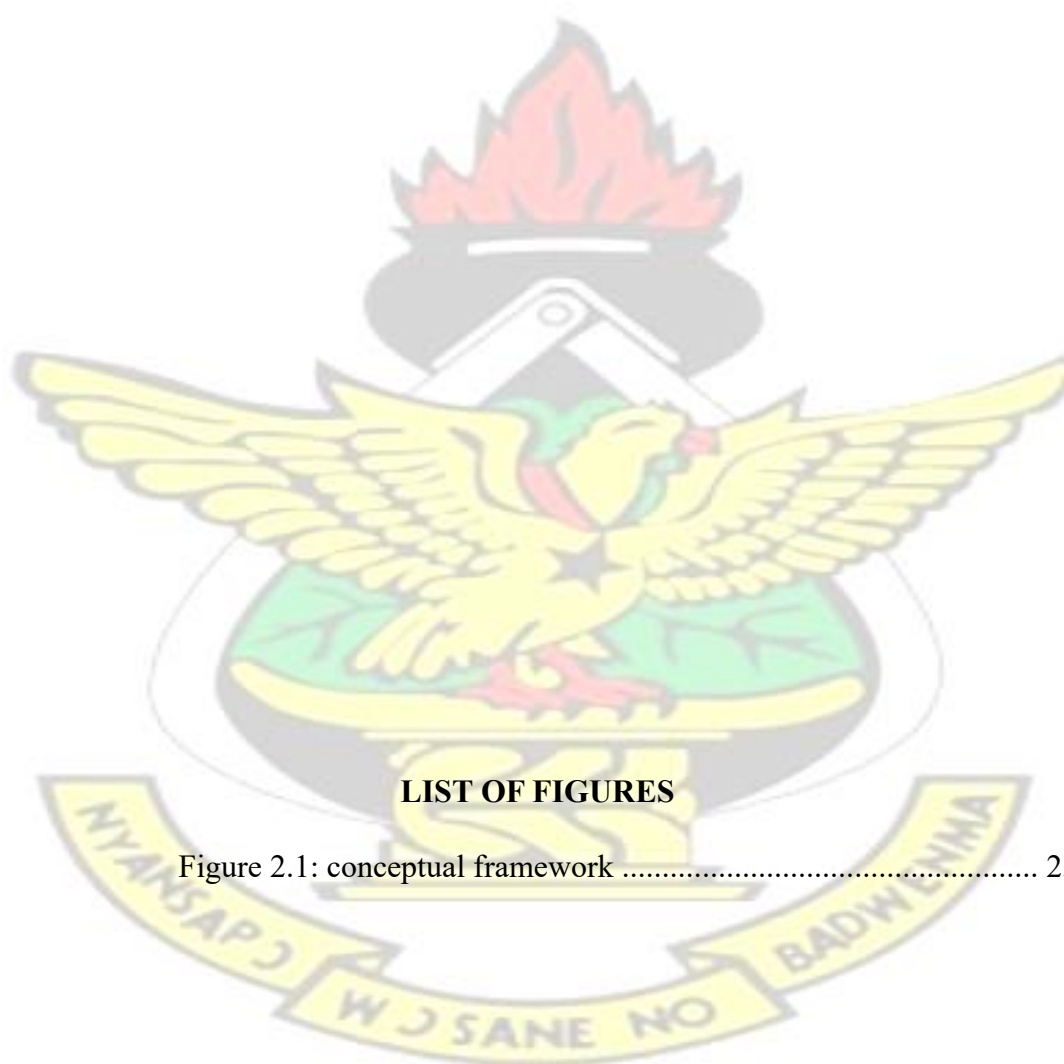
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## **LIST OF ABBREVIATIONS**

CSR: corporate social responsibility

BS: board size

BIND: board independence

MO: managerial Ownership

ROA: return on Assets

FP: firm performance

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 BACKGROUND OF THE STUDY**

Many organisations, not only shareholders, care about a company's corporate social responsibility (CSR). The primary reason for this is because this is the best indicator of the positive impact an organisation has on the quality of its environment. Companies are always looking for ways to increase profits and improve society; therefore, it is no surprise that there has been a rise in books and articles on corporate social responsibility (Pekovic and Vogt, 2021). By participating in CSR programmes and disclosing the outcomes, businesses may demonstrate their commitment to social responsibility. Publication of CSR results is an element of corporate social responsibility disclosure, which serves to provide credibility to businesses' actions (Kim, Yin, and Lee, 2020).

Although many contend that CSR may be explained in a number of ways, the most popular explanation is that proposed by Carroll (1979). According to Carroll (1979), CSR should primarily focus on four obligations: economic, legal, ethical, and charitable. Therefore, corporate social responsibility (CSR) includes four responsibilities for businesses: the economic responsibility of making a profit; the legal responsibility of following the rules; the ethical responsibility of doing what is right and fair; and the philanthropy responsibility of sharing resources for the benefit of society at large. The performance and continued existence of a firm may be influenced by the form and size of a company's CSR, which in turn is influenced by its corporate Governance (Waheed, Hussain, Hanif, Mahmood and Malik, 2021).

The goal of corporate Governance in a commercial context is to level the playing field between the company's shareholders and its employees, or "agents" (management). Due to the fact that ownership and control are maintained distinct from one another, tension might arise between the principal and the agent. Agency theory, developed by Jensen and Meckling (1976), is a framework for analysing the practises of corporations' top management. It is argued under this theory that agents, seen as individuals, might act in ways that are advantageous to their own interests (Kim, Park, and Lee, 2018). They are more inclined to look out for themselves, including by avoiding risks, manipulating finances for remuneration, maximising profits, and plundering business resources, rather than the principals, who are the owners.

Managers may seek personal benefit via CSR, which is not in the shareholders' best interest. Managers' ability to attain their own goals via the use of CSR alternatives will be hampered or aided, respectively, by the effectiveness of existing corporate governance systems (Kabir and Thai, 2017). This demonstrates how the financial outcomes of CSR efforts might depend on the kind of corporate Governance and the effectiveness of corporate governance procedures of an organisation. Many proxies, including board size, board independence, ownership structure, have been shown via empirical research to aid corporations in improving their governance quality (Al-Shammari, Banerjee, and Rasheed, 2021; Ikram, Sroufe, Mohsin, Solangi, Shah, and Shahzad, 2019; Yang, Bento, and Akbar, 2019; Naseem, Shahzad, Asim, Rehman and Nawaz, 2020). Shareholder confidence is bolstered by good corporate Governance, which in turn helps the company's leadership get reasonably priced capital (Yang, Bento, and Akbar, 2019). Businesses with better management are more lucrative and have a less negative impact on society

(Al-Shammari, Banerjee, and Rasheed, 2021).

## **1.1 PROBLEM STATEMENT**

Financial success is simply one metric among several that is used to evaluate businesses. Environmental, social, and governance concerns are among the many issues that matter to stakeholders (Ghardallou and Alessa, 2022; Khan, Jia, Lei, Niu, Khan, and Tong, 2022). Corporate social responsibility (CSR) disclosure is an effort to be more transparent with stakeholders and demonstrate that a company's obligations extend beyond the maximisation of profit (Ba, 2017; Kordloie and Shahverdi, 2018). CSR disclosure shows investors how the firm interacts with its employees, society, and the environment, narrowing the knowledge gap between management and owners (Pham and Tran, 2020; Zheng, Rashid, Siddik, Wei, and Hossain, 2022). Corporations guarantee integrity and transparency in business operations with solid governance structures (Firmansyah, Husna, and Putri, 2021). There should be a balance between the company's economic and social objectives and those of its workers and the community, and this is what corporate governance aims to achieve. Successful CSR policies rely on effective corporate governance; thus, the board ensures that corporate responsibility issues are integrated into the governance structure so that it can be properly monitored to achieve its aim (Nour, Sharabati and Hammad, 2020; Chijoke-Mgbame, Mgbame, Akintoye, and Ohalehi, 2020; Ananzeh, Alshurafat, Bugshan and Hussainey, 2022). The literature shows little research on CSR and Firm performance in Ghana (Famiyeh, 2017; Gatsi, Anita, Gadzo and Ameyibor, 2016). Hence, this study adds to the empirical literature in Ghana. Also, this study contributes to the Ghanaian literature by considering moderating variables which previous studies have not studied. Hence this study fills

the gap in the Ghanaian literature by examining how corporate governance moderates the relationship between CSR and firm performance.

## **1.2 OBJECTIVES OF THE STUDY**

The main objective of the study is to examine the moderating role of corporate governance on the relationship between corporate social responsibility and firm performance. The study shall delve into these specific objectives.

1. To examine the effect of CSR on firm performance
2. To examine the moderating effect of board size on the relationship between CSR and firm performance
3. To examine the moderating effect of board independence on the relationship between CSR and firm performance
4. To examine the moderating effect of managerial ownership on the relationship between CSR and firm performance

## **1.3 RESEARCH QUESTIONS**

1. What is the effect of CSR on firm performance?
2. What is the moderating effect of board size on the relationship between CSR and firm performance?
3. What is the moderating effect of board independence on the relationship between CSR and firm performance?
4. What is the moderating effect of managerial ownership on the relationship between CSR and firm performance?

#### **1.4 SIGNIFICANCE OF THE STUDY**

The findings of this study will contribute to the academic literature. The study will inform scholars about the role corporate governance plays in CSR and firm performance relationships, which could propel scholars to research other moderating variables.

The study will inform investors about the role corporate social responsibility plays in the performance of firms. This will guide investors in choosing the right firms to invest especially those that disclose their CSR activities.

The purpose of the research is to assist businesses in formulating effective guidelines for their corporate social responsibility (CSR) initiatives so that those businesses may enjoy greater levels of success. Therefore, the insights gained from this research will assist managers in comprehending how corporate social responsibility influences the success of a company.

The results of the research will provide members of the public with information on the amount of money companies spend on CSR efforts. Consumers who are concerned about corporate social responsibility will benefit from this information since it will enable them to identify companies with whom they should consider doing business. In addition to this, advocacy organisations will have an easier time appealing to these companies over CSR activities.

The findings of the study will educate policymakers on the role of corporate governance in the CSR-firm performance link. As a consequence of this,

policymakers will be better prepared to make appropriate changes to the law governing corporate governance.

### **1.5 BRIEF METHODOLOGY**

The study is a quantitative study which tests the relationships among the variables of the study. The study has four variables. The dependent variable is firm performance. The moderators are board size, board independence and managerial ownership. The control variables are firm size, leverage, age and inflation. The data for the study is analysed using panel regression.

### **1.6 SCOPE AND LIMITATIONS OF THE STUDY**

The study focuses only on listed firms due to the availability of data. The data is obtained from published documents by the sampled firms. The study covers companies listed on the Ghana stock exchange from 2010 to 2021. The study does have limitations. It is crucial to note that the sample procedure does not perfectly adhere to probability sampling since it is not able to get complete data for all organisations. Furthermore, the model is far simpler than reality, and this extends beyond the problem of endogeneity because it is impossible to account for every variable that can influence the examined connections.

### **1.7 ORGANIZATION OF THE STUDY**

The research is composed of five chapters. The first chapter includes the introduction, which introduces the foundation and the rationale of the study. The report also includes a summary of the study's relevance and its scope, as well as the outline of

the thesis. A literature assessment of CSR and firm performance follows in chapter two. Chapter three describes the study's methodologies and data collection. Chapter four discusses the outcomes of the study. Finally, the study's conclusion and policy suggestions are provided in chapter five.

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## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 INTRODUCTION**

This chapter reviews pertinent literature in relation to the research objectives. The chapter specifically presents review on CSR, corporate governance and firm performance. Further, theories and summary of previous studies are also reviewed.

#### **2.1 CONCEPTUAL REVIEW**

This section explains CSR, corporate governance and its components and firm performance.

##### **2.1.1 Corporate Social Responsibility**

According to Nour et al. (2020), CSR is a collection of policies, processes, and projects that are integrated into the way a company operates and deal with issues of socially responsible investment and business ethics. According to Yeon (2016), corporate social responsibility (CSR) occurs when a company incorporates the principles of social justice, and sustainable business practises into the way it conducts its operations. Additionally, corporate social responsibility (CSR) is a concept that considers organisations to be the representatives of the interests of a variety of diverse groups (Ba, 2017). This is in contrast to the conventional view of the company, which holds that the sole reason for the company's existence is financial gain (Jensen and Meckling, 1976). Therefore, modern corporations serve as a central location for the formation of contracts between the company and its larger group of stakeholders, with the ultimate objective

of boosting the value of the company (Peng and Yang, 2014; Naseem et al., 2020). According to Peng and Chen (2015), corporate social responsibility is when a business takes steps to address issues and solve problems that are beyond the scope of its financial and technical capabilities in order to assist the community in which it operates and generates revenue. According to Kordloie and Shahverdi (2018), corporate social responsibility provides a voluntary means for corporations to address social and environmental issues in the areas in which they operate. After that, Al-Shammari, Banerjee, and Rasheed (2021) defined CSR as the motivation of businesses to improve the well-being of societies and communities by contributing corporate resources, to help all stakeholders. As a result of what has been discussed, it is abundantly evident that corporate social responsibility refers to the decisions and activities that businesses take not only to satisfy their immediate financial demands but also to satisfy the needs of all of their stakeholders.

### **2.1.2 The Concept of Corporate Governance**

Corporate governance (CG) entails putting in place the structure, processes, and mechanisms that ensure the organisation is operated and managed in such a manner to generate long-term shareholder value via the stewardship of management and to boost the performance of the company (Buallay, Hamdan, and Zureigat, 2017). According to Bhagat and Bolton (2019), CG has the potential to assist individuals in defining their goals and developing strategies on how to achieve those goals. According to Paniagua, Rivelles and Sapena (2018), CG is a collection of rules for maintaining order inside the system, including both those that are self-inflicted and those that are enforced from the outside. These rules and procedures ensure that organisational managers are held

accountable in order to guarantee that they are watching out for the interests of individuals who have a financial stake in the firm. It is possible for a broad range of parties, including a business's management, investors, workers, and suppliers, as well as regulatory authorities, government agencies, consumer protection organisations, and the general public, to have an effect on or be affected by the operations of a company.

According to Al-Gamrh, Smail, Ahsan and Alquhaif (2020), CG also includes the checks and balances that have been put in place to ensure that management prioritises the interests of the firm's stakeholders and that value is maximised. Also covered are publicly listed companies and the legal, cultural, and institutional frameworks that regulate their operations and administration. In a nutshell, CG refers to a methodical approach to the administration of a company in which the role of owner and management are held by distinct individuals. CG allows businesses to more efficiently plan, collaborate across departments, and communicate with their stakeholders by sharing information with them.

#### **2.1.2.1 Board Size**

According to Vitolla, Raimo and Rubino (2020), a board's size is the total composition of the board. When the need for boards is acknowledged, it is reasonable to assume that a larger board would be preferable so that a wider range of skill sets would be represented. However, the board's ability to maintain tabs on agents is compromised by a larger membership due to increased coordination and communication difficulties (Zubeltzu, Jaka, Álvarez, Etxeberria and Ortas, 2020; Jensen, 1993). It has also been argued that larger boards make it more difficult for individual directors to voice their

displeasure with senior management and conduct thorough assessments of the company's performance (Mayur and Saravanan, 2017).

Boards larger than seven or eight members, as suggested by Jensen (1993), are more prone to waste resources and perform poorly. According to the agency theory, a larger board increases the risk of "free-riding" directors and makes the board less functional in the day-to-day operations of the company. Even if a company has a large board, operations are often delegated to the chief executive officer. This will allow management to act in their own self-interest rather than in the best interest of the firm as a whole, which will have a negative impact on the company's performance (Wang, Chen, Fang and Tian, 2018). According to Gambo, Bello and Rimamshung (2018), more individuals on a board means more opinions and viewpoints to consider, making it more difficult to reach a consensus. Because of this, boards with more members take longer and provide fewer results.

#### **2.1.2.2 Board Independence**

Independent directors (NED) are members of a company's board of directors who are not affiliated with the company or its management and do not have any conflicts of interest that would prevent them from making objective decisions on behalf of the company and its shareholders (Nzeribe, 2019). According to agency theory, NEDs are the most effective regulators for protecting shareholders from management's self-interest by enforcing strict monitoring processes (Jensen and Meckling, 1976). It is also argued that an increase in the number of NEDs on a board would lead to more effective monitoring and, ultimately, fewer issues inside an organisation (Fama and Jensen, 1983). Executives, according to Fuzi, Halim and Julizaerma (2016), are beneficial to

boards because of their expertise and insight into the company, but they might be driven by self-interest at the cost of the business and its shareholders. However, NEDs are able to conduct impartial monitoring and boost corporate performance without having as much familiarity with day-to-day operations as CEOs (Shan, 2019). The composition of the board may be determined by a variety of criteria, including the number of directors, the number of independent board members, and the number of directors from outside the company (Fuzi, Halim and Julizaerma, 2016). The principle of agency underpins the concept of a board's impartiality. Since they are less prone to have issues in their connection with the boss and the staff, independent board members may be better equipped to keep operations in check and responsible. This is due to the fact that, as elected officials, their loyalty lies not with themselves but with the people who put them in office. Therefore, improving business performance should be a natural consequence of increasing the number of independent directors on company boards.

The incentive of director/managerial ownership, as stated by Jensen and Meckling (1976), is expected to encourage agents to generate a total surplus. This is because it becomes less attractive for managers to operate in a manner that favours themselves as management ownership rises and the interests of shareholders and managers become more aligned. In other words, managers have more at stake if they do not maximise shareholder value, as measured by the number of shares they possess. Consequently,

the agency issue may be resolved, and shareholders' primary purpose of maximising value can be achieved when principals and agents have aligned interests.

### **2.1.3 The Concept of Financial Performance**

A company's success or failure is directly related to its ability to generate profit. Financial performance, according to Fahad and Busru (2021), is the degree to which actual outcomes from management actions meet or exceed planned outcomes. It is the firm's capacity to make better use of its assets in order to accomplish its aims. According to Trivedi (2010), financial performance is the execution of a financial job in accordance with established standards of precision, completeness, cost, and timeliness. It indicates how close or far off an organisation is from reaching its monetary goals. The term "financial performance" is used to describe how well a business is performing financially or how effectively it is able to achieve its objectives. Aydiner, Tatoglu, Bayraktar, Zaim and Delen (2019) also characterised financial performance as the extent to which a company increases its earnings, profits, and market value. The rise in the price of the company's stock is evidence of this, which may be weighed against the rise or fall of similar stocks and sectors. According to what has been said, financial performance is a metric for gauging the success with which financial objectives are being pursued and achieved, as well as the rate of increase in the value of a company's shares.

## **2.2 THEORETICAL REVIEW**

Two theories are found relevant for the study; These are the agency and the stakeholder theories.

### **2.2.1 Agency Theory**

The connection between shareholders and an agent is the subject of agency theory. Since most organisations judge businesses by their financial performance, studying corporate social responsibility (CSR) includes an emphasis on financial outcomes. CSR activities, according to Akpınar, Jiang, Gómez-Mejía, Berrone and Walls (2008), may lead to agency difficulties or conflicts of interest between shareholders and directors. CSR may provide an agency issue for corporations if they utilise it to achieve their own goals. It was also recognised that CSR spending represents a diversion of resources from other uses inside the company. This demonstrates that the firm will make good use of CSR funds to increase productivity, which is consistent with a socially responsible stance (Greiner and Sun, 2021). With regards to agency theory's impact on corporate social responsibility, CG mechanisms should only support the implementation of CSR initiatives if doing so improves the effectiveness of the business. Hence according to the agency theory, the board serves as a check on management so that management does not target CSR activities to achieve their personal objectives.

### **2.2.2 Stakeholder Theory**

Stakeholder theory is the foundation for the relationship between external stakeholders and business operations. Management performs CSR to satisfy its moral, ethical, and

social duties to its stakeholders while also accomplishing its financial objectives (Freeman, 1984). Stakeholders, according to Freeman (1984), are those who may be impacted by an organization's decisions and activities. The most significant stakeholders include consumers, workers, communities, suppliers, the public, regulators, the government, policymakers, and shareholders. Also, the stakeholder theory suggests that when directors take part in CSR activities, all of the firm's stakeholders support them. Directors should thus seek to enhance the welfare of all groups that may impact or be affected by the firm. This will assure the company's continued financial health and prosperity for the benefit of its shareholders.

In the same manner, this point of view states that enterprises have to account not just to shareholders but also to anybody whose the firm's activities impact (Rodriguez-Dominguez, Gallego-Alvarez and Garcia-Sanchez, 2009). According to stakeholder theory, managers may increase the company's worth by prioritizing everyone who has a financial or other interest in the business. The theory suggests that most CSR-conscious businesses are those who prioritize the requirements of their various stakeholder groups before their own, leading to better economic outcomes (Kordloie and Shahverdi, 2018). Also, management initiatives that are aimed to make a company's major stakeholders happy should boost corporate value and financial performance. A robust CSR strategy approved by the board of directors also makes the firm more lucrative and benefits all the individuals whose decisions will touch. This theory is relevant because stakeholder theory advocates that companies who actively address

social and environmental concerns will be better equipped to balance the interests of all of their stakeholders and increase their profits (Ikram, Sroufe, Mohsin, Solangi, Shah, and Shahzad 2019; Al-Shammari, Banerjee, and Rasheed, 2021).

## **2.3 EMPIRICAL REVIEW**

A summary of previous studies are presented in this section.

### **2.3.1 Effect of CSR on Firm Performance**

The study conducted by Ikram, Sroufe, Mohsin, Solangi, Shah, and Shahzad (2019) is a longitudinal investigation of small and medium-sized enterprises (SMEs) in Pakistan aimed at examining the impact of CSR initiatives on organisational performance. The research involved administering surveys to small and medium-sized enterprises (SMEs) located in Karachi, Lahore, and Faisalabad. As per the research, there appears to be a positive correlation between CSR and financial performance.

The study conducted by Al-Shammari, Banerjee, and Rasheed (2021) examines the correlation between CSR and financial performance. The authors employed a panel sample that was continuous in nature, consisting of 137 companies from the S&P 500 index. The study utilised data from multiple sources to examine the period spanning from 2004 to 2013. Stochastic frontiers analysis is employed to assess a company's research and development, managerial, and marketing proficiencies. The findings indicate a correlation between CSR and financial performance, wherein the impact on

organisational effectiveness is more pronounced for firms possessing greater research and development capabilities and practical expertise.

The study conducted by Peng and Chen (2015) examined the correlation between CSR and financial performance within the United States. The researchers utilised information sourced from the KLD spanning the years 2003 to 2011, in conjunction with the Execucomp and Compustat Databases provided by S&P. The researchers employed OLS regression, association analysis, and descriptive statistics to analyse the aforementioned dataset. The findings indicate a significant impact CSR on financial performance.

The paper by Agyemang and Ansong (2017) examined the impact of CSR on the financial performance of SMEs in Ghana, controlling for variables including access to finance and business reputation. These writers conducted interviews with 423 SMEs in the Greater Accra Area to acquire an in-depth understanding of the topic at hand. The estimate technique of partial least squares was employed to check the data. The authors provided proof that CSR has an effect on company finances by showing that smaller businesses with more responsible policies have a higher level of brand loyalty and success as a result.

Mangalagiri and Bhasi (2022) investigated the effects of CSR on the stock market performance of publicly listed Indian enterprises. They performed a regression analysis to probe the connection between CSR and financial success. This study employed accounting and market metrics to evaluate company performance. Research shows that

CSR has a positive impact on financial metrics but has minimal bearing on stock price performance. The most crucial finding of the research was that markets do not value most required CSR expenditure. Companies who invest in CSR activities above what is legally required receive financial rewards for their efforts.

The research team of Khan, Jia, Lei, Niu, Khan, and Tong (2022) investigates the link between CEO compensation and in-kind donations made by companies. This research looked at a subset of publicly traded, privately held, non-SOE companies in China from 2009 to 2015 that made charitable contributions but did not disclose them in their CSR reports. The information was collected from a wide range of sources, including the CSMAR database and the annual and CSR reports of the selected businesses. The regression model was employed to examine the primary effect. The findings indicate that companies thrive less when their employees brag about their achievements. Silent donations increased company's performance.

Ghardallou and Alessa's (2022) research contributes to this continuing discussion by examining how CSR and financial success are not always linearly related. Finding the value transition threshold of CSR in 70 GCC enterprises from 2015 to 2020 using a PSTR model was the focus of this research. The CSR composite index and other CSR characteristics were used, including environmental, social, and governance transition factors, to get these results. Real-world data reveals that investing in CSR does not boost a company's worth until it reaches a certain critical valuation point. When the marginal benefit exceeds the cost, investing in CSR is excellent for a company's bottom line. When examining government, social, and environmental CSR evaluations

independently, the findings similarly demonstrate the nonlinear connection. Interesting, the finding ties the social CSR characteristic to the highest possible threshold. Therefore, businesses might increase profits by investing more in CSR's social initiatives.

By examining the function of intellectual capital efficiency as the mechanism between CSR and company performance, Shahzad, Baig, Rehman, Saeed, and Asim (2022) investigated the impact of CSR on business performance. Accounting for endogeneity issues in research conducted between 2009 and 2018, the authors of this paper analysed data from 2,132 US enterprises to develop a structural model of CSR, IC, and firm performance. According to the findings, CSR has a significant impact on the success of businesses.

According to Yang, Bento, and Akbar (2019), 125 Chinese pharmaceutical businesses between 2010 and 2016 were used to assess the influence of CSR on five unique components of CSR: shareholders; workers; consumers and suppliers; environmental practices; and society. An overall CSR score has an enormous impact on a company's financial performance, according to panel-based regression models

CSR was investigated by Naseem, Shahzad, Asim, Rehman and Nawaz (2020) in relation to firm performance. Thomson Reuters-ASSET4 DataStream environmental, social, and governance ratings are used to compute them (as a proxy for corporate social responsibility). Stakeholder theory-based analysis of 1021 Asia Pacific corporations between 2006 and 2016 shows a favourable correlation between CSR and company performance.

The impacts of CSR disclosure on company performance in India were studied by Fahad and Busru (2021). They considered both the market worth and profitability of the companies they studied. This research examines the relationship between CSR disclosure and financial success for the most recent sample of 386 Indian businesses from the BSE 500 index using panel regressions. From 2007 to 2016, it profiles the world's most influential stock market figures. This unintended consequence may be largely attributed to the ESG disclosure ratings. There is however contradictory research showing that increased company profitability and firm value have a detrimental impact on CSR disclosure.

### **2.3.2 The Moderating Effect of Board Size on the Relationship Between Corporate Social Responsibility and Firm Performance**

The work of Pekovic and Vogt (2021) considered how CSR meshes with other aspects of CG. The authors built a model to examine the factors—such as board size, ownership concentration, gender diversity, and independence—that moderate the connection between CSR and company financial success (as assessed by Tobin's q).

Based on a sub-sample of 17,500 data points amassed over the course of 11 years, the model mostly corroborate the moderated assumptions. Considering board size and gender diversity, CSR has a favourable impact on a company's financial performance. But a company's financial performance is harmed when CSR and high levels of concentrated ownership work together. Furthermore, they found no evidence that an impartial board altered the correlation between CSR and financial performance. By

elucidating the role of corporate governance qualities in mediating the correlation between CSR and financial success, they advanced the state of the field.

In a study spanning 2012-2016, Ba (2017) analysed the effect of CG on the correlation between corporate social responsibility and financial performance at 75 Dutch firms. Analyses of the data included both descriptive and inferential statistics, including correlation and OLS regression. The findings demonstrated that the positive and significant connection between CSR and financial performance is unaffected by board size, ownership concentration, or management ownership.

Researchers Ntim and Soobaroyen (2013) examined 169 non-financial enterprises trading on South Africa's Johannesburg Stock Exchange (JSE) between 2002 and 2009 to see whether CG strengthened the correlation between CSR and financial success. A variety of statistical methods were used to examine the data, including descriptive statistics, correlation analysis, bivariate regression, and multiple regression. The findings demonstrated that well-governed businesses use CSR practises in order to increase their proportion of socially responsible investments, and that the synergy between CSR and CG practises has a higher beneficial influence on financial performance than CSR alone. In other words, this demonstrates that CG such board size contributes to strengthening the connection between CSR and bottom-line results.

Chang (2016) utilised panel data to examine whether or whether the association between CSR and financial performance at businesses listed on the Taiwan Stock

Exchange (TSE) during 2005 and 2009 was affected by media attention and CG. A variety of statistical methods were used to examine the data, including descriptive statistics, correlation analyses, pooled ordinary least squares regressions, fixed effect regressions, and random effect regressions. The data demonstrates that CG especially board size may function as a balance point between CSR and business performance.

### **2.3.3 The Moderating Effect of Board Independence on the Relationship Between Corporate Social Responsibility and Firm Performance**

Researchers Rodriguez-Fernández (2016) examined the effect of strong CG on the correlation between CSR and financial results for firms trading on the Madrid Stock Exchange in 2009. The data was analysed using a variety of statistical methods, including descriptive and correlational statistics and a multivariate regression model. The findings demonstrated that board independence moderates the connection between CSR and financial performance.

The study conducted by Yeon (2016) examined the correlation between CSR and the financial performance of publicly traded companies in Korea during the period spanning from 2008 to 2013. The data was analysed through the utilisation of a regression model and basic statistical methods. The research has revealed that CSR had a favourable impact on financial performance, which is statistically significant.

The study conducted by Kabir and Thai (2017) analysed a sample of 524 Vietnamese companies that were publicly traded on the Ho Chi Minh and Hanoi Stock Exchanges during the period of 2008 to 2013. The objective of the study was to examine the

potential impact of CG on the relationship between CSR and financial performance. The findings indicate that there exists a positive and statistically significant correlation between CSR and financial performance, which is further amplified by factors such as foreign ownership, board size, and board independence. In contrast, the impact of state ownership did not exhibit such a consequence.

Studying the impact of CG on the correlation between CSR and financial performance for 83 publicly listed Romanian firms between 2011 and 2016, Kordloie and Shahverdi (2018) found mixed results. They employed both descriptive statistics and regression to analyse the data. Findings demonstrated that board independence moderates the connection between CSR and financial success while board size does not.

#### **2.3.4 The Moderating Effect of Managerial Ownership on the Relationship Between Corporate Social Responsibility and Firm Performance**

However, Peng and Yang (2014) investigated whether or not the concentration of ownership influenced the correlation between CSR and financial results. They accomplished this for all cement, plastics, chemical, paper and pulp, and iron and steel enterprises registered in Taiwan between 1996 and 2006 who made yearly environmental capital expenditures. The finding indicated that the link between CSR and financial performance weakens when ownership is highly concentrated.

From 2012 to 2014, Siregar and Bukit (2017) analysed the link between CSR, business size, and financial performance for plantation firms registered on the Indonesian and Malaysian Stock Exchanges. Analyses of the data using linear and multiple regressions

revealed that CG (managerial ownership) positively impacted the connection between CSR and the financial performance of businesses.

Kim, Park, and Lee (2018) investigated the effect of ownership on the correlation between CSR and value for 48 firms in Korea between 2010 and 2014. A negative and statistically significant moderation impact of substantial foreign ownership on the link between CSR and business value was found, but no effect of managerial ownership could be shown.

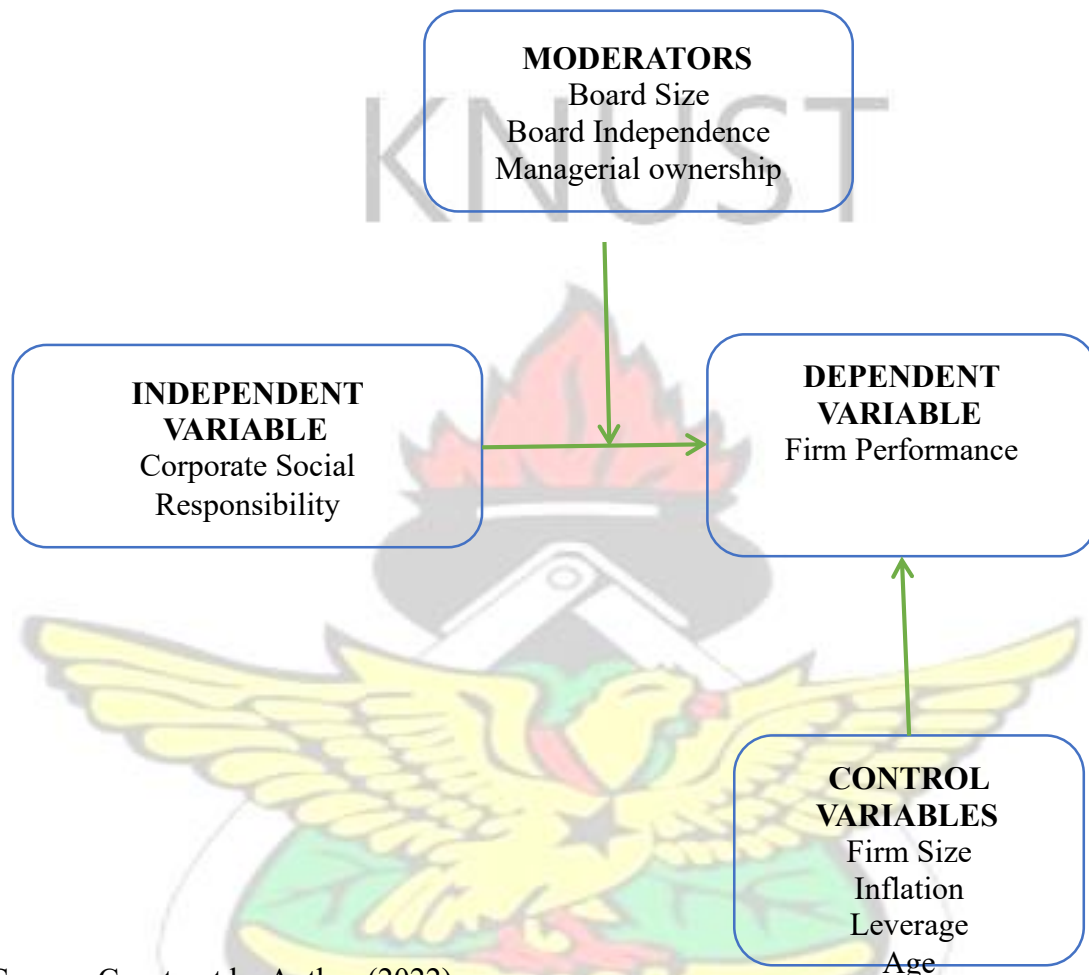
An integrated theoretical framework was provided by Waheed, Hussain, Hanif, Mahmood, and Malik (2021) to explain the moderating impact of institutional investors, managerial ownership their investment horizon, and the corporate governance mechanism in the long-term viability of the CSR-performance nexus. A random sample of 327 companies that are not banks but are listed on the Pakistan Stock Exchange were used to test the proposed model. According to the findings, institutional investors and managerial ownership (as a whole) positively moderate the connection between CSR and financial success.

## **2.4 CONCEPTUAL FRAMEWORK**

The framework to achieve the study objectives are presented in this section. The independent variable is CSR. The dependent variable is firm performance. The moderators are board size, board independence and managerial ownership. The control variables are firm size, leverage, age and inflation. The framework shows that the independent variable is linked to the dependent variable. Also the moderators are

connected in-between the independent variable and the dependent variable. The control variables are also linked to the dependent variable.

**Figure 2.1: conceptual framework**



Source: Construct by Author (2022)

## 2.5 SUMMARY

The study explained corporate social responsibility, corporate governance and firm performance. The agency theory and stakeholder theory were explained. This section also reviewed the empirical studies that supports the study and finally the conceptual framework was also presented.

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## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 INTRODUCTION**

This chapter delineates the methodology employed in the execution of the investigation. The document provides a comprehensive account of the research methodology, encompassing aspects such as the research design, population, sampling methodology, data collection techniques, data analysis procedures, research variables, and the assessment of validity and reliability.

### **3.1 RESEARCH DESIGN**

In light of the fact that the purpose of this thesis is to provide an explanation for the connection that exists between CSR and firm Performance, the research strategy for this study is explanatory. In addition, quantitative research methodologies were used in this project as a result of the fact that data on the dependent variable, independent variables, moderators and control variables are all presented in numerical format. This research is considered a desk study because, rather than engaging participants in actual fieldwork, the data for the study were obtained from previously published publications, such as yearly reports.

### **3.2 POPULATION OF THE STUDY**

All companies on the Ghana stock exchange were considered for the study. The Ghana stock exchange is the only regulated market where securities are traded.

Companies quoted on the Ghana stock exchange make information needed for this study easily available as it is a requirement for continuous listing on the exchange.

There are thirty-eight companies currently listed on the Ghana stock exchange.

### **3.3 SAMPLE SIZE AND SAMPLING PROCEDURES**

For the purpose of the research, sixteen (16) businesses were chosen. The time frame covered by the investigation was from 2010 to 2021. The sample size was determined by the use of a purposive sampling method in the research. Both the time frame and the sample were chosen according to the amount of data that the researcher had access to. Firms were only selected if they had declared the amount spent on CSR for the significant part of the period considered under the study.

### **3.4 DATA COLLECTION**

Secondary data was used in this study, which was derived from past financial reports provided by the firms under consideration. The data were downloaded, and the information contained inside them was retrieved for use in this investigation. Data on corporate governance were extracted from the corporate section of the financial statements. Data on firm performance was extracted from the financial statement section. Data on CSR was extracted from the notes to the financial statements.

### **3.5 DATA ANALYSIS**

In the analysis of the data set the study used a panel data method and the software used was Stata 15. Cross-sectional data, time series data, and panel data are often used in empirical research. Values for many entities or units are gathered simultaneously in a cross-sectional data set. One or more variables' values are followed through time in a time series. Cross-sectional units (such companies, families, or states) are gathered at several points in time to create panel data. Panel data, in other words, include both time and space dimensions (Gujarati and Porter, 2003). The error term is defined differently by the two primary models for panel data regression, the fixed effects model and the random effects model. A major tenet of the fixed effect model is that the error term associated with each individual's influence does not vary. However, the premise of the random effect is that each effect represents a change drawn at random from a probability distribution (Sul, 2019).

The term "fixed effect (FE)" has a consistent meaning that does not evolve with time. The fixed effect illustrates the association between predictor and outcome variables inside a given entity (country, person, company, etc.). It is possible that the predictor variables will be influenced in different ways by the various entities. Therefore, the hypothesis that the entity's error term and predictor factors are interconnected holds true (Sarstedt and Mooi, 2019). Time-invariant features of predictor variables are cancelled out by the FE. Furthermore, the FE model relies on the idea that these time-invariant characteristics are exclusive to each individual and should not be associated with other attributes. Due to their distinct qualities, each entity has its own error term and constant, and they should be treated as independent variables. FE is undesirable if the error terms are correlated, thus conclusions may be flawed. For this reason, the random-effect (RE) might be useful (Athey and Imbens, 2017).

A RE model is appropriate if the unobserved individual heterogeneity is independent of the included factors. Contrary to the fixed effects model, the principle behind the RE model is that differences across entities are not tied to the predictor or independent variables in the model (Athey and Imbens, 2017). According to Gujarati and Porter (2003), the key distinction between fixed and random effects is whether or not the unobserved individual effects have components that are connected to the regressors in the model. FE models are restricted form of RE models (in which the variance of the random effects is shrunk to zero). What this implies is that RE specifications are improved (since it is more general). However, this may not be the case if the random effect specification contains several parameters and the data do not back up the higher unpredictability that these factors indicate. Accordingly, contrasting the RE with the FE is recommended (Sarstedt and Mooi, 2019).

Researchers typically utilise the Hausman (1978) specification test to choose between a RE model and a FE model. When using the Hausman test, one hopes to uncover evidence against the hypothesis that explanatory factors are unconnected to the impact they have on the whole. With random effects modelling, this is an essential component. Estimates from the random effects model and the fixed effects model should be comparable if there is no connection between the independent variable(s) and the unit effects.

### **3.5.1 Specification Tests**

This study validated a set of broad assumptions required for conducting multiple regression analysis. First, multicollinearity between the variables was checked. When two or more variables are intertwined in a manner that might alter the estimated regression parameters, then there is multicollinearity (Alin, 2010). Estimating and testing assumptions regarding regression coefficients is complicated by multicollinearity. The regression coefficient is unreliable and obscured by multicollinearity. Moreover, the coefficients lose their statistical significance due to larger standard errors. Multicollinearity may also induce coefficient sign shifts, which makes it more challenging to identify the best model. Pairwise correlation was used to test for multicollinearity.

Autocorrelation analysis was performed. Modelling panel data using serial correlation produces biased and inefficient outcomes. When two or more observations have the same error term, this is known as a serial correlation (Daoud, 2017). Autocorrelation

occurs in time-series analysis when errors observed in one period recur in subsequent periods. Time-series data, in which the same variables are recorded at various periods, and cluster sampling, in which the same variables are measured on individuals who are linked to one another, are two examples of situations in which there is an economic relationship between the observations (e.g. more than one member of the same family, more than one firm operating in the same company). In this research, autocorrelation was determined using the Wooldridge test. And third, homoskedasticity was checked. The phenomenon of heteroskedasticity is a rejection of this assumption. This occurs whenever there exists a discrepancy between the error terms of several observations. When the variance of a disturbance does not remain constant over time, then heteroskedasticity is present. Heteroscedasticity is likely to be present if the squared residuals increase or decrease as a function of a change in a particular independent variable (Daoud, 2017). This research examined heteroscedasticity using the Breusch-Pagan test.

### 3.5.2 Model Specification and Justification

The econometric models followed the study of Waheed, Hussain, Hanif, Mahmood, and Malik (2021).

$$FP_{it} = \alpha + \beta_1 CSR_{it} + \beta_2 Inflation_{it} + \beta_3 Leverage_{it} + \beta_4 Size_{it} + \beta_5 Age_{it} + \varepsilon_{it} \dots (1)$$

$$FP_{it} = \lambda_0 + \lambda_1 CSR_{it} + \lambda_2 BS_{it} + \lambda_3 (BS * CSR)_{it} + \lambda_4 Inflation_{it} + \lambda_5 Leverage_{it} + \lambda_6 Size_{it} + \lambda_7 Age_{it} + \varepsilon_{it} \dots (2)$$

$$FP_{it} = \lambda_0 + \lambda_1 CSR_{it} + \lambda_2 Bind_{it} + \lambda_3 (Bind * CSR)_{it} + \lambda_4 Inflation_{it} + \lambda_5 Leverage_{it}$$

$$+ \lambda_6 Size_{it} + \lambda_7 Age_{it} + \varepsilon_{it} \dots (3)$$

$$FP_{it} = \lambda_0 + \lambda_1 CSR_{it} + \lambda_2 MO_{it} + \lambda_3 (MO * CSR)_{it} + \lambda_4 Inflation_{it} + \lambda_5 Leverage_{it}$$

$$+ \lambda_6 Size_{it} + \lambda_7 Age_{it} + \varepsilon_{it} \dots (4)$$

In this model firm performance is the dependent variable. CSR is corporate social responsibility with is the independent variable. Bind is board independence, BS ia board size, MO is managerial ownership which are moderators. (Bind \* CSR) is the interaction between board independence and corporate social responsibility. (MO \* CSR) is the interaction between managerial ownership and corporate social responsibility. (BS \* CSR) is the interaction between board size and corporate social responsibility. Inflation, leverage, size and age are the control variables.

### 3.6 VARIABLES AND MEASUREMENT

The study used four variables namely; dependent variable, independent variable, moderator and control variable.

**Table 3.1 Variables and Measurement**

Variables	Measurement	Source
<b>Dependent Variable</b>		
Firm Performance	Pretax profit divided by total assets	Agyemang and Ansong (2017)
<b>Independent Variable</b>		
Corporate social responsibility	Natural log of actual amount spent on corporate social responsibility	Khan, Jia, Lei, Niu, Khan, and Tong (2022)

## Moderators

Board independence	Proportion of independent directors on the board	Kordloie and Shahverdi (2018)
Board Size	The number of directors on the board	Kabir and Thai (2017)
Managerial Ownership	Percentage of shares owned by executives	Kim, Park, and Lee (2018)

## Control Variables

Size	Natural log of total assets	Fahad and Busru (2021)
Inflation	Consumer price Index	Pekovic and Vogt (2021)
Leverage	The ratio of total debts to total assets	Ghardallou and Alessa's (2022)
Age	The number of years a company has been listed on the exchange	Shahzad, Baig, Rehman, Saeed, and Asim (2022)

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Source: Construct by Author (2022)

### 3.7 VALIDITY AND RELIABILITY

The research's reliability and validity are the yardsticks by which its quality is evaluated. Both demonstrate the reliability of a measurement technique, procedure, or test. Reliability is taken to signify dependability, whereas validity is understood to refer to the precision with which a measurement is made. Validity and reliability are often intertwined; a research or measurement need not be valid to be reliable (Apuke, 2017). The reliability of a process is measured by how consistently it produces the same outcomes when applied to the same data and circumstances (Apuke, 2017). However, validity refers to how effectively a technique really measures the constructs for which it was designed. In terms on validity, the models for estimating CSR and firm

performance have been tested and utilized by several researches prior to this study and could be considered valid within the corporate governance research. To increase reliability of the estimated coefficients, the study also tested for multicollinearity with the purpose of identifying if any of the independent variables are linearly related. Therefore, the internal reliability is considered high. Also post diagnostic test were performed to increase reliability.

The logo of Kenyatta University of Science and Technology (KNUST) is centered in the background. It features a yellow eagle with its wings spread, perched on a green shield. Above the eagle is a red flame. Below the eagle is a yellow banner with the text 'WISDOM BEGETS KNOWLEDGE' in black capital letters. The entire logo is set against a light gray background.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSIONS**

#### **4.1 INTRODUCTION**

This chapter presents the findings of the study and provides a thorough discussion of the results. The descriptive statistics of the data collected during the study are shown, and diagnostic tests are run to verify the accuracy of the results. The final conclusions are then presented.

## 4.2 DESCRIPTIVE STATISTICS

Table 4.1 shows that ROA has mean of 0.07. The positive average of ROA indicates that, on average, the firms in the sample are generating a return on their assets. This is a good sign for the firms as it means they are efficiently utilizing their assets to generate profits. However, the standard deviation in ROA suggests that some firms are not generating a positive return on their assets. The average CSR expenditure of 11.29 suggests that the firms in the sample are spending a moderate amount on CSR initiatives. This can have positive effects on the firms' reputation and brand image. However, the high standard deviation of 4.12 indicates that there is significant variation in the amount spent on CSR among the firms. The average board size of 8.82 suggests that the firms in the sample have relatively small boards. This can have positive effects on the firms' decision-making processes as smaller boards may be more agile and efficient in their decision-making.

**Table 4.1: Descriptive statistics**

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	186	0.07	0.13	-0.91	0.61
CSR	186	11.29	4.12	0.00	16.49
BS	186	8.82	1.70	5.00	13.00
BIND	186	0.73	0.17	0.29	0.92
MO	186	0.01	0.06	0.00	0.30
SIZE	186	20.53	1.68	16.99	23.64
LEV	186	0.71	0.24	0.02	1.29
AGE	186	49.97	26.46	2.00	125.00

INFL	186	11.69	3.34	7.14	17.45
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Source: Construct by Author (2022), ROA: return on assets, CSR: corporate social responsibility, BS: board size, MO: managerial ownership, LEV: leverage, INFL: inflation, BIND: board independence

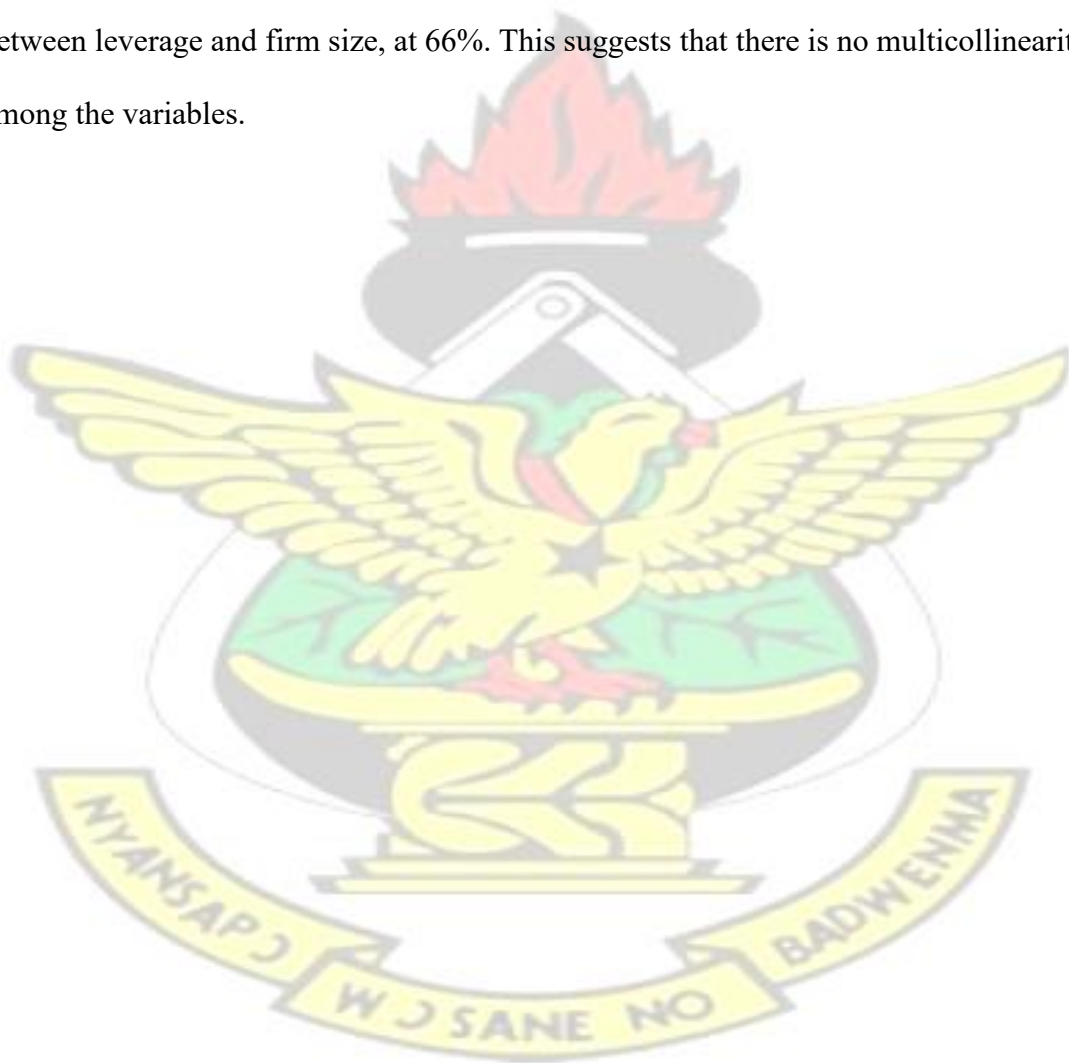
The average board independence of 0.73 suggests that the firms in the sample have relatively independent boards. This can have positive effects on the firms' decision-making processes as independent boards are more likely to make unbiased decisions that are in the best interest of the company. The average managerial ownership of 0.01 suggests that executives on the boards of the firms in the sample own a relatively small percentage of ordinary shares. This can have positive effects on the firms' decision-making processes as executives may be more likely to make decisions that are in the best interest of the company rather than their own personal interests.

The average firm size of 20.53 (measured as the natural log of total assets) suggests that the firms in the sample are of moderate size. Larger firms may have certain advantages, such as greater access to capital and resources, while smaller firms may be more agile and able to adapt to changes more quickly. The standard deviation of 1.68 indicates that there is significant variation in the size of firms in the sample. The average leverage of 0.71 suggests that the firms in the sample have a moderate level of debt relative to their equity. High levels of leverage can be beneficial as they can help firms to access funding and grow their business, but can also increase the risk of financial distress. The average age of the firms in the sample is 49.97 years. Older firms may have certain advantages such as established reputations and customer bases, while younger firms may be more innovative and able to adapt to changes more quickly. The average inflation rate of 11.69 suggests that the firms in the sample are operating in an environment of moderate

inflation. Inflation can have various effects on firms, such as increasing the cost of inputs and reducing the purchasing power of customers.

#### **4.3 CORRELATION MATRIX**

Table 4.2 presents the relationship between the variables of the study. The data indicates that the correlation between the independent variables is low. The highest correlation is between leverage and firm size, at 66%. This suggests that there is no multicollinearity among the variables.



**Table 4.2: Pairwise correlation coefficient**

	ROA	CSR	BS	BIND	MO	SIZE	LEV	AGE	INFL
ROA	1.00								
CSR	-0.02	1.00							
BS	-0.14*	0.29***	1.00						
BIND	-0.05	0.03	0.28***	1.00					
MO	-0.08	-0.11	-0.05	-0.11	1.00				
SIZE	-0.23***	0.44***	0.46***	0.16**	-0.29***	1.00			
LEV	-0.48***	0.39***	0.50***	0.06	-0.17**	0.66***	1.00		
AGE	0.00	0.05	-0.13*	-0.27***	-0.06	0.02	0.00	1.00	
INFL	0.05	0.02	0.07	-0.15**	0.09	-0.07	0.01	-0.03	1.00

Source: Construct by Author (2022), ROA: return on assets, CSR: corporate social responsibility, BS: board size, MO: managerial ownership, LEV: leverage, INFL: inflation, BIND: board independence, \*\*\*:1% significance, \*\*:5% significance, \*:10% significance

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#### 4.4 MODEL SPECIFICATION

The Hausman test is presented in Table 4.3. According to Table 4.3 the correct model for equation 1 - 4 is the random effect. This is because the p-values are above the 0.05 significance level.

**Table 4.3: Hausman test**

Hausman Test		
Equation 1	stat	11.38
	p-value	0.12
Equation 2	stat	13.31
	p-value	0.09
Equation 3	stat	10.53
	p-value	0.06
Equation 4	stat	10.88
	p-value	0.14

Source: Construct by Author (2022)

#### 4.5 HETEROSKEDASTICITY AND AUTOCORRELATION TEST

Table 4.4 shows that the presents a test for heteroskedasticity and autocorrelation. The p-value for the Cook-Weisberg test is 0.12 which is above the 5% significance level. Also, the p-value of Wooldridge test is 0.94 which is above the 5% significance level. The data indicates that there is no autocorrelation and heteroskedasticity present in the data.

**Table 4.4: Diagnostic test**

		Heteroskedasticity	Serial correlation
Equation 1	stat	17.14	0.05
	p-value	0.12	0.94

Source: Construct by Author (2022)

## 4.6 REGRESSION RESULTS

The results of the study is shown in this section. The findings are presented in accordance with the objectives of the study.

### 4.6.1 Effect of Corporate Social Responsibility on Firm Performance

Table 4.5 indicates that the r-square is 32 per cent. This means that 32% of the variation in the dependent variable (ROA) is explained by the independent variables. The wald chi square is significant at 1% level meaning the overall model is fit for the study. The coefficient for CSR is 0.00603 and has a p-value of 0.01. This means that CSR has a significant positive effect on ROA because the p-value is below the conventional level of 10 per cent. Previous studies such as Ikram, Sroufe, Mohsin, Solangi, Shah, and Shahzad (2019) and Naseem, Shahzad, Asim, Rehman and Nawaz (2020) came to the same conclusion.

**Table 4.5: CSR and firm Performance**

ROA	Coef.	Std. Err.	t-value	p-value
-----	-------	-----------	---------	---------

CSR	0.00603	0.00230	2.62	0.01***
SIZE	0.00635	0.00709	0.9	0.37
LEV	-0.34029	0.04919	-6.92	0.00***
AGE	-0.00008	0.00034	-0.23	0.82
INFL	0.00242	0.00250	0.97	0.33
Constant	0.08647	0.12975	0.67	0.51
Wald chi <sup>2</sup>	63.09			
R-square	0.27***			

Source: Construct by Author (2022), ROA: return on assets, CSR: corporate social responsibility, LEV: leverage, INFL: inflation, \*\*\*:1% significance

A possible reason for this relationship is that CSR improves a company's reputation and brand image by demonstrating to stakeholders (e.g., customers, employees, communities, investors, etc.) that the company is socially and environmentally responsible. This can lead to increased customer loyalty and a competitive advantage in the market. Also the loyalty can happen on the employee side as well because CSR initiatives can create a positive work environment and increase employee engagement and retention. This can lead to increased productivity and efficiency, which can contribute to improved profitability and performance of the firm.

The finding supports the stakeholder theory. According to the stakeholder theory, a company has a responsibility to balance the interests of its various stakeholders, including shareholders, employees, customers, suppliers, and the community, in order to achieve long-term success. This theory suggests that a company's commitment to corporate social responsibility (CSR) can contribute to improved relationships with its stakeholders, which could ultimately lead to improved financial performance. By

participating in CSR activities firms can mitigate risks related to social and environmental issues, which can protect the company's reputation and financial performance in the long run. CSR can build the financial resources of the firm by making the firm attractive to investors, which can lead to increased access to capital. This, in turn, can help to support the company's growth and profitability.

#### **4.6.2 Moderating Effect of Board Size on The Relationship Between Corporate Social Responsibility and Firm Performance**

Table 4.6 indicates that the r-square is 30 per cent. This means that 30% of the variation in the dependent variable (ROA) is explained by the independent variables. The wald chi square is significant at 1% level meaning the overall model is fit for the study. The coefficient for CSR is 0.03762 with a p-value of 0.01, indicating that there is significant positive effect of CSR on ROA in this model. The coefficient for BS is 0.05140 with a p-value of 0.01, also indicating that there is a significant positive effect of BS on ROA. To determine whether there is a moderation effect in this table, the study examines the interaction term between the independent variable (CSR) and the moderator (BS). The coefficient for the interaction term is -0.00372 with a p-value of 0.02, indicating that the interaction effect is statistically significant. Specifically, the negative sign for the coefficient indicates that the positive relationship between CSR and ROA becomes weaker as the level of board size increases. This means that for firms with larger boards, the positive effect of CSR on ROA is not as strong as for firms with smaller boards. The finding supports the study of Pekovic and Vogt

(2021).

**Table 4.6: CSR, Board Size, and firm Performance**

ROA	Coef.	Std. Err.	t-value	p-value
CSR	0.03762	0.01358	2.77	0.01***

BS	0.05140	0.01908	2.69	0.01***
BS*CSR	-0.00372	0.00158	-2.36	0.02**
SIZE	0.00484	0.00747	0.65	0.52
LEV	-0.37525	0.05270	-7.12	0.00***
AGE	-0.00007	0.00036	-0.2	0.84
INFL	0.00159	0.00247	0.64	0.52
Constant	-0.28087	0.20966	-1.34	0.18
Wald chi <sup>2</sup>	68.34			
r-square	0.30***			

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Source: Construct by Author (2022), ROA: return on assets, CSR: corporate social responsibility, BS: board size, LEV: leverage, INFL: inflation, \*\*\*:1% significance, \*\*:5% significance

One possible explanation is that larger boards may have more difficulty in coordinating and implementing CSR activities. As board size increases, it may become more challenging for board members to reach a consensus on CSR initiatives, allocate resources effectively, and monitor the progress of CSR programs. This could lead to a weaker relationship between CSR and ROA for firms with larger boards. Another explanation is that larger boards may have higher agency costs, which can negatively impact firm performance (Ba, 2017). Agency costs refer to the costs associated with conflicts of interest between managers and shareholders, and are typically higher when there are more board members. If larger boards are less effective in monitoring and controlling managerial behaviour, this could lead to lower returns on assets, which would weaken the positive effect of CSR on ROA.

The agency theory explains this finding. The theory suggests that firms are subject to agency costs due to conflicts of interest between managers and shareholders. According

to agency theory, larger boards may be less effective in monitoring and controlling managerial behaviour, which can lead to higher agency costs and lower firm performance. This could explain why the positive effect of CSR on ROA is weaker for firms with larger boards, as larger boards may have higher agency costs that offset the benefits of CSR.

#### 4.6.3 Moderating Effect of Board Independence on the Relationship Between Corporate Social Responsibility and Firm Performance

Table 4.7 indicates that the r-square is 27 per cent. This means that 27% of the variation in the dependent variable (ROA) is explained by the independent variables. The wald chi square is significant at 1% level meaning the overall model is fit for the study. The coefficient for CSR is 0.01525 with a p-value of 0.26, indicating that there is no significant direct effect of CSR on ROA in this model. The coefficient for BIND is 0.10963 with a p-value of 0.58, also indicating that there is no significant direct effect of BIND on ROA. To determine whether there is a moderation effect in this table, the study examines the interaction term between the independent variable (CSR) and the moderator (BIND). The coefficient for the interaction term is -0.01208 with a p-value of 0.48, indicating that the interaction effect is not statistically significant. This suggests that there is no evidence of moderation in this model, and that the effect of CSR on ROA does not depend on board independence. The finding leans towards the studies of Kordloie and Shahverdi (2018).

**Table 4.7: CSR, Board independence, and firm Performance**

ROA	Coef.	Std. Err.	t-value	p-value
CSR	0.01525	0.01344	1.13	0.26
BIND	0.10963	0.19762	0.55	0.58

BIND* CSR	-0.01208	0.01698	-0.71	0.48
SIZE	0.00735	0.00705	1.04	0.30
LEV	-0.34363	0.04799	-7.16	0.00***
AGE	-0.00013	0.00034	-0.4	0.69
INFL	0.00211	0.00256	0.82	0.41
Constant	-0.00932	0.18061	-0.05	0.96
Wald chi <sup>2</sup>	66.77			
R-square	0.27***			

Source: Construct by Author (2022), ROA: return on assets, CSR: corporate social responsibility, BIND: board independence, MO: managerial ownership, LEV: leverage, INFL: inflation, \*\*\*:1% significance

#### **4.6.4 Moderating Effect of Managerial Ownership on the Relationship Between Corporate Social Responsibility and Firm Performance**

Table 4.8 indicates that the r-square is 29 per cent. This means that 29% of the variation in the dependent variable (ROA) is explained by the independent variables. The wald chi square is significant at 1% level meaning the overall model is fit for the study. The coefficient for CSR is 0.00617 with a p-value of 0.01, indicating that there is a significant positive effect between CSR and ROA in this model. The coefficient for MO is 0.13929 with a p-value of 0.83, indicating that there is no significant direct effect of MO on ROA. To determine whether there is a moderation effect in this table, the study examines the interaction term between the independent variable (CSR) and the moderator (MO). The coefficient for the interaction term is -0.05248 with a p-value of 0.44, indicating that the interaction effect is not statistically significant. This suggests that there is no evidence of moderation in this model, and that the effect of CSR on ROA

does not depend on managerial ownership. The findings confirms the study of Kim, Park, and Lee (2018).

**Table 4.8: CSR, managerial ownership, and firm Performance**

ROA	Coef.	Std. Err.	t-value	p-value
CSR	0.00617	0.00230	2.69	0.01***
MO	0.13929	0.63125	0.22	0.83
MO* CSR	-0.05248	0.06759	-0.78	0.44
SIZE	0.00366	0.00702	0.52	0.60
LEV	-0.33644	0.04721	-7.13	0.00***
AGE	-0.00011	0.00032	-0.33	0.74
INFL	0.00264	0.00251	1.05	0.29
Constant	0.14106	0.12923	1.09	0.28
Wald chi <sup>2</sup>	73.39			
R-square	0.29***			

Source: Construct by Author (2022), ROA: return on assets, CSR: corporate social responsibility, MO: managerial ownership, LEV: leverage, INFL: inflation, \*\*\*:1% significance, \*\*:5% significance

#### 4.7 ROBUSTNESS CHECK

The study conducted a robustness check using the Feasible Generalized Least Squares regression. It allows for the estimation of efficient and unbiased coefficients while taking into account the correlation between observations within each entity (e.g., individual, firm, country) and over time. The findings in Table 4.9 to 4.12 indicates that the results are robust. In Table 4.9, it seen that CSR has a significant positive effect on ROA just like the random effect regression. In Table 4.10 the interaction between BS

and CSR is negative and significant just like the random effect regression. In Table 4.11 the interaction between BIND and CSR is not significant. In Table 4.12 the interaction between MO and CSR is not significant just like the random effect models.

**Table 4.9: Robustness check CSR and FP**

ROA	Coef.	Std. Err.	t-value	p-value
CSR	0.00578	0.00225	2.57	0.01***
SIZE	0.00767	0.00674	1.14	0.26
LEV	-0.34084	0.04651	-7.33	0.00***
AGE	-0.00005	0.00031	-0.17	0.86
INFL	0.00246	0.00247	0.99	0.32
Constant	0.06096	0.12326	0.49	0.62
Wald chi <sup>2</sup>	69.81***			

Source: Construct by Author (2022), ROA: return on assets, CSR: corporate social responsibility, LEV: leverage, INFL: inflation, \*\*\*:1% significance

**Table 4.10: Robustness check CSR, BS and FP**

ROA	Coef.	Std. Err.	t-value	p-value	Wald chi <sup>2</sup>
CSR	0.03773	0.01314	2.87	0.00***	
BS	0.05032	0.01846	2.73	0.01***	
BS*CSR	-0.00377	0.00152	-2.48	0.01***	
SIZE	0.00818	0.00680	1.2	0.23	
LEV	-0.37446	0.04796	-7.81	0.00***	
AGE	-0.00004	0.00031	-0.13	0.90	
INFL	0.00174	0.00244	0.71	0.48	
Constant	-0.33934	0.19768	-1.72	0.09*	
	80.21***				

Source: Construct by Author (2022), ROA: return on assets, CSR: corporate social responsibility, BS: board size, LEV: leverage, INFL: inflation, \*\*\*:1% significance, \*:10% significance

**Table 4.11: Robustness check CSR, BIND and FP**

ROA	Coef.	Std. Err.	t-value	p-value
CSR	0.01558	0.01314	1.19	0.24
BIND	0.11609	0.19300	0.6	0.55
BIND* CSR	-0.01256	0.01660	-0.76	0.45
SIZE	0.00758	0.00685	1.11	0.27
LEV	-0.34380	0.04654	-7.39	0.00***
AGE	-0.00013	0.00033	-0.4	0.69
INFL	0.00211	0.00251	0.84	0.40
Constant	-0.01872	0.17576	-0.11	0.92
Wald chi <sup>2</sup>	70.90***			

Source: Construct by Author (2022), ROA: return on assets, CSR: corporate social responsibility, BIND: board independence, MO: managerial ownership, LEV: leverage, INFL: inflation, \*\*\*:1% significance

**Table 4.12: Robustness check CSR, MO and FP**

ROA	Coef.	Std. Err.	t-value	p-value
CSR	0.0061	0.0022	2.73	0.01***
MO	0.1359	0.6175	0.22	0.83
MO*CSR	-0.0521	0.0662	-0.79	0.43
SIZE	0.0039	0.0068	0.57	0.57
LEV	-0.3364	0.0459	-7.34	0.00***
AGE	-0.0001	0.0003	-0.33	0.74
INFL	0.0026	0.0025	1.08	0.28
Constant	0.1369	0.1257	1.09	0.28
Wald chi <sup>2</sup>	77.66***			

Source: Construct by Author (2022), ROA: return on assets, CSR: corporate social responsibility, MO: managerial ownership, LEV: leverage, INFL: inflation, \*\*\*:1% significance

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMENDATIONS

#### 5.0 INTRODUCTION

This chapter summarizes the main findings of the study in line with the research objectives, conclusions, policy implications and recommendations and suggestion for further studies.

#### 5.1 SUMMARY OF FINDINGS

The study found that the coefficient for CSR was 0.00603 and a p-value of 0.01. This meant that CSR had a significant positive effect on ROA. The finding suggested that CSR increased ROA.

The also found that coefficient for the interaction term between BS and CSR was -0.00372 with a p-value of 0.02, indicating that the interaction effect is statistically significant. Specifically, the negative sign for the coefficient indicated that the positive relationship between CSR and ROA becomes weaker as the level of board size increased.

It was also discovered that the coefficient for the interaction term between BIND and CSR was -0.01208 with a p-value of 0.48, indicating that the interaction effect is not statistically significant. This suggested that there was no evidence of moderation and that the effect of CSR on ROA did not depend on board independence.

The study finally found that the coefficient for the interaction term between MO and CSR was -0.05248 with a p-value of 0.44, indicating that the interaction effect was not

statistically significant. This suggested that there was no evidence of moderation and that the effect of CSR on ROA did not depend on managerial ownership.

## **5.2 CONCLUSION**

The study highlights the importance of considering the role of corporate governance in understanding the relationship between CSR and firm performance. The study suggests that firms should prioritize CSR while also considering the potential trade-offs with board size.

This study examines the relationship between CSR and firm performance, and how board size, board independence, and managerial ownership moderate this relationship. The study finds that CSR has a positive impact on firm performance, and that this impact is more significant in larger companies. Additionally, board independence and managerial ownership also have moderating effects on the relationship between CSR and firm performance.

## **5.3 RECOMMENDATION**

1. The significant positive effect of CSR on ROA suggests that firms should prioritize CSR initiatives. It is recommended that firms should implement sustainable practices in operations, investing in social and environmental causes, and engaging with stakeholders to understand their needs and concerns. Implementation ideas could include developing a CSR strategy that aligns with the company's values and goals, setting measurable targets for CSR performance, and communicating CSR efforts to stakeholders through reporting and disclosure.

2. It is recommended that firms should consider the trade-offs between CSR and board size. The weaker relationship between CSR and ROA as board size increases suggests that firms should consider the potential trade-offs between. To implement this recommendation, firms can first assess their current board size and structure and evaluate whether it aligns with their business goals and CSR efforts. They can then conduct a cost-benefit analysis of different board sizes and structures to determine the optimal balance between board size and CSR efforts. This analysis can involve evaluating the potential benefits of a larger board, such as more diverse perspectives and better oversight, against the potential costs, such as increased management costs and reduced efficiency. Firms can also evaluate how different board structures, such as a mix of independent and non-independent directors, can impact their CSR efforts and financial performance.

3. It is recommended that firms should prioritize CSR initiatives as they have a significant positive effect on ROA. It is recommended that firms implement sustainable practices in their operations, invest in social and environmental causes, and engage with stakeholders to better understand their needs and concerns. To achieve this, firms can develop a CSR strategy that aligns with their values and goals, set measurable targets for CSR performance, and communicate their CSR efforts to stakeholders through reporting and disclosure.

4. It is recommended for firms to weigh the pros and cons of having a larger board size in relation to their CSR efforts. As board size increases, the connection between CSR and ROA becomes less strong. Therefore, firms should assess their current board size and structure to ensure it aligns with their CSR goals. They should then perform a cost-benefit analysis to determine the optimal balance between board size and CSR efforts. This analysis could involve weighing the potential advantages of a larger board,

such as more diverse perspectives and better oversight, against the potential disadvantages, such as increased management costs and reduced efficiency. Firms should also evaluate how different board structures, such as a mix of independent and non-independent directors, can affect their CSR efforts and financial performance.

#### **5.4 RECOMMENDATION FOR FURTHER STUDIES**

1. Future research should investigate other potential moderators, such as CEO ownership, CEO duality, or firm age, to gain a better understanding of the complex relationships between CSR, governance, and financial performance.
2. Further studies should investigate the impact of CSR on different financial outcomes, such as return on investment, market value, or cost of capital, to gain a more comprehensive understanding of the relationship between CSR and financial performance.

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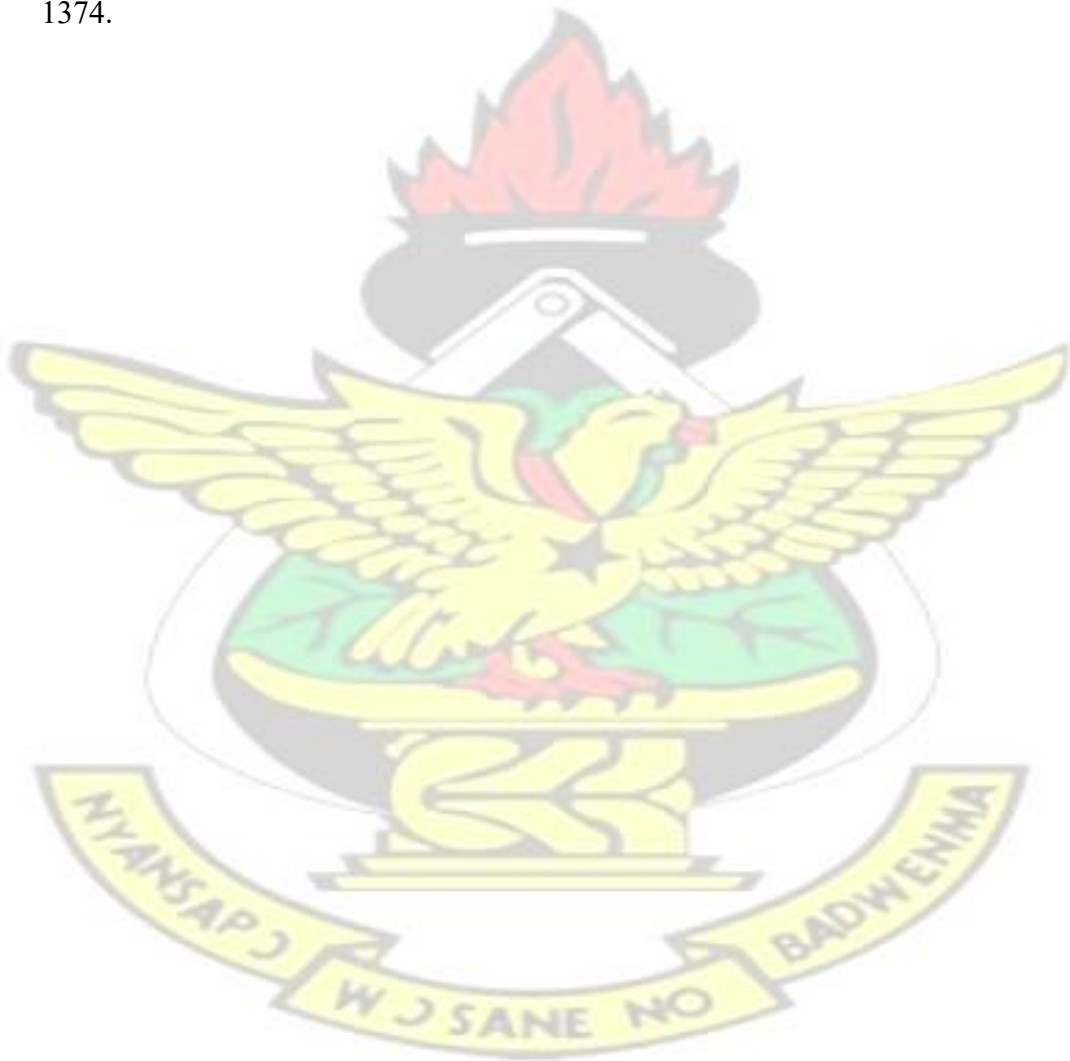
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## APPENDIX

Random-effects GLS regression  
Group variable: id

Number of obs = 186  
Number of groups = 16

R-sq:

within = 0.1614  
between = 0.6960  
overall = 0.2727

Obs per group:

min = 10  
avg = 11.6  
max = 12

corr(u\_i, X) = 0 (assumed)

Wald chi2(5) = 63.09  
Prob > chi2 = 0.0000

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
CSR	.0060299	.0022999	2.62	0.009	.0015222	.0105376
SIZE	.006348	.0070892	0.90	0.371	-.0075466	.0202427
LEV	-.3402873	.0491941	-6.92	0.000	-.436706	-.2438686
AGE	-.0000773	.0003373	-0.23	0.819	-.0007384	.0005839
INFL	.0024201	.0024993	0.97	0.333	-.0024785	.0073187
_cons	.0864748	.1297473	0.67	0.505	-.1678251	.3407748
sigma_u	.01226023					
sigma_e	.10596798					
rho	.01320908	(fraction of variance due to u_i)				

Random-effects GLS regression  
Group variable: id

Number of obs = 186  
Number of groups = 16

R-sq:

within = 0.2041  
between = 0.6643  
overall = 0.3001

Obs per group:

min = 10  
avg = 11.6  
max = 12

corr(u\_i, X) = 0 (assumed)

Wald chi2(7) = 68.34  
Prob > chi2 = 0.0000

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
CSR	.0376205	.0135843	2.77	0.006	.0109957	.0642453
BS	.0513967	.0190789	2.69	0.007	.0140027	.0887906
BSCSR	-.0037163	.0015766	-2.36	0.018	-.0068064	-.0006262
SIZE	.0048442	.0074719	0.65	0.517	-.0098005	.019489
LEV	-.3752483	.0527008	-7.12	0.000	-.47854	-.2719566
AGE	-.0000716	.0003632	-0.20	0.844	-.0007835	.0006403
INFL	.001588	.0024663	0.64	0.520	-.0032459	.0064219
_cons	-.2808733	.2096581	-1.34	0.180	-.6917956	.1300489
sigma_u	.01841018					
sigma_e	.10476479					
rho	.02995552	(fraction of variance due to u_i)				

Random-effects GLS regression  
Group variable: id

Number of obs = 186  
Number of groups = 16

R-sq:

within = 0.1547  
between = 0.7210  
overall = 0.2760

Obs per group:

min = 10  
avg = 11.6  
max = 12

corr(u\_i, X) = 0 (assumed)

Wald chi2(7) = 66.77  
Prob > chi2 = 0.0000

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
CSR	.0152479	.0134434	1.13	0.257	-.0111008	.0415965
BIND	.1096286	.1976209	0.55	0.579	-.2777013	.4969585
BINDCSR	-.0120812	.0169836	-0.71	0.477	-.0453684	.021206
SIZE	.0073524	.0070521	1.04	0.297	-.0064694	.0211742
LEV	-.3436292	.0479938	-7.16	0.000	-.4376954	-.249563
AGE	-.0001346	.0003381	-0.40	0.691	-.0007973	.0005282
INFL	.002106	.002559	0.82	0.411	-.0029096	.0071217
_cons	-.0093232	.1806055	-0.05	0.959	-.3633034	.344657
sigma_u	.00559558					
sigma_e	.10617074					
rho	.00276997	(fraction of variance due to u_i)				

Random-effects GLS regression  
Group variable: id

Number of obs = 186  
Number of groups = 16

R-sq:

within = 0.1703  
between = 0.7660  
overall = 0.2945

Obs per group:

min = 10  
avg = 11.6  
max = 12

corr(u\_i, X) = 0 (assumed)

Wald chi2(7) = 73.39  
Prob > chi2 = 0.0000

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
CSR	.0061668	.002295	2.69	0.007	.0016688	.0106649
MO	.1392912	.631252	0.22	0.825	-1.09794	1.376522
MOCSR	-.0524829	.0675916	-0.78	0.437	-.18496	.0799942
SIZE	.0036557	.0070235	0.52	0.603	-.0101101	.0174215
LEV	-.3364365	.0472111	-7.13	0.000	-.4289687	-.2439044
AGE	-.0001055	.0003171	-0.33	0.739	-.000727	.0005159
INFL	.0026372	.0025074	1.05	0.293	-.0022773	.0075516
_cons	.1410589	.129234	1.09	0.275	-.1122351	.3943529
sigma_u	.00501405					
sigma_e	.10601773					
rho	.00223178	(fraction of variance due to u_i)				

Cross-sectional time-series FGLS regression

Coefficients: generalized least squares  
Panels: homoskedastic  
Correlation: no autocorrelation

Estimated covariances	=	1	Number of obs	=	186
Estimated autocorrelations	=	0	Number of groups	=	16
Estimated coefficients	=	6	Obs per group:		
			min	=	10
			avg	=	11.625
			max	=	12
			Wald chi2(5)	=	69.81
Log likelihood	=	144.1558	Prob > chi2	=	0.0000

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
CSR	.0057822	.0022477	2.57	0.010	.0013767	.0101876
SIZE	.0076736	.0067363	1.14	0.255	-.0055293	.0208766
LEV	-.3408395	.0465122	-7.33	0.000	-.4320017	-.2496773
AGE	-.0000531	.0003104	-0.17	0.864	-.0006614	.0005552
INFL	.0024565	.0024733	0.99	0.321	-.0023911	.0073041
_cons	.0609626	.1232611	0.49	0.621	-.1806247	.3025499

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Coefficients: generalized least squares  
Panels: homoskedastic  
Correlation: no autocorrelation

Estimated covariances	=	1	Number of obs	=	186
Estimated autocorrelations	=	0	Number of groups	=	16
Estimated coefficients	=	8	Obs per group:		
			min	=	10
			avg	=	11.625
			max	=	12
			Wald chi2(7)	=	80.21
Log likelihood	=	147.8633	Prob > chi2	=	0.0000

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
CSR	.0377316	.0131373	2.87	0.004	.0119829	.0634803
BS	.0503191	.0184585	2.73	0.006	.0141411	.0864972
BSCSR	-.0037699	.0015191	-2.48	0.013	-.0067473	-.0007925
SIZE	.0081829	.0067956	1.20	0.229	-.0051364	.0215021
LEV	-.3744579	.0479559	-7.81	0.000	-.4684498	-.2804661
AGE	-.0000397	.000309	-0.13	0.898	-.0006453	.000566
INFL	.0017373	.0024424	0.71	0.477	-.0030498	.0065244
_cons	-.3393441	.1976754	-1.72	0.086	-.7267809	.0480926

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Cross-sectional time-series FGLS regression

Coefficients: generalized least squares  
Panels: homoskedastic  
Correlation: no autocorrelation

Estimated covariances	=	1	Number of obs	=	186
Estimated autocorrelations	=	0	Number of groups	=	16
Estimated coefficients	=	8	Obs per group:		
			min	=	10
			avg	=	11.625
			max	=	12
			Wald chi2(7)	=	70.90
Log likelihood	=	144.5501	Prob > chi2	=	0.0000

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
CSR	.0155751	.0131435	1.19	0.236	-.0101857	.0413359
BIND	.116094	.1929968	0.60	0.547	-.2621728	.4943608
BINDCSR	-.0125624	.0165951	-0.76	0.449	-.0450881	.0199633
SIZE	.0075828	.0068462	1.11	0.268	-.0058355	.0210011
LEV	-.3437992	.0465376	-7.39	0.000	-.4350112	-.2525873
AGE	-.0001289	.0003262	-0.40	0.693	-.0007683	.0005105
INFL	.0021147	.0025062	0.84	0.399	-.0027973	.0070267
_cons	-.0187246	.1757598	-0.11	0.915	-.3632074	.3257582

Cross-sectional time-series FGLS regression

Coefficients: generalized least squares  
Panels: homoskedastic  
Correlation: no autocorrelation

Estimated covariances	=	1	Number of obs	=	186
Estimated autocorrelations	=	0	Number of groups	=	16
Estimated coefficients	=	8	Obs per group:		
			min	=	10
			avg	=	11.625
			max	=	12
			Wald chi2(7)	=	77.66
Log likelihood	=	146.9667	Prob > chi2	=	0.0000

ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
CSR	.006116	.0022419	2.73	0.006	.001722	.01051
MO	.1359291	.6175057	0.22	0.826	-1.07436	1.346218
MOCSR	-.0521065	.0661611	-0.79	0.431	-.1817799	.0775669
SIZE	.0038705	.0068295	0.57	0.571	-.009515	.0172561
LEV	-.3364299	.0458531	-7.34	0.000	-.4263003	-.2465596
AGE	-.0001015	.0003065	-0.33	0.740	-.0007023	.0004992
INFL	.0026455	.0024551	1.08	0.281	-.0021664	.0074574
_cons	.1369361	.1256655	1.09	0.276	-.1093637	.3832359