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THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON FIRM

FINANCIAL PERFORMANCE: DOES INDUSTRY TYPE MATTER?

By

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DECLARATION

I hereby declare that this submission is my own work towards the award of the MSc Accounting and Finance and that, to the best of my knowledge, it contains no material previously published or written 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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DEDICATION

This thesis is devoted to God Almighty, whose guidance has been unfailing, and to my cherished family, my steadfast husband, Col. Emmanuel Opare Nyante, and my inspiring children, Manuel and Elspeth Nyante. Your unwavering support and love are etched on every page. This accomplishment is as much yours as it is mine.

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ABSTRACT

Corporate social responsibility (CSR) of firms creates a connection between the industry and the outside world. Thus, it serves various purposes for the social well-being of the people and also has an effect on the corporation's performance. The purpose of the study is to investigate the relationship between CSR and the financial performance of firms and how this relationship is influenced by the type of industry the firm operates in. The study draws a diversified sample of 5 leading financial and 5 nonfinancial local and foreign-owned firms over a 12-year period (2010-2021), a period post Ghana Stock Exchange adoption of CSR disclosure for listed firms. In predicting the findings of the study, the static panel regression model was used, and the results showed that increases in CSR initiatives lead to a decrease in the financial performance (ROE) of both financial and nonfinancial firms. This implies the cost of firms investing in social and environmentally friendly initiatives outweighs the benefits. The results also showed that firms in the financial sector experience better financial performance compared to those firms in the non-financial sector. Also, the study finds that the type of industry in which a firm operates positively influences the relationship of CSR on financial performance (ROE). Therefore, despite the fact that CSR initiatives provide valuable benefits for stakeholders and the environment, firms should take caution when investing in CSR initiatives, as it can have deleterious implications on their financial performance due to Agency costs. Also, the study suggests that firms should always consider their industry type (financial or non-financial) when investing in CSR initiatives.
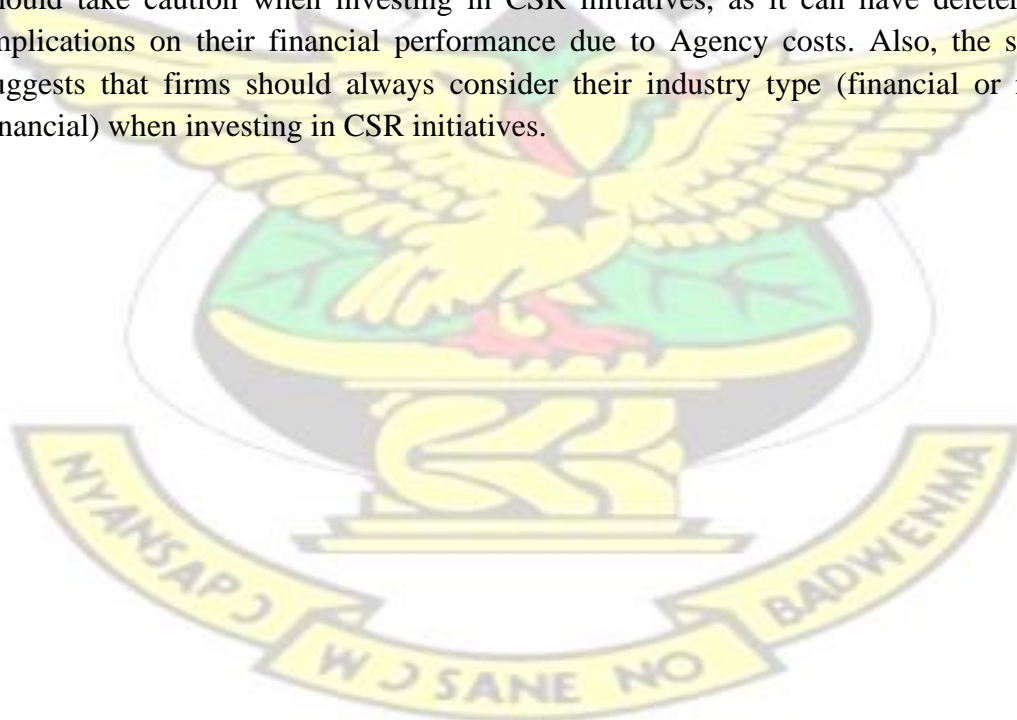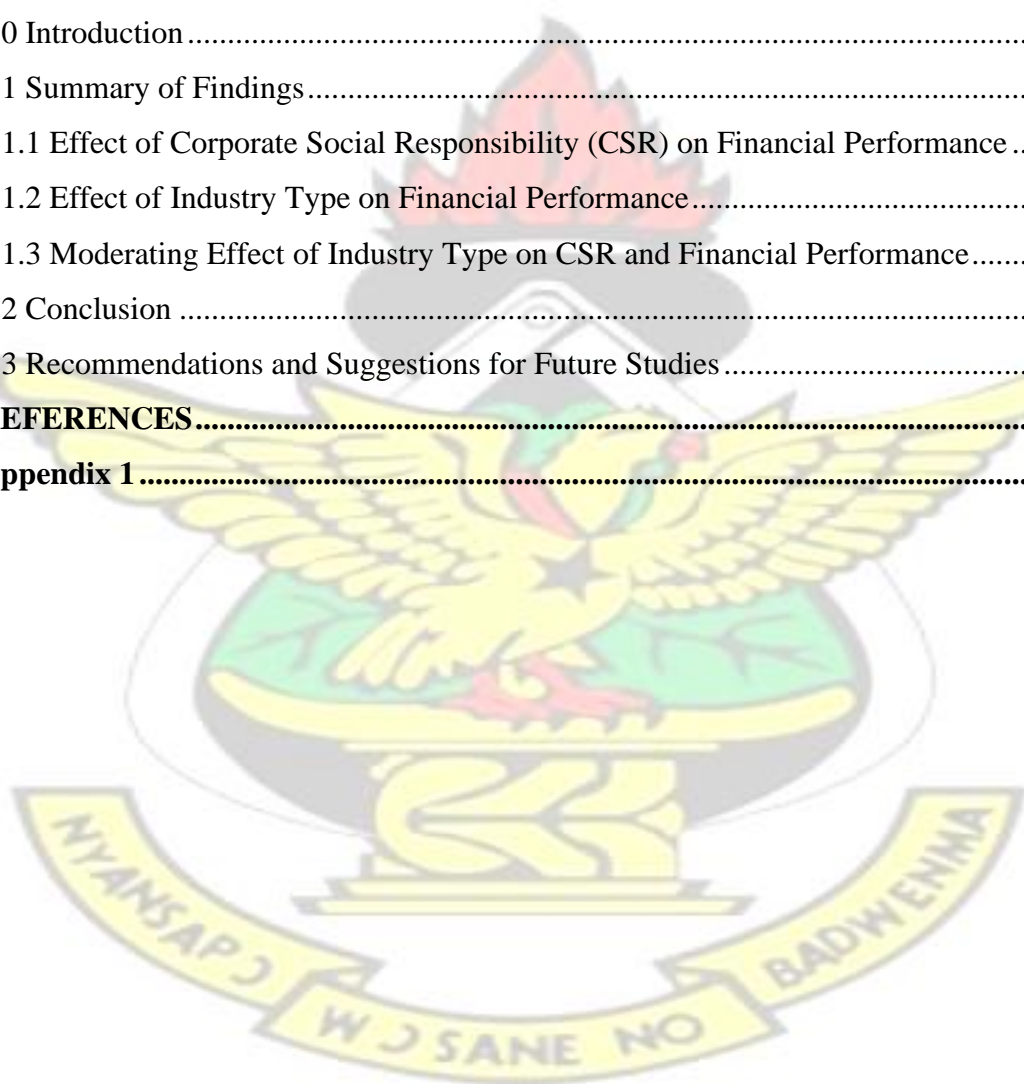
TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

KNUST

CHAPTER ONE

INTRODUCTION

1.0 Background of the Study

Companies in developed countries utilize a variety of corporate social responsibility (CSR) strategies to encourage investors (Platonova, Asutay, Dixon, and Mohammad, 2018; Galant and Cadez, 2017). In addition to assisting individuals in achieving their financial objectives, these strategies also improve their moral, social, and ecological conditions (Maqbool and Zameer, 2018). Consequently, the CSR initiatives encouraged by their firms are a contributing factor to the stable social and economic development of industrialized countries (Wang and Sarkis, 2017). The effects of corporate social responsibility on the processes that drive a company's success are not uniform, according to studies that have looked at this question empirically (Kim, Kim, and Qian, 2018). As a result, there is a need to look at the factors that explain the apparent discrepancies between theory and evidence. There is a lot of literature on the issue of CSR in industrialized nations, but in developing countries, there is hardly any (Chetty, Naidoo, and Seetharam, 2015; Achour and Boukattaya, 2021).

Management and equity investors may have disagreements about whether or not to approve the firm's spending on CSR projects (Chakroun, Salhi, Amar, and Jarboui, 2020). Agency theory, on the other hand, suggests a wide variety of internal and external structures (including industry type) that help to limit the negative effects of such agency conflicts. According to the research of Achour and Boukattaya (2020), having industries around can act as an efficient external control mechanism that helps to reduce agency problems and also plays a crucial role in the financial performance

1

of the company. Additionally, it aids in the allocation of resources for CSR initiatives. Hence, this research investigates how the type of industry can moderate the relationship between corporate social responsibility and the financial performance of a company. However, there is a wide variety of financial organizations. Researchers categorized institutional investors based on the length of time they plan to hold onto their investments in investee firms (Chakroun et al., 2020; Cho, Chung, and Young, 2019).

Researchers hypothesised that industry type has a realistic view of the link between sustainable CSR and firm performance (Cho et al., 2019). Institutional investors are seen as superior company owners due to their extensive product knowledge, financial acumen, and ability to predict future economic trends (Grassmann, 2021). Large players in the financial industry are interested in businesses for both the long and short term. Conversely, corporate social responsibility (CSR) is a long-term investment that yields stronger profits for corporations in the years after the investment (Khan, Lockhart, and Bathurst, 2021; Lahouel, Bruna, and Zaied, 2020a). The purpose of this study is, therefore, to examine how financial and non-financial institutions, both as homogeneous and diverse groupings according to their investment horizon in the firms, shape the relationship between CSR and the performance sustainability of organizations.

To have CSR means that a company cares about the well-being of its employees, neighbours, and the world at large (Lahouel et al., 2020a). That was the conclusion of a recent study (Cho et al., 2019) that, CSR and good industry type work hand in hand, since they both aim to benefit the company's constituents. While the main aim of the industry is to increase the company's wealth for its shareholders, CSR activities go

beyond financial considerations to prioritize the well-being of all stakeholders to be identified through a large body of empirical research as factors that contribute to the quality of a company's governance (Cho et al., 2019; Khan et al., 2021). Management can obtain financial resources at affordable rates because shareholders have faith in the sector (Grassmann, 2021). Companies with superior management are not only more ethical from a social perspective but also more successful financially (Lahouel et al., 2020a).

When capital is allocated to corporate social responsibility (CSR) activities, agency theory predicts that tensions will arise between management and shareholders (Lahouel et al., 2020a). This means that CSR is seen as an agency problem that can be fixed by raising the bar on company type. As a result, the role of company type and CSR in ensuring the long-term viability of a company's performance is nuanced and seldom investigated in either developed or developing economies. A comprehensive measure of industry type is constructed according to the method of (Cui et al., 2018; Chakroun et al., 2020), and then this index is moderated to establish a long-term relationship between CSR and the firm's performance. Moreover, the research adds to the existing body of knowledge on developing nations by creating a classification system for industries that relies on key factors of effective company operations: (Chakroun et al., 2020; Achour and Boukattaya, 2021).

The significance of industry type in company performance and the moderating influence of industry type on firm performance have been studied by Singh et al. (2018) in developing countries and Lahouel et al. (2020b) in the setting of developed economies. Additionally, Liu, Wang, and Lee (2020) investigated the moderating relationship of industry type between CSR and companies' performance in the context

of Pakistan. Lahouel et al. (2020) and Grassmann (2021) have researched the impact of industry type on the correlation between corporate social responsibility and financial performance in their respective national contexts. These scholars also called for further study of the topic and urged looking at the other parts of the equity system as well. To fill these gaps, this research analyses how non-financial and other financial institutions boost company performance through direct interventions and indirect means like improved social responsibility. The study looked to the industry type to fill this void since several studies have shown that company type and market insight significantly influence the corporate policies of the enterprises in which they are invested (Grassmann, 2021).

The novel aspect of this study is that it empirically tests current theories on CSR in the context of a developing country like Ghana, which is plagued by a wide range of social and economic issues (such as a high birth rate, inadequate health care, and education, political unrest, terrorism, and high unemployment rates) (Laskar and Maji, 2016: Ramzan, Amin, and Abbas, 2021). Companies operating in this environment manufacture low-quality goods since the bulk of the population has a low per capita income and there is limited demand for pricey items on the market (Rashid, 2021). The corporation's responsibility to help raise the quality of life for all people has grown as a result of the current crisis. There is ample evidence to suggest that businesses will fail to meet their long-term growth and profitability targets in countries with a poor quality of life. The Ghanaian corporate sector has witnessed a surge in the importance of CSR due to various reasons. These include corporate scandals, family dominance, and intervention by regulatory bodies in the corporations, poor governance, rising social and political awareness, and rapid globalization. Therefore, CSR in the Ghana

context requires more emphasis from both the private sector and the public sector if the country is to attain economic sustainability.

1.1 Problem Statement

Corporate social responsibility (CSR) programmes are gaining popularity among businesses (Rashid, 2021). The most widely acknowledged explanation of CSR is Carroll's (1991) model, which integrates the economic, ethical, moral, commercial, and legal expectations that society has of enterprises. A contemporary definition of CSR is provided by ISO26000, which describes it as "firms' decision-making following transparent and ethical conduct and corporations' responsibility for the influence of their decisions and actions on society and the environment" (Salhi, Riguen, Kachouri, and Jarboui, 2020). According to various authors, CSR refers to the integration of social and environmental issues into a company's operations and the acknowledgement of stakeholders' interests (Salhi et al., 2020; Shahbaz, Shahzad, Ahmad, and Alam, 2016). To ensure the long-term viability of their economic operations from an environmental and social perspective, firms should prioritize a broader range of non-financial goals (Zeng, 2020). Researchers have shown that CSR affects a company's financial performance, among other outcomes. While several studies have been undertaken to determine whether or not CSR has a positive effect on a company's financial performance, the results have been inconsistent (Zeng, 2020; Lahouel et al; 2020a). Several studies have found a positive relationship between these two factors, including Liu et al. (2020), Ramzan et al. (2021), Cho et al. (2019), and Grassmann (2021), while others have found no such relationship Platonova et al. (2018), Galant and Cadez (2017), and Maqbool and Zameer (2018). The stakeholder theory's social impact hypothesis, which claims that effective stakeholder

5

management will lead to increased productivity, is the main argument in favour of a positive correlation (Achour and Boukattaya, 2021).

CSR advocates argue that their work improves a company's financial performance by raising brand awareness, consumer satisfaction, and brand loyalty (Grassmann 2021; Achour and Boukattaya, 2021). Because of this, a socially responsible business may have an advantage in the market (Khan et al., 2021). However, the grounds for a negative connection are grounded in agency theory. Investors' focus is diverted from CSR activities, which may exacerbate information asymmetry problems and harm businesses' image, leading to a worsening of capital constraints (Khan et al., 2021). The agency costs (Lahouel et al., 2020a) and decline in firm value Lahouel et al., 2020b) arise when managers pursue CSR initiatives to optimize their interests rather than those of shareholders and other stakeholders (Laskar and Maji, 2016). Similar findings have been reported by other researchers (Liu et al., 2020). According to the agency theory, a company's competitiveness and financial performance would suffer if its CSR budget is raised (Ramzan, et al., 2021).

This discrepancy in results highlights the need to revisit the correlation between CSR and company performance. The models used in the prior studies (Ramzan, et al., 2021; Rashid, 2020) were too simplistic, focusing only on the direct links between CSR and financial performance while ignoring other potential moderating factors. They failed to account for the moderating effect of the type of industry on the decision-making, motivation, and direction of organizations (Rashid, 2020; Salhi et al., 2020). Exploring overlooked areas by previous researchers can provide a more intricate comprehension of how corporate social responsibility (CSR) relates to the financial success of companies. Positive findings from recent empirical research on the link between CSR

and firm financial performance are supported; however, the latter may be affected by a number of contextual (moderating or mediating) factors (Salhi et al., 2020; Laskar et al., 2020a). One industry type may be especially important in this context for improving the soundness of strategic decisions and guaranteeing the efficient rollout of novel initiatives like corporate social responsibility (Zeng, 2021). A good industry type is viewed as an important indicator tool for preventing and resolving agency conflicts (Zeng, 2021). Costs are incurred by the agency because of information gaps between stakeholders and management. Therefore, businesses will need external support from the industry to safeguard against opportunistic behaviour (Cho et al., 2019). Accordingly, using a test population of the listed firm on GSE, this study seeks to analyze the impact of CSR on corporate financial performance and highlight the moderating effect of industry type on this link.

There are several ways in which this study departs from the prior scholarly work. In the first place, it promotes the establishment of the industry type and dynamic links between CSR and financial performance. In contrast to other studies that just looked at the direct correlation between CSR and financial performance, specifically Ghana, this one also considers the impact that industry type may have on the strength of that correlation. Second, this study looks at how environmental, social, and governance aspects of corporate social responsibility (CSR) affect a company's financial performance. While most research on CSR has focused on the overall score, the effects of the individual tenets of CSR have received very little attention (Lahouel et al., 2020a:2020b; Liu et al., 2021). Therefore, this study aims to investigate the moderating effect of industry type on the relation between corporate social responsibility (CRS) and firm financial performance, a case of the listed firm on GSE.

1.2 The Objective of the Study

The main purpose of this study is to investigate the moderating effect of industry type on the relationship between corporate social responsibility (CSR) and firm financial performance, a case of the listed firm on GSE, with the following specific objectives.

1. To determine the effect of corporate social responsibility (CSR) on financial performance.
2. To examine the effect of industry type on financial performance.
3. To investigate the moderating effect of industry type on the relationship between corporate social responsibility and financial performance.

1.3 Research Question

1. What is the effect of corporate social responsibility (CSR) on financial performance?
2. What is the effect of industry type on financial performance?
3. Does industry type moderate the relationship between corporate social responsibility and financial performance?

1.4 Significance of the Study

The main purpose of the study is to investigate CSR on firm financial performance, and the moderated role of industry type. This study will assist in crafting a comprehensive equity structure that protects the interests of all parties involved in a corporation. The study will also inform executives on the significance of the industry to the long-term viability of CSR and the performance nexus of firms. As a consequence, the findings of the research have far-reaching implications for business

managers and investors interested in how CSR and the efficiency and productivity of firms are influenced by listed firms in Ghana. Both financial and non-financial institutions may benefit from this study; this study can help both institutions in the growing economy of Ghana. Institutional investors might use the findings from the study to guide their decisions on the long-term and short-term financing of businesses.

1.5 Scope of the Study

The main purpose of the study is to investigate the CRS on firm financial performance, and the moderated role of industry type. All the financial and non-financial firms listed on GSE were used for the study. Secondary data was used and acquired from the annual financial report of the selected firm database. Also, another source of information was acquired from journal articles, media reports, and policy documents for further discussion on the study's purpose. The study applied partial frontier approaches to detect and remove outliers. Finally, firms with missing data for some of the study variables of interest were removed from the study sample.

The justification lies in the fact that the study chooses to focus on Ghana where many companies have just recently begun to forge international trade and industrial relations with their Western contemporaries. According to Zeng (2021), the United States accounts for over a third of the world's empirical studies on corporate responsibility. CSR initiatives in Western Europe, Asia, and certain newly industrialized economies have also been studied (China, India, Brazil, Argentina, Mexico, and Russia). Unfortunately, CSR studies have been uncommon for the vast majority of other developing countries like Ghana. CSR activities in the developed world stand out more

than they do in the developing world because of the former's more robust institutional architecture and the latter's more efficient financial market operations. Ghana's industry type, business systems, organizations, and cultures are unique, even though the vast majority of CSR activities in developing Ghana are largely adapted from Western ideas. Many Ghanaian firms struggle with issues including poverty and economic inequality, inequalities in education, susceptibility to natural catastrophes, etc. Understanding how businesses in Ghana approach CSR is, therefore, an interesting topic of study.

New perspectives might be gained by studying Ghana's unique institutional setting. Because of its unique political and legal atmosphere and its rapidly developing capital market that has attracted substantial foreign investment, Ghana is a fascinating country. A communist democratic and planned economy is giving way to a market economy led by a single political party. There must be a strong commitment to a socialist economic ideology and active government involvement. Environmental protection and worker rights are only two examples of the many areas of corporate social responsibility that are the subject of legislation.

However, Ghana suffers from a lack of a coherent public CSR strategy and a general lack of vigilance in terms of upholding the law. The Ghana economy is booming, with a focus on exports and a developing capital market. These changes increase the importance of corporate social responsibility (CSR) efforts from global clients and investors. Ghana's culture is shaped by both Eastern and Western traditions. Culture has the potential to influence opinions about CSR among stakeholders, managers, and boards in a positive way. There may be repercussions for CSR understanding and practice in Ghana as a result of all of these institutional features.

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1.6 Summary Methodology

Quantitative with the descriptive and correlational design was employed. For this study, all the variables were sourced from the financial reports of selected firms on GSE. This research employs a panel data approach using a pool of data spanning the years 2010 to 2021. The selection of the annual financial report is based on the fact that this dataset contains the variables to be utilized in the analysis. Furthermore, the study uses key elements of Institutional Shareholder Services' ESG ratings to evaluate companies' social impact (ISS). ISS's investment research division establishes and manages the ISS-ESG rating score by conducting comparative studies of companies' responses to and contributions to environmental, social, and governance concerns and attempts to achieve sustainable development goals (SDG). The ISS-ESG rating score was identified as the most important CSR indicator due to its reliability in publishing sustainability reports. Also, financial performance (return on equity, Tobin's Q, and return on assets), and industry type (1 if the company is in the financial sector, otherwise 0).

Given that the study is interested in how CSR influences financial performance and the moderate role of the industry type, the study should also take into consideration other factors that may have an effect on financial performance and are related to CSR. As a result, the study creates variables unique to the study company to address any urgent issues. To be more specific, the study utilizes measures of firm size (SIZE), leverage (LEV), book value to market value (BM), cash flow from operating activities (CF), and daily stock return volatility (sd.VOL). This study used static and dynamic panel estimation techniques to investigate the effect of CSR on financial performance with a moderating role of the industry type, building on the work of (Trinugroho et al.,

2014; Khan et al., 2020). Static methods such as the RE model and the FE models are used.

1.7 The Organisation of the Study

The study is divided into five chapters. The first chapter introduces the background of the research under investigation. In this chapter, the statement of the problem, as well as the objectives and research questions, are provided. Furthermore, the significance, scope, limitations, and a summary of the methodology are captured in Chapter One. Chapter two is the literature review section of the study. The review of concepts, theories, empirical studies, and conceptual framework is presented in the second chapter. The third chapter is made up of the methodological techniques that were utilized in the study; sampling techniques, data collection, data analysis, and a host of others are outlined in chapter three. The fourth chapter of the study presents the analysis of the findings of the study in conjunction with relevant literature and the final chapter concludes the study by providing the summary, conclusion, and avenues for further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This research examines how the type of industry affects the connection between a company's corporate social responsibility (CSR) and its financial performance. The study focuses on firms listed on the GSE. There are five sections in the chapter; the first is various concepts under the conceptual review, followed by the theory underpinning the study, the empirical review from various literature, and the conceptual framework and hypothesis development. Lastly, the study concluded with a summary.

2.1 Conceptual Review

This subsection provides the various definitions and conceptualizations given by different authors to the key concepts and sub-concepts in this study. Some of the key concepts considered are corporate social responsibility, firm performance, and industry effect.

2.1.1 Corporate Social Responsibility

Numerous industry professionals have offered their perspectives on how to best define "corporate social responsibility." According to Tran (2019), corporate social responsibility (CSR) is defined as an action that is mandated by law to create positive activities for the surrounding society. CSR may be defined as the degree to which a company complies with the expectations placed upon it by its many stakeholders to act in a socially responsible manner. When stakeholders have reached a level of

contentment with the reporting of financial information, they are free to shift their focus to the manner in which the organization acts as a good citizen within the community (Miloud, 2015). In addition, Latapí Agudelo, Jóhannsdóttir, and Davídsdóttir (2019) defined corporate social responsibility as the operations of a corporation that should be open to public scrutiny since they have an impact on people, communities, and the environment. It is necessary to acknowledge and address the adverse effects caused by the company's operations. The significant issues will result in a reduction in the company's earnings.

Corporate social responsibility (CSR) is an organization's effort to meet its social, legal, economic, ethical, and philanthropic responsibilities. According to Shin (2003), social responsibility is a set of ethical guidelines that businesses should follow to meet the needs and expectations of the public and stakeholders. This involves addressing various social and economic issues through corporate initiatives, as outlined in the domestic literature. Moreover, according to leading international institutions, such as the OECD, CSR refers to a company's responsibility to consistently enhance the symbiotic relationship between itself and the community.

2.1.2 Benefits of Corporate Social Responsibility

With growing awareness of environmental and social responsibility, the topic of whether or not a company may gain a competitive advantage by investing in corporate social responsibility has emerged as a fundamental concern for both academia and practice. Jelavic, (2017) presented a natural RBV that takes into account environmental difficulties that would ultimately push a corporation to utilize its intangible resources as a source of competitive advantage. According to the ideals behind CSR, a corporation must deliver environmentally friendly products and

services. A corporation may have no option but to implement new technology in order to develop high-quality and appealing ecologically friendly goods, which may result in product differentiation and improved financial performance (Galant and Cadez, 2017; Berning and Venter, 2015). Similarly, as a result of this improvement action, a company's internal processes may be improved. For example, one corporation may need to limit its environmental pollution by conserving resources and energy (Ashrafi, Adams, Walker and Magnan, 2018). However, it needs to revamp its manufacturing method, which might improve production efficiency and lower production costs (D'Souza and Taghian, 2018). Furthermore, corporate social responsibility can promote the accumulation of human capital. A firm with a high degree of CSR is more appealing to employees and has a low turnover rate of lowering recruiting, new employees, and employee training expenses (Ersoy and Aksehirli, 2015).

2.1.3 Financial Performance

Mutende et al. (2017) define financial performance as a firm's capacity to accomplish anticipated financial results when assessed against its intended outputs. The ratios return on equity (ROE), return on assets (ROA), return on sales (ROS), return on capital (ROC), and operating margin are typically used to evaluate a company's financial success (Gilchris, 2013). Because ratios are derived from information that is found in a firm's financial records, they can give a more comprehensive insight into how well a company is performing. Also, it can be described as an organization's endeavour to fulfil its goals or to be productive (Zieliński, 2019). It is possible to readily quantify it by utilizing the assets of the business to describe how effectively an organization is producing a profit or the overall financial health of the organization. CSR is one of the many elements that have affected corporate financial success. The

usual assessment data for financial success include return on assets (ROA), return on equity (ROE), return on investment (ROI), and net profit margin (Whalen, 2013; Saeidi et al., 2015; Thao and Middleton, 2018). Nonetheless, Lu et al. (2014) classified financial success into three categories: 1) accounting-based, 2) market-based, and 3) perceptual indicators.

Accounting-based research can be connected to the vast majority of research measurement methods, such as return on assets (ROA) and assets turnover, amongst others. It investigates the growth of businesses via profitability and asset use. Market-based evaluates financial success through share price appreciation, price per share, stock performance, market return, market value to the book, and so on. Finally, subjective impressions or assumptions underpin perceptual assessments of an organization's financial success. For example, financial goal attainment in comparison to rivals, financial target position, or prudent use of organizational assets. When compared to market-based measures, which are said to be somewhat objective, perceptual measures are noted to be significantly more subjective. On the other hand, accounting-based indicators are considered to be audited and completely objective (Thao and Middleton, 2018).

2.1.4 Industry Effect

Disclosure of corporate social responsibility (CSR) differs from sector to industry due to the different costs and benefits associated with distinct business features (Welbeck, Owusu, Bekoe and Kusi, 2017; Li, Xin, Sun, Huang and Ren, 2016). For instance, Harte and Owen (Anh and Velencei, 2019) suggested that the degree to which a sector

is sensitive to the environment would influence the degree to which corporations disclose their social responsibilities. Companies that place a high priority on environmental protection are more likely to be transparent about their environmental performance (Li, Xin, Sun, Huang and Ren, 2016; Welbeck, Owusu, Bekoe and Kusi, 2017).

In comparison to businesses operating in other sectors, those whose production methods have a detrimental impact on the natural environment will be required to provide more information. Companies operating in the financial and service sectors are required to disclose their involvement in social causes and charitable contributions (Lin, Chang and Van Thac Dang, 2015). Industries such as mining, petroleum, and chemical corporations will, in general, have an emphasis on the environment, health, and safety (Pimentel Da Silva, 2021; Lin, Chang and Dang, 2015). The actual findings of a large number of studies have shown that the mining, paper resources and pulp, water resources, electric power and chemical and medical sectors all have a substantial impact on the environment (Cordeiro and Tewari, 2015; Hoffman and Jennings, 2015). Other businesses, particularly emerging service industries, and manufacturing, do not have as big of an impact on the environment as those corporations do. As a result, they will have less disclosure on matters pertaining to the environment. Companies operating in these sectors will be held to lower standards in terms of their environmental performance, and as a result, less information will be disclosed (Hoffman and Jennings, 2015; Cordeiro and Tewari, 2015).

2.1.5 Differences in CSR Across Industries

Both Sweeney and Coughlan (2011) and Robertson and Nicholson (1996) do an excellent job of illustrating how different industries approach CSR in their own unique

ways. Sweeney and Coughlan classified six possible stakeholders as consumers, workers, suppliers, shareholders, the environment, and the community. They then conducted an investigation to determine which stakeholders were included in the annual and CSR reports of 28 FTSE4Good companies in December 2004. The FTSE4Good enterprises belonged to a stock market index produced by the FTSE Group, a wholly-owned subsidiary of the London Stock Exchange Group, based on certain CSR criteria. Financial services, pharmaceutical (health & beauty), pharmaceutical (medical), telecommunications, car, oil & gas, and retail were among the industries represented.

Following their investigation, they found that "the industry in which the business works should have a substantial impact on the stakeholders addressed in the firm's annual report." For example, while corporations in the telecommunications industry supported CSR projects aimed at consumers and workers, those in the car industry led CSR initiatives aimed at the environment. Corporations in financial services, on the other hand, addressed consumers, workers, and communities through CSR practices, while pharmaceutical enterprises supported CSR activities centered on customers, communities, employees, and shareholders. Robertson and Nicholson (1996) discovered that the industry not only determines the kind of CSR programmes that are put into effect but also how such programmes are revealed to the public.

2.2 Theoretical Review

The pertinent theories that anchor this study's objectives are elaboratively presented. These theories serve as the guiding framework based on which the study conducts its deductive analysis. Expressly, the stakeholder theory served the purpose of this study.

2.2.1 Stakeholder Theory

Stakeholder theory, developed by Freeman in 1994, says that a corporation is responsible not just to stockholders, but to all of its other stakeholders as well, who are powerful forces that can accelerate a firm's success (Atkins et al., 2018; Singh and Delios, 2017). It contends that good relationships with key stakeholders are critical for corporations to preserve and improve corporate legitimacy (Ye and Li, 2021; Cho et al., 2019). According to the researchers of stakeholder theory, corporations face primary economic duty as well as legal, ethical, and charitable obligations to meet the requirements of stakeholders (Guix et al., 2018). Moreover, the ability of a company's managers to satisfy its stakeholders is crucial for the business's survival and prosperity. Firms with positive stakeholder relationships receive a competitive edge (Kim et al., 2018; Lu et al., 2021). According to the theory, stakeholders prefer to reward successful Corporate social responsibility initiatives (Franco et al., 2020), which has a favourable impact on a company's financial performance by allowing enterprises to create good stakeholder connections (Grassmann, 2021). As a result, CSR is an important strategy for industries to build strong ties with their stakeholders. Companies can enhance their credibility with stakeholders by engaging in social activities, which can lead to greater market prospects and higher prices. This can also help to lower transaction costs and enhance customer satisfaction, as well as boost employee productivity and loyalty. These benefits have been highlighted in studies conducted by Amatulli et al. (2018). These favourable consequences boost the company's financial performance.

Stakeholder theory suggests that companies should participate in different CSR initiatives to fulfil stakeholder demands related to Corporate social responsibility

matters. These stakeholders may include consumers, suppliers, employees, local communities, shareholders, government agencies, and others. Moreover, the degree of stakeholder responsibilities differs among companies. Industries that are environmentally sensitive often face more intense pressure from stakeholders compared to industries that are not ecologically sensitive. Stakeholders tend to pay more attention and allocate more resources to companies in environmentally sensitive industries when they prioritize their investment in CSR. Despite investing in CSR, companies in industries that are not environmentally sensitive may not always receive recognition and positive feedback from stakeholders. Depending on the type of industry, the financial performance of a company may be affected differently by its CSR practices.

2.3 Empirical Review

This subsection presents the various empirical findings germane to the study objectives. Thus, the empirical studies were categorized under each of the three objectives identified in the preceding chapter. They are the effect of CSR on financial performance, the effect of industry type on firm performance, and the moderating role of industry type on firm performance.

2.3.1 Corporate Social Responsibility on Financial Performance

Yu-Shu, Chyi-Lin, and Altan-Uya (2015) researched the subject of "Corporate social responsibility and company financial performance: the intervening influence of social capital" in Taiwan as part of a study that was identical to the one described above. To conduct a regression analysis, empirical data from Taiwanese publicly traded companies were collected. The findings of their research indicated that social capital plays a moderating function in the connection between CSR and CFP. As a result, CSR has a positive effect on social capital, which in turn has a positive effect on CFP. This is a consequence of the positive influence that CSR has on CFP.

Fernandes (2019) explored the correlation between a company's CSR performance and its financial performance in the European market. To measure the connection between corporate social responsibility and financial success, they utilize ESG scores to proxy for CSR performance, ROA, and ROE to reflect financial success, and Tobin's Q to stand in for firm value. Several pieces of data point to a favourable link between CSR performance and the value or profitability of a company. The results also indicate that CSR leaders should expect greater financial rewards than their colleagues with inferior CSR performance. However, there is no proof that companies

with the weakest CSR performance have poorer financial outcomes. In conclusion, the data shows that the three ESG (Environmental, Social, and Corporate Governance) tenets have distinct meaningful correlations with business value and financial performance.

Ibrahim and Hamid (2019) investigated the effect that a company's focus on social responsibility has on the financial performance of non-financial service firms that are publicly traded in Nigeria. The ex-post factor research approach was applied in this study, and secondary data were acquired according to the annual reports and accounts of twenty-three (23) different listed non-financial services that were sampled from the firms in Nigeria over ten years (2008-2017). The method of census sampling was utilized to choose the participants for the study. According to the findings of the study, corporate social responsibility has a sizeable and beneficial effect on financial success. Also, the study suggests that socially responsible investments can improve the financial performance of Nigerian listed firms.

Muchiri, Erdei-Gally and Fekete-Farkas (2022) sought to ascertain the impact of Corporate social responsibility on the financial performance of Kenyan financial institutions. A total of 300 personnel from financial institutions in Kirinyaga County were included in the study, and a sample of 171 participants was chosen utilizing stratified and systematic selection methods. The research was conducted utilizing a causal research design, and SPSS was utilized for the data analysis. Based on the study's findings, businesses should prioritize CSR initiatives that prioritize ethics, charity, and the inclusion of women and gender nonconformists to boost their performance.

Cheruiyot (2018) analyzed the CSR practices and financial performance of companies that were listed on the Kenya Stock Exchange in terms of ROE, ROA, and ROS. This research utilized regression analysis to conduct a cross-sectional study on 47 firms that were listed on the Nigerian Stock Exchange as of the end of December 2018. There was a correlation that may be considered significant between CSR and financial performance.

Afsheen (2015) found that CSR affects the performance of companies. conducted research on a representative sample of 101 Pakistani employees using correlation and regression analytic methods. According to the results of the study, corporate social responsibility has a significant influence on the performance of organizations and performs actions that contribute to improving profitability and raising the market worth, value, and stakeholder interest of enterprises.

Malik and Kanwal (2018) explored the influence of corporate social responsibility (CSR) on the financial performance of chosen firms listed on the Bombay Stock Exchange (BSE) in India. The study is entirely based on secondary data gathered from firms' annual reports and sustainability reports from 2016-2017 to 2018-2019. The findings show that participation in socially responsible projects has a considerable beneficial influence on corporate financial success. These findings give management insights on how to integrate the firm's CSR activities with its strategic business strategies, transforming the company mindset from a typical profit-oriented strategy to a socially responsible approach.

2.3.2 The Type of Industry on Financial Performance

Nyeadi, Ibrahim and Sare (2018) conducted an empirical study of the effect CSR has on the financial performance of listed companies in South Africa. The authors employed panel-corrected standard errors and accounted for cross-correlations across the panel's time series. CSR has been demonstrated to have a significant beneficial influence on corporate financial performance in South Africa. Upon further dissection of CSR into its major components, it is found that governance performance has a positive effect on a company's financial performance, while there is no evidence of a link between social components and company success, there is evidence of a link between factors in the environment and firm performance. Corporate social responsibility has a larger and more noticeable beneficial effect on the performance of large companies. Good governance and environmentally responsible actions are two ways in which CSR is improving the extractive industry's financial performance. However, it does not affect financial firms' profitability.

Tetteh (2019) evaluated the effects that corporate social responsibility has on the financial performance of non-financial companies that are listed on the Ghana Stock Exchange. The research used a statistical method and a descriptive survey design. Data for this study came from the annual reports and financial statements of 21 non-financial enterprises listed on the Ghana Stock Exchange between the years 2000 and 2018. The study used a panel regression model with coefficients estimated using a random-estimation econometric algorithm. In this case, the revenue-to-cost ratio was found to have a statistically significant unfavourable impact on ROA and EVA. Companies with a high concentration of non-financial businesses on the GSE have a

25

negative correlation between corporate social responsibility and return on investment (ROI).

Okafor, Adeleye and Adusei (2021) analyze the financial success of small and medium-sized enterprises (SMEs) in the service and manufacturing sectors in the United States to assess the efficacy of management decisions on social and environmental CSR initiatives. The levels of social CSR, environmental CSR, and financial performance, as perceived by the owner/managers of 50 U.S.-based. The results demonstrated that service SME financial performance was much greater than manufacturing SME financial performance when both were involved in workplace and customer CSR activities. Furthermore, regardless of the kind of firm, a combined focus on social and environmental CSR efforts has been shown to have a small but unfavourable impact on financial outcomes. These results suggest that small and medium-sized enterprises (SMEs) in the United States should keep an eye on their performance while investing in corporate social responsibility (CSR) and trying to maximize the social and financial returns from such initiatives.

In this study, Hou, Lu and Hung (2019) explored the connection between social responsibility on the part of businesses and the financial success of the creative sector. They analyzed 53 creative businesses' efficiency over five years using a dynamic DEA model. Regression analysis was used to investigate whether or not corporate social responsibility affected financial performance. The empirical findings showed that enterprises in the content media sector, which includes film, publishing, and broadcasting, are the leaders in terms of performance growth, and the regression findings demonstrated that CSR has a strong positive effect on the financial

performance of the creative sector. It was also found that the creative business is full of risk-takers and money-motivated individuals.

Nirino, Miglietta and Salvi (2019) examine how corporate social responsibility (CSR) affects the financial performance (FP) of food and beverage (F&B) companies. The authors provide a theoretical framework predicated on the idea that firms' financial performance (FP) is positively impacted by environmental and social CSR results. The authors used an ordinary least squares regression analysis to experimentally evaluate the model using data they collected from 190 F&B firms. The results demonstrate the genuine societal concerns among firms' stakeholders in the F&B industry, and they also indicate the favourable influence of CSR governance on environmental and social outcomes. Some studies have found a positive correlation between CSR outcomes and FP, whereas others have found no correlation at all. Social outcomes, on the one hand, have a favourable effect on a company's performance, whereas environmental outcomes, on the other hand, exhibit either negligible or negative impacts on FP.

2.3.3 The Moderating Role of the Type of Industry of Corporate Social Responsibility on Financial Performance

In their recent study, Zaiane and Ellouze (2022) investigated how corporate social responsibility affects the performance of companies, while also considering the effects of firm size and industry profile between 2002 and 2018. According to the findings, the influence of scale is advantageous for industries that are environmentally conscious, but detrimental for those that are not. According to the findings, big businesses in non-environmentally sensitive sectors just show lip service to corporate social responsibility, whereas tiny ones really implement concrete CSR initiatives. Furthermore, in environmentally sensitive industries, large firms participate in

effective CSR initiatives to address the needs of stakeholders, but smaller firms obliged to engage in costly CSR activities, are hurt and lose interest in CSR implementation.

2.4. Hypothesis Development

Three hypotheses as shown in the conceptual framework were developed based on the study objectives.

2.4.1 Relationship between CSR and Financial Performance

Research conducted on the impact of CSR initiatives on a company's financial performance has yielded conflicting results. As per the claims made by Shabbir et al. (2018), there are some who believe that financial performance and social responsibility have an inverse relationship. They argue that being highly accountable requires more resources, which puts socially responsible companies at a disadvantage compared to their less responsible counterparts. These additional expenses may be incurred as a result of activities such as making major philanthropic contributions, supporting community development programmes, sustaining plants in economically depressed areas, and developing environmental protection measures. There is a considerable body of evidence indicating that a company's financial performance is positively impacted by its participation in CSR initiatives (Majeed et al., 2015; Franco et al., 2020;). The concepts are founded on stakeholder ideas and highlight the societal mission of businesses. According to Freeman's (1984) stakeholder theory and other proponents, corporate social responsibility (CSR) programmes can help mitigate conflicts of interest between companies and stakeholders, leading to better financial performance and increased company value. Twenty Pakistani commercial banks had

28

their CSR efforts analyzed by Ramzan et al. (2021) between the years 2008 and 2017. The research indicates that there is a clear correlation between CSR and the financial success of banks. This suggests that banks that prioritize CSR activities tend to have better customer relationships. According to research conducted by Rodrguez-Fernandez (2016), a positive correlation was shown between CSR and financial success as measured by return on assets (ROA), Tobin's Q (TQ), and return on equity (ROE) for a sample of Spanish publicly listed enterprises in Europe. This suggests that companies with a higher social focus outperform their competitors in terms of financial success.

H1: There is a positive and significant relationship between CSR and financial performance.

2.4.2 Type of Industry on Financial Performance

The costs of resources used in corporate social responsibility initiatives vary by firm and industry, according to Kim, Nobi, and Kim (2020). Companies operating in industries that have a significant impact on the environment may allocate substantial amounts of money and effort toward corporate social responsibility projects. These initiatives could include research and development aimed at producing eco-friendly goods or the construction of facilities and systems for managing waste to improve the environmental impact of their offerings. These CSR initiatives are vital because they will assist enterprises in developing distinctive products and services, hence increasing sales and financial success (Lin, Chang and Dang, 2015). Firms in ecologically non-sensitive industries, on the other hand, do not always generate or enhance environmentally oriented goods and services. According to Plumlee, Brown, Hayes and Marshall (2015), the high costs of resources used in CSR initiatives can negatively

affect a company's overall performance. According to these concepts, the research argues that the correlation between CSR and a firm's financial performance will be restricted by the type of industry. More CSR efforts will boost financial performance for corporations in environmentally sensitive industries. More Corporate social responsibility initiatives, on the other hand, will harm the financial success of corporations in environmentally unsensitive industries.

H2: There is a positive and significant effect of industry type on financial performance.

2.4.3 Moderation Role of the Type of Industry of Corporate Social Responsibility on Financial Performance

Bitecktine and Haack (2015) argue that a business's growth and performance are dependent on its relationships with many actors or stakeholders (such as workers, consumers, shareholders, government agencies, suppliers, etc.) both within the firm and in the external society. The growing significance of CSR concerns in today's economic climate means that companies need to devote substantial resources to CSR initiatives if they want to win over stakeholders, gain their trust, and access the resources they control. In spite of the company's best efforts, stakeholders may fail to acknowledge its CSR efforts. According to a study by Chang, Chen and Shu (2018), the financial performance of companies may be negatively impacted by CSR. This is because stakeholders may not view the company's expanded CSR investments favourably, and the money spent on CSR activities may divert from business objectives and lose its significance. Put differently, stakeholders (including customers, suppliers, government agencies, shareholders, etc.) have higher and stricter expectations in industries that are environmentally conscious.

When businesses in industries with a high environmental impact participate in corporate social responsibility (CSR) initiatives that meet the demands of their stakeholders, the business has access to the goodwill, respect, and resources that the stakeholders control. As a result, the firms will enjoy benefits and enhanced financial results. On the other hand, corporations in sectors that do not have a significant impact on the environment do not have to make substantial investments in CSR operations since their stakeholders do not demand it. For some companies, CSR initiatives are a waste of time. If organizations spend significantly on CSR operations, the expenses and efforts involved will have a detrimental impact on their performance.

H3: There is a moderating effect of the type of industry on the relationship between CSR and financial performance.

2.5 Conceptual Framework and Hypothesis Development

The conceptual framework and the accompanying hypotheses are presented in this section with an explanation. The framework visualizes the existing linkages between the dependent, independent, and moderating variables. These linkages are used to develop hypotheses.

2.5.1 Conceptual Framework

The theoretical model clarifies the relationship between the social responsibility of companies and their economic outcomes. Therefore, it suggests a comprehensive framework that incorporates the type of industry as a mediator in the relationship between corporate social responsibility and the economic outcomes of companies. Based on this framework analysis, it can be inferred that CSR has a notable correlation

with the financial performance of a company, leading to an improvement in overall business financial performance. The upcoming section will demonstrate how financial performance is influenced by the industry type. The diagram will illustrate the correlation between the variables and the theoretical basis for the hypotheses.

Figure 2. 1 Conceptual Framework of the Link between CSR, Industry Type and Financial Performance

Source: Author's Construct (2023)

2.6 Summary

Corporate Social Responsibility assesses a company's social and environmental performance from a range of viewpoints, such as community participation, employee relations, product safety, philanthropy, and the firm's environmental effect. When a corporation is in a good position, it can carry out its responsibilities effectively. In contrast to when they are not earning profits, firms tend to engage in CSR efforts as long as they are profitable.

There are several ways in which this study departs from the prior scholarly work. In the first place, it promotes the establishment of the industry type and dynamic links between CSR and financial performance. In contrast to other studies that just looked at the direct correlation between CSR and financial performance, specifically Ghana, this one also considers the impact that industry type may have on the strength of that correlation. Second, this study looks at how environmental, social, and governance aspects of corporate social responsibility affect a company's financial performance. While most research on CSR has focused on the overall score, the effects of the individual tenets of CSR have received very little attention (Lahouel et al., 2020a:2020b; Liu et al., 2021). Therefore, this study aims to investigate the moderating effect of industry type on the relation between CSR and firm financial performance, a case of the listed firm on GSE.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents an outline of the various methods and strategies employed by the researcher to collect data, clean the data, and analyze the data using the appropriate analytical tools. It looks at the research design, data, method, model specification, diagnostics, and chapter summary.

3.1 Research Approach

Scholars have argued that the research approach should not differ from the study's objectives and hypotheses (Lahouel, Bruna, and Zaied, 2020b). In addition, three criteria must be considered when choosing an approach for a study, namely the nature of the study, associated risk, and time available (Grassmann, 2021). The quantitative research approach was utilized in this study as it relies on mathematical calculations and numerical data to arrive at its findings. The selection of quantitative methodology stems from the need to use numerical values in order to tally and quantify variables and ideas that are crucial to the study's explanations (Zeng, 2021). Furthermore, data collection, descriptive analysis, and conclusions from a quantitative method may help illuminate the impacts of the factors on the respondents selected (Lahouel, Bruna, and Zaied, 2020a). Once again, this quantitative idea evaluates the CRS in terms of business financial performance and the moderating effect of industry type. The reason is to delve into the most important dimension of the CRS that influences the financial performance in Ghana's financial and non-financial sectors.

3.2 Research Design

This study used correlational and descriptive research methods. Grassmann and Zeng (2020) state that descriptive research is data collection used to test hypotheses or answer questions about the existing state of the issue under investigation. Discovering and describing the current state of affairs is the job of descriptive research. Descriptive research is a branch of science that aims to provide a detailed account of an occurrence, location, or group of people. The study also employed a correlational methodology to investigate the connection between CSR and financial outcomes. Therefore, the choice of the correlational design and descriptive research design has been grounded in a similar empirical study (eg. Grassmann, 2021; Achour and Boukattaya, 2021). The correlational descriptive design allowed the researcher to estimate and test the relationship that exist among the relational hypotheses of the study.

3.3 Source of Data

Secondary data was used and was acquired from the annual financial report of the selected firm's database. Also, another source of information was acquired from journal articles, media reports, and policy documents for further discussion on the study's purpose.

3.4 Sampling Technique

The targeted population for the study includes all firms listed on GSE. Thirty-seven (37) companies, both financial and otherwise, are represented on GSE. A total of ten (10) businesses were chosen to sample due to time and resource restrictions. Researchers utilize samples to create norms and generalize findings from a statistically

significant subset of a study's population (Lahouel, Bruna, and Zaied, 2020b). The investigation's sample was selected by a process of purposeful sampling. Judgmental sampling is another name for the purposeful sampling technique. The selection of this method of sampling is premised on the level to which the units comprising the target population meet the prerequisites of having simple access to the relevant data (Rashid, 2020). Using the collected information, this study's final sample includes 10 different firm-year observations spanning from 2010 to 2021. The selected firms were those that had all the necessary information that was relevant to the aims and objectives of the study. another including criteria was the that the firm should have been listed on the Ghana stock exchange.

3.5 Data Collection Procedure

All of the variables used in this analysis were taken directly from each company's annual financial report. This research employed a panel data approach using a pool of data spanning the years 2010 to 2021. The selection of the annual financial report is based on the fact that this dataset contains the variables to be utilized in the analysis. Furthermore, the study uses key elements of Institutional Shareholder Services' ESG ratings to evaluate companies' social impact (ISS). The ISS-ESG rating score is established and managed by ISS's investment research section, which compares firms' reactions to and contributions to environmental, social, and governance problems and efforts to accomplish sustainable development objectives (SDG). Due to its credibility in reporting sustainability data, the ISS-ESG rating score has been deemed the most essential CSR indicator. Industry type, financial metrics (ROE, ROA, and Tobin's Q), and other metrics (1 if the company is in the financial sector, otherwise 0). Finally,

firms with missing data for some of the study variables of interest were removed from the study sample.

While the study's focus is on the influence of CSR on financial performance and the moderating function of the industry type, it would be remiss not to investigate additional elements that are connected to CSR and might have an impact on financial success. Therefore, the research generates company-specific factors to address any pressing concerns. Firm size (SIZE), leverage (LEV), book value to market value (BM), cash flow (CF), and daily stock return volatility are the particular metrics used in this analysis (sd.VOL). The SIZE of a company I in year t is equal to the natural logarithm of its sales, the LEV of its debts is equal to its market value of equity, the BM of its equity is equal to its market value of equity, and the CF of its operating activities is equal to the division of its total assets by its operating cash flow and the standard deviation of its daily stock returns. CSR has been shown in previous research to correlate to a company's soundness, liquidity, risk profile, and size. CSR is more likely to occur at a larger company because of the increased vulnerability that size brings (Adel et al., 2019). CSR-related metrics, such as the book-to-market ratio, are also considered (Achour and Boukattaya, 2021). CSR initiatives are justifiable by a company's operational cash flow (Zeng, 2021). Return volatility, an indicator of a stock's liquidity, also affects CSR (Achour and Boukattaya, 2021).

3.6 Empirical Estimation Technique

This research builds on the work to examine the impact of CRS on the financial performance of businesses listed on GSE, using both static and dynamic panel estimate methodologies to control for the moderating effects of industry type (Trinugroho, Agusman, Tarazi, 2014; Khan, Khan, Kim Oanh, and Lin, 2020). Through applying

static panel estimate techniques, the study analyses the impact of CSR on the financial performance of the chosen business in Ghana and develops an equation (3.1).

Whereas if cross-sections pooled OLS and the random effect (RE) model are actually incompatible, then this may be determined by using the Breusch-Pagan Lagrange Multiplier (LM) test. The cross-section pooled OLS technique fails if the null hypothesis is correct. Whether or not the random effect is consistent and efficient is the first step in the Hausman criteria test, which is used to choose between the fixed effect (FE) and random effect (RE) models.

3.7 Empirical Model

This research examines how CRS affects the financial success of GSE-listed companies and how the industry has a moderating function (CSR, financial performance, industry type, and Control Variables). The impact of CRS on the listed firm's financial performance is studied using a panel regression, with the moderating influence of industry type being examined. From the static model, the objectives above are analysed using:

$$\text{Tobin's Q}_{it} = \beta_0 + \beta_1 CSR_{it} + \beta_2 INTYPE_{it} + \beta_3 CSR * INTYPE_{it} + \sum_{c=1}^{5} \beta_4 CONTROL_{it} + \varepsilon_{it} \qquad (3.1)$$

$$\text{ROE}_{it} = \beta_0 + \beta_1 CSR_{it} + \beta_2 INTYPE_{it} + \beta_3 CSR * INTYPE_{it} + \sum_{c=1}^{5} \beta_4 CONTROL_{it} + \varepsilon_{it} \qquad (3.2)$$

$$\text{ROA}_{it} = \beta_0 + \beta_1 CSR_{it} + \beta_2 INTYPE_{it} + \beta_3 CSR * INTYPE_{it} + \sum_{c=1}^{5} \beta_4 CONTROL_{it} + \varepsilon_{it} \qquad (3.3)$$

Where Tobin's Q_{it}, ROE_{it} and ROA_{it} are the financial performance proxy for the selected firms i over the period t, CSR is the corporate social responsibility of firm i over the period t, $INTYPE_{it}$ is the industry type i over the period t, and $CSR * INTYPE_{it}$ is the interaction effect of CSR and INTYPE of firm i over the period t. Also, $CONTROL_{it}$ are the control variables thus (firm size (SIZE), leverage (LEV), book value to market value (BM), cash flow from operating activities (CF), and daily stock return volatility) of firm i over the period t.

3.8 Diagnostic Test

To ensure that the models' assumptions are met for FE and RE, the study conducted various diagnostic tests to ensure the fitness of the adopted models. They include serial correlation tests, multicollinearity tests, unit root tests and tests of statistical significance of the models.

3.8.1 Test for Serial Correlation

One of the fundamental assumptions that underpin the use of a panel regression model is that the variables are uncorrelated. Nevertheless, there are situations when variables are correlated sequentially, which is referred to as "serial correlation. Although the regression estimates derived using the ordinary least square model are still unbiased, they are inefficient owing to the serial correlation between variables. Waston Durbin Experiments were conducted to see whether the model exhibited serial correlation. Autocorrelation in regression residuals from statistical models may be quantified using the Durbin-Watson statistic. The test was executed using Eviews. The Durbin-Watson distribution always has values between zero and four. Sample uncorrelation is

indicated by a score of 2, positive autocorrelation by values between 0 and 4, and negative autocorrelation by values greater than 4.

3.8.2 Unit Root Test

Panel data analysis relies on the stationarity of the data series to draw inferences and enhance the precision and consistency of the resulting models. A data series is said to be stationary if its mean and variance remain constant throughout time and the covariance between the two extreme periods relies only on the lag between the two extreme periods and not on the actual moment at which it is calculated (Kanagaretnam et al., 2014).

3.8.3 Test for Multicollinearity

Multicollinearity occurs when the independent variables are strongly interrelated; their presence may have a deleterious influence on the regression findings. Multicollinearity in the regression model was analysed using a correlation matrix.

3.8.4 Test of Statistical Significance of Panel Regression Coefficients

The significance of the panel regression coefficients was estimated using F-statistics and R-squared. The F-test assumes that all of the regression coefficients are equal to zero, which means that they are not statistically significant. To ensure that a decision concerning the null hypothesis was reached at the 5% level of significance, the F-statistic and its associated p-value were evaluated. Additionally, it was vital to have a high R-squared value.

Table 3. 1 Variable Description

Variables	Operationalisation	Data Source	Literature source
Dependent Variable			
Tobin's Q	Tobin's Q equals the market value of a company divided by its assets' replacement cost	Annual Financial Report	Ben Slama et al. (2019), Chakroun et al. (2020), Lahouel et al. (2020a, b)
Return on Equity	Percentage of net income over total equity	PWC report	Chakroun et al. (2020), Liu et al. (2021), Ramzan et al. (2021)
Return on Assets	Net Income/Total Assets	PWC report	Chakroun et al. (2020), Rashid (2020), Lahouel et al. (2020a, b), Ramzan et al. (2021)
	Independent Variables		
CSR	A combined score on the three dimensions (social, environmental, and governance). The latter is measured on a scale from 0 to 100	Annual and sustainability reports, reliable websites	Zeng (2021), Salhi et al. (2020), Cui et al. (2018), Achour and Boukattaya (2021)
	Moderator		
Industry Type	A dummy variable (I if the firm is the financial sector and 0 otherwise)	Annual Financial Report	Lahouel et al. (2020a, b), Ramzan et al. (2021)
	Control Variables		
Firm Size	The natural logarithm of total assets	Annual Financial Report	Cho, Chung, and Young (2019)
Leverage	Total debts divided by the market value of equity	Annual Financial Report	Cho, Chung, and Young (2019)
Book Value to Market Value	Total equity divided by the market value of equity	Annual Financial Report	Cho, Chung, and Young (2019)
Cash Flow	cash flows from operating activities divided by total assets	Annual Financial Report	Cho, Chung, and Young (2019)
Daily stock return volatility	The standard deviation of daily stock returns.	Ghana Stock Exchange	Cho, Chung, and Young (2019)

Source: Authors Compilation (2023).

3.9 Chapter Summary

This chapter explains the use of a positive paradigm and its accompanying quantitative procedures for answering the study objectives and questions indicated in Chapter 1. It also includes a comprehensive rationale for the design, data sources, and data measurement and collection procedure. In addition, the chapter highlighted the approach of data analysis by defending the usage of static and dynamic methods of estimation.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Introduction

This chapter presents the output from the data analysis. It is structured to provide the necessary answers to the research questions and to achieve the objectives that were set out in the subsequent chapters. The chapter was organized into preliminary analyses, results for the various objectives, diagnostic tests and a chapter summary.

4.1 Preliminary Analyses of Data

The various pre-estimation tests carried out in this study were aimed at getting a firm grip on how data behave and relate to each other. As a result, the trend analysis, panel unit root test, descriptive statistics and correlation analysis were carried out using the Eviews version 10 statistical software.

4.1.1 Trend Analysis

The graphical representation of the variables used in the study is visualized in the graphs in Figures 4.1 and 4.2 in Appendix 1.

The pictorial view of the variables shows that none of the variables follows a specific trend. In other words, the majority of the variables are persistent over time around their mean. For instance, ROA is found to be persistent at around 1.5%. However, in Figure 4.2, the age of the firms was seen to have a negative trend. A cursory view of the graphs in Figure 4.2 also confirms that there is a boom and bust movement of the

variables across the 10 firms over the 12-year study period. This gives the indication that during the unit root test, most of the variables may be stationary at levels.

4.1.2 Descriptive Statistics

To get a full insight into the statistical nature of the variables, the study computed descriptive statistics. Researchers often employ descriptive statistics to provide a high-level overview of their data sets, allowing readers to better understand the breadth and nature of the information collected. Because of its strength as a data summarizer, descriptive statistics should be the starting point for every inferential investigation, according to Kaur, Stoltzfus, and Yellapu (2018). These summarized findings highlight any gaps, discrepancies, or outliers in the dataset. The researcher precisely determines the mean and standard deviation (SD) to determine the dataset's central tendency and dispersion. To further determine whether there are outliers, the extreme values (minimum and maximum) of the variables are also determined. The results are presented in Table 4.1.

From the results, the performance of the firms was measured using the return on assets (ROA), return on equity (ROE), and Tobin's Q. The average performance recorded by the firms is 1.58% with a standard deviation (SD) of 2.11, 10.22% (SD = 17.45) and 2.86 (SD = 8.55) representing ROA, ROE and Tobins'Q respectively. On average, an ROA of 1.58% shows that the firm's profitability vis-à-vis their stock of assets is low compared to the profitability they make with the stakeholder's equity (ROE) which recorded 10.22%. Similarly, an average of 2.86% of Tobin's Q value shows that the firms have market values greater than the cost of replacement of recorded assets of the firms. This means firms (both financial and non-financial) have their overall stock

value more expensive than the cost of replacement. Hence the stock of the firms is overvalued at a Tobin's Q value of 2.86%. The high values of standard deviations (SD = 2.11, SD =17.45, and SD = 8.55) among the three financial performance variables shows that there are high variations in profitability levels between financial and non-financial institution. The highest value of performance achieved by these firms was 7% for ROA, 49.10% for ROE, and 77.74% for Tobin's Q. While both high values of ROA and ROE are good signs of profitability for firms, the 77.74% Q-ratio shows overvaluation of firms, which may not attract more investors, but rather it increases firm competitors. The lowest performance of the firms was attained at a minimum ROA value of -3.70, ROE value of -80.69, and Tobin's Q value of 0.03. Whereas the negative ROA and ROE are a worry, the 0.03 Q-ratio shows that some firms have highly valuable assets that can offset the market valuation of a stock.

Corporate social responsibility (CSR) which is made up of governance, social, and environmental factors had an average value of less than 1, (that is 0.13), the deviation from this mean was 0.22 and the highest and lowest corporate social responsibility scores attained by these firms were 0.51 and 0.00 units respectively. A zero-minimum score of CSR means that some firms failed to honour their corporate social responsibilities to their stakeholders. The average age of the firms was found to be about 43 years, with the youngest being 18 years, while the oldest firms were 115 years. The average size and leverage were found to be 19.91% and 0.64% respectively. The deviation from these means where 3.02 and 15.58 respectively. This shows that firms have highly varying sizes and leverage levels. The largest firm size was 26.5% while the smallest firm size was 11.39%. Likewise, the highest leverage value was 1.7% with the lowest being -0.31%. Also, on average, the cash flow of the firms was

over Ghc10 million, and a standard deviation of over Ghc35 million. This shows that there is a huge variation in cash flow among financial and nonfinancial firms. The highest recorded cash flow over the study period was over Ghc232 million, while the least flow of cash was in debt (Ghc-178,682,000). The mean BV_MV was 28.8 (SD = 184.88) and maximum and minimum values of 1541.35 and -0.78 respectively. Likewise, the mean SRV was 0.31 (SD = 0.34), and maximum and minimum values of 3.10 and -0.07 respectively. The study used a total observation of 120 without any gaps in data over a study period of 12 years with 10 firms.

Table 4. 1 Results of Descriptive Statistics

	ROA	ROE	TOBINQ	SIZE	LEV	INTYPE	CSR	CF	BV-MV	AGE	SRV
Mean	1.58	10.22	2.86	19.91	0.64	0.50	0.13	0.06597	28.80	42.80	0.31
Std. Dev.	2.11	17.45	8.55	3.02	15.58	0.50	0.22	0.1725	184.88	26.18	0.34
Maximum	7.00	49.10	77.74	26.50	1.27	1.00	0.51	1.314	1541.35	115.00	3.10
Minimum	-3.70	-80.69	0.03	11.39	-0.31	0.00	0.00	-0.2480	-0.78	18.00	-0.07
Obs.	120	120	120	120	120	120	120	120	120	120	120

Author's computation (2023). *Where: Return on Assets (ROA), Return on Equity (ROE), Firm size (SIZE), Leverage (LEV), book value to market value (BV_MV), Industry Type (INTYPE), Corporate Social Responsibility, cash flow from operating activities (CF), and daily stock return volatility (SRV)*

4.1.3 Correlation Analysis

To get first-hand knowledge of the nature of the relationship existing between the variables, the study employed the Pearson correlation coefficient (ρ) to examine the bivariate relationship. This statistical technique was used to understand the strength and direction of the relationship between study variables. The results in Table 4.2 show that ROA and ROE have a very strong positive correlation, (ρ = 0.86). Thus, both variables move in the same direction, such that as ROA increases, ROE also increases. Again, ROA posed a positive but very weak correlation with Tobin's Q (ρ = 0.06). Likewise, ROA and CSR have a very weak positive correlation where Rho = 0.03. Indicatively, ROA and CSR move in the same direction, and when CSR initiatives increase, firms' ROA also increases. Meanwhile there existed a very weak negative correlation between ROE and CSR, as well as Tobin's Q and CSR at respective correlation coefficients of Rho = -0.06 and Rho = -0.09. These indicate that CSR moves in a different direction from ROE and Tobin's Q, such that as CSR initiative increases, both ROE and Tobin's Q decrease and vice versa. The results further indicate that the majority of the controlled variables such as (SIZE, LEV, BV_MV, and CF) have weak correlation coefficients ranging below ±0.50. This general weak correlation coefficient between the variables gives an indication of the potential absence of multicollinearity in the data.

Table 4. 2 Correlation Matrix

	ROA	ROE	TOBINSQ	SIZE	LEV	CSR	CF	BV_MV	AGE	SRV
ROA	1.00									
ROE	0.86	1.00								
TOBINQ	0.06	0.08	1.00							
SIZE	0.50	0.48	0.03	1.00						
LEV	0.35	0.28	-0.00	0.54	1.00					
CSR	0.03	-0.06	-0.09	0.02	-0.07	1.00				
CF	-0.23	-0.20	0.06	0.12	-0.31	0.02	1.00			
BV_MV	-0.08	-0.07	-0.05	0.31	-0.09	0.08	-0.06	1.00		
AGE	0.54	0.52	-0.12	0.51	0.34	-0.06	-0.25	-0.07	1.00	
SRV	-0.09	-0.07	-0.01	-0.04	-0.12	-0.03	0.05	-0.04	-0.23	1.00

Author's computation (2023). *Where: Return on Assets (ROA), Return on Equity (ROE), Firm size (SIZE), Leverage (LEV), book value to market value (BV_MV), Industry Type (INTYPE), Corporate Social Responsibility, cash flow from operating activities (CF), and daily stock return volatility (SRV)*

4.1.4 Test for Stationarity of Variables

The study conducted the first-generation unit root tests. Levin, Lin and Chu (2002), lm, Pesaran and Shin (2003), W-stat, ADF and PP Fisher chi-square statistics were used to investigate the presence of unit root among the variables under study. This first-generation unit root test assumes the absence of cross-sectional dependence among the variables. Consider the results in Table 4.3. The results show that at the common unit root process, all the variables are stationary at the level since the p-values are less than 5%. Thus, at a $p < .001,$ the variables have no common unit root. At the individual level unit root tests, the majority of the variables such as ROE, Tobin's Q, CSR, SRV, BV_MV and CF are stationary at level, whereas the remaining variables became stationary after the first difference. This indicates that there is no problem of a unit root in the variables, thus the study's finding can be relied upon for forecasting and policymaking since it is not spurious (Abdulai & Alhassan, 2022).

Table 4. 3 Results of Unit Root Tests

Panel unit root test: Summary
Sample: 2010--2021
Newey-West automatic bandwidth selection and Bartlett kernel

LEVEL FORM	ROA	ROE	TOBINSQ	SIZE	CSR	SRV	BV_MV	CF
Null: Unit root (common unit root process)								
Levin, Lin & Chu t*	-3.16***	-3.89***	-73.53***	-2.42***	-7.64***	-3.02***	-6.26***	-3.21***
Null: Unit root (individual unit root process)								
Lm, Pesaran and Shin W-stat	-1.52	-2.56***	-21.26***	0.38	-4.96***	-3.73***	-3.92***	-1.84**
ADF - Fisher Chi-sq	28.95	40.79***	54.37***	18.25	52.12***	52.57***	50.59***	42.79***
PP - Fisher Chi-sq	31.69**	51.95***	26.66	34.36**	64.09***	49.93***	45.16***	45.46***
FIRST DIFFERENCE	**ROA**	**ROE**	**TOBINSQ**	**SIZE**	**CSR**	**SRV**	**BV_MV**	**CF**
Null: Unit root (common unit root process)								
Levin, Lin & Chu t*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Null: Unit root (individual unit root process)								
Im, Pesaran and Shin W-stat	-5.76***	N/A	N/A	-3.96***	N/A	N/A	N/A	N/A
ADF - Fisher Chi-sq	69.28***	N/A	N/A	52.43***	N/A	N/A	N/A	N/A
PP - Fisher Chi-sq	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Author's construct (2023). *Note. * p < .05, ** p < .01, *** p < .001. Where: Return on Assets (ROA), Return on Equity (ROE), Firm size (SIZE), Leverage (LEV), book value to market value (BV_MV), Industry Type (INTYPE), Corporate Social Responsibility, cash flow from operating activities (CF), and daily stock return volatility (SRV)*

4.1.5 Model Selection Tests

The study used the static regression techniques to estimate the study model. Specifically, the random and fixed effects models were employed. To ensure that a consistent and unbiased model is selected from these two static models, the Hausman test statistic was used to test the null hypothesis that the random effect model was more consistent, against the alternative that the fixed effect model was more consistent. The results of the test are shown in Table 4.4

Table 4. 4 Hausman Tests

Correlated Random Effect Hausman Test			
Random Effect (RE1)	**Chi-square statistic**	**d.f**	**P-value**
Cross-section Random	2.3678	8	0.9676
Random Effect (RE2)			
Cross-section Random	2.3426	8	0.9687
Random Effect (RE3)			
Cross-section Random	2.130	8	0.952

Author's construct (2023)

Since the p-values of the three models are greater than 0.05, that is 0.9676, 0.9687 and 0.952, the study failed to reject the null hypothesis and conclude that the Random Effect model is more consistent than the fixed effect model. Hence the study presented only the random effect model in the analysis.

Table 4. 5 Random Effect Regression Output

Variables	RE1 (ROA)	RE2 (ROE)	RE3 (Tobin's Q)	RE(GLS) (ROA)	RE(GLS) (ROE)	RE (GLS) (Tobin's Q)
Constant	2.5099(0.3487)	4.708(0.8351)	15.6511(0.3189)	2.8160(0.0798)	24.341(0.1374)	5.3321(0.5808)
SIZE	-0.0392(0.7223)	0.9254(0.7287)	-0.4927(0.3189)	−0.0503(0.321)	−0.3074(0.5723)	−0.1413(0.7955)
LEV	-0.0781 (0.9230)	-0.1583(0.9814)	1.090(0.5091)	−0.1903(0.361)	0.5457(0.8341)	−0.2366(0.9520)
INTYPE*CSR	0.7834 (0.4962)	16.2663(0.0942)	-6.2052(0.4419)	0.2094(0.3573)	−0.0863(0.9714)	−5.6114(0.4047)
INTYPE	5.5289(0.0624)	35.5072(0.0922)	10.1994(0.3451)	0.0007(0.0883)	0.0048(0.1539)	3.2950(0.4961)
CSR	-0.2486 (0.7650)	-15.4755(0.0273)	-3.165(0.0464)	−0.072(0.0891)	−0.7555(0.0035)	−2.4748(0.6001)
CF	0.2149(0.8197)	2.0926(0.7925)	0.8806(0.8185)	0.2381(0.1503)	1.8093(0.2032)	3.8843(0.4262)
BV_MV	0.0006(0.5333)	0.003(0.7289)	0.000008(0.9983)	−0.3218(0.236)	−3.7522(0.0735)	−0.001(0.8782)
AGE	-0.0699(0.0417)	-0.4218(0.1244)	-0.1844(0.3778)	4.6522(0.1976)	44.2084(0.2065)	−0.0440(0.5593)
SRV	0.2384(0.5453)	2.1216(0.1244)	-0.2684(0.8287)	1.7963(0.1407)	8.0640(0.2725)	−0.1044(0.9614)
ROA(-1)				0.2979(0.0651)		
ROE(-1)					0.19041(0.0671)	
Tobin's Q (-1)						0.3441(0.000)
Durbin-Watson	*1.372****	*1.2550****	*1.2501****	*1.76138*	*1.705138*	*1.99306*

Author's construct (2023). *Where Return on Assets (ROA), Return on Equity (ROE), Firm size (SIZE), Leverage (LEV), book value to market value (BV_MV), Industry Type (INTYPE), Corporate Social Responsibility (CSR), cash flow from operating activities (CF), and daily stock return volatility (SRV). ***, ** and * are the statistical significance levels of 1%, 5% and 10%. Values in parenthesis are standard errors, while values outside parenthesis are coefficients.*

To measure the performance of firms, the study variables such as the return on assets (ROA), return on equity (ROE) and Tobin's Q as the proxies. Therefore, these three variables constituted the dependent variables. Since the study variables consisted of both time-variant and time-invariant variables, it was appropriate to examine the relationship between the variables using both static. Expressly, the static models consisted of FE and RE models.

The results in the RE1 model show that firms' age is related negatively to their performance. Hence, at a statistically significant level of 1%, any unit increase in these firms' age leads to -0.0699 units decrease in the performance of firms (ROA). However, none of the controlled variables were statistically significant in Model 2 and 3. The autocorrelation of the independent variables was tested using the Durbin-Watson statistics. The results presented 1.372, 1.255, and 1.250 for ROA, ROE and Tobin's Q. Since all statistics are below 2.00, it implies that there exists a positive autocorrelation, where the independent variables are correlated with their lagged values. To correct the autocorrelation in the models, a robust standard error with PSCE technique was employed. Also, endogeneity in the models were accounted for in the GLS specified random effect models. The results show a difference from the original model in RE1, RE2 and RE3. As a result, the problem of serial correlation was solved, as it can be seen that all the Durbin-Watson statistics of the robustness models have D-W statistics of 1.7614, 1.7051 and 1.9931, which are approximately 2.00. hence the models are free from positive autocorrelation.

4.2 Effect of Corporate Social Responsibility (CSR) on Financial Performance

The outcomes presented in Table 4.4 reveal intriguing insights into the relationship between corporate social responsibility (CSR) and financial performance, measured through different metrics. Notably, when assessing firm performance using return on assets (ROA) and Tobin's Q, CSR exhibits both positive and negative associations, although these relationships lack statistical significance.

However, a distinctive pattern emerges when scrutinizing return on equity (ROE) as a performance metric. In this context, there is a statistically significant negative impact of CSR on financial performance. Specifically, the findings suggest that at a 5% significance level, a unit increase in CSR is linked to a notable 15.476-unit decrease in ROE, assuming other variables remain constant. Similarly, when Tobin's Q is used to gauge financial performance, each unit increase in CSR is associated with a significant decrease in Tobin's Q by -3.165 at the 5% significance level.

Relating these findings to Stakeholder Theory, which posits that businesses should consider the interests of all stakeholders, including society and the environment, the observed negative impact of CSR on financial performance, especially in the context of ROE and Tobin's Q, could suggest a potential tension or trade-off. It implies that the resources allocated to CSR activities might be affecting short-term profitability or market valuation. Stakeholder Theory encourages a balance between the interests of various stakeholders, and these results prompt further exploration into how CSR initiatives align with the financial goals of the firm, shedding light on the complex interplay between social responsibility and financial performance.

4.2.1 Effect of Industry Type on Financial Performance

The results of three regression models indicate that the type of industry has a positive influence on firms' performance. The difference between the performance of financial (bank) and nonfinancial industry types (INTYPE) are 5.5289 and 35.5072. This indicates that at a statistical significance level of 10%, banks experience an increase in their performance by 5.5289 and 35.5072 increase in their performance (ROA and ROE) than manufacturing firms. This result indicates that banks, by virtue of them belonging to the financial sector have the opportunity to increase their performance than the manufacturing firms, all other things being equal.

4.2.2 Moderating Effect of Industry Type on CSR and Financial Performance

The relationship between the corporate governance of firms and their performance could also be influenced by the type of industry. For instance, it is expected that financial institutions will have more corporate social responsibility activities than nonfinancial institutions. Therefore, to find the influential role of industry type, the study obtained the moderation effect of industry type on the relationship between CSR and firms' performance. The results show that with ROA and Tobin's Q as the dependent variables, INTYPE has no significant intervening influence on CSR. However, when the dependent variable is ROE, there exists a positive moderating effect of industry type on the relationship between CSR and firm performance. Thus, when the type of industry is 1 (financial institutions), then the firm type moderates the CSR of the banks to cause an increase in their performance by 16.2663 (p= 0.0942) units. However, when the industry type is 0 (nonfinancial institution), it moderates a

negative influence of CSR on firm performance by 35.5072, at a statistically significant level of 5%.

4.3 Results Discussion

This subsection presents the discussion of the key findings. It compares the current findings to the reviewed literature. The section is grouped into three subsections based on the study objectives.

4.3.1 Effect of Corporate Social Responsibility (CSR) on Financial Performance

Different measurement variables of financial performance relate differently to the corporate social responsibility of the firms. Thus, using the return on assets (ROA) and Tobin's Q as the measures of firm performance, corporate social responsibility (CSR) poses no statistical influence. However, when the financial performance was measured by ROE, model RE2 showed that increases in CSR reduce the financial performance of the firms. This finding corroborates the study of Plumlee, Brown, Hayes and Marshall (2015), who averred that the high costs of resources used in CSR initiatives can negatively affect a company's overall performance. Likewise, other studies believe that CSR initiatives generate agency problems, thus affecting the performance of the firms. Also, the issue of agency cost associated with CSR investment (Lahouel, Bruna and Zaied, 2020a), as well as the effect of firm value depletion (Lahouel et al., 2020b) that results from the investment in CSR activities may arise when firm managers seek to satisfy their parochial interest rather than the interest of the shareholder (Laskar and Maji, 2016). Also, the current findings of this

study confirm that of Okafor, Adeleye and Adusei (2021) and Ramzan et al. (2021) who revealed that the financial performance of firms is in jeopardy when managers continuously allocate more resources to CSR activities. Likewise, the negative relationship between CSR and financial performance is accentuated by Shabbir et al. (2018) who argued that being highly accountable through CSR initiatives requires more resources, which puts socially responsible companies at a disadvantage compared to their less responsible counterparts. These additional expenses may be incurred as a result of activities such as making major philanthropic contributions, supporting community development programmes, sustaining plants in economically depressed areas, and developing environmental protection measures.

As opposed to the current study's findings, there is a considerable body of evidence that also believe that a company's financial performance is positively impacted by its participation in CSR initiatives (Majeed et al., 2015; Franco et al., 2020). This result of a positive relationship is grounded on the stakeholder theory, which highlights the societal mission of businesses. According to Freeman's (1984) stakeholder theory and other proponents, corporate social responsibility (CSR) programmes can help mitigate conflicts of interest between companies and stakeholders, leading to better financial performance and increased company value.

4.3.2 Effect of Industry Type on Financial Performance

The study employed three distinct variables to serve as proxies for assessing the financial performance of firms. The outcomes derived from each of these variables consistently highlight the positive influence of industry type on firms' overall performance. Specifically, the findings suggest that companies affiliated with the financial sector exhibit superior financial performance across metrics such as return on assets (ROA), return on equity (ROE), and Tobin's Q, in comparison to their counterparts in the non-financial sector.

This result stands in contrast to the observations of Hou, Lu, and Hung (2019), who asserted that firms within the content media industry exhibited heightened financial performance compared to entities in other industries. The study's findings underscore the presence of significant disparities in financial performance between the financial and non-financial industries.

In the context of Stakeholder Theory, which advocates for a consideration of various stakeholders' interests, these results prompt an exploration of how industry dynamics intersect with financial performance. It implies that industry-specific factors play a crucial role in shaping financial outcomes for firms. The contrasting findings with the content media industry highlight the nuanced nature of industry influences on financial performance, emphasizing the need for a more granular understanding of how different sectors navigate the intricate balance between financial goals and stakeholder interests.

4.3.3 Moderating Effect of Industry Type on CSR and Financial Performance

The examination of the results reveals that when considering return on assets (ROA) and Tobin's Q as the dependent variables, the industry type (INTYPE) does not exhibit a significant moderating influence on the relationship between Corporate Social Responsibility (CSR) and firm performance. However, when the dependent variable shifts to return on equity (ROE), a positive moderating effect of industry type emerges, indicating that the industry type plays a crucial role in shaping the association between CSR and firm performance.

This significant positive moderating effect aligns with the findings of previous studies conducted by Singh et al. (2018), Lahouel et al. (2020b), Lahouel et al. (2020), and Grassmann (2021) across both developing and developed economies. As emphasized by Cho et al. (2019), the impact of CSR on firms' financial performance is not uniform across different industry types. Industry type serves as a crucial indicator in preventing and addressing agency conflicts, influencing the overall performance of firms (Zeng, 2021). The study underscores the importance of considering industry-specific contexts in understanding the relationship between CSR and firm performance.

Moreover, the findings support the assertion by Zaiane and Ellouze (2022) that the influence of production scale (industry type) is advantageous for environmentally conscious industries but detrimental for those that are not. This suggests that industry type is a crucial factor in determining the effectiveness of CSR initiatives. In environmentally sensitive industries, larger firms actively engage in CSR to address stakeholder needs, while smaller firms may face challenges in implementing costly CSR activities, impacting their interest in CSR initiatives. The study emphasizes the nuanced role of industry type in shaping the dynamics between CSR and firm performance, contributing valuable insights to the broader discourse on corporate social responsibility.

4.4 Model Diagnostic Tests

The study undertook various pertinent diagnostic tests to ascertain the fitness and usability of the specified static the cross-sectional dependence test was used.

4.4.1 Cross-sectional Dependence

The cross-sectional dependence of the model seeks to find out the characteristic interconnectedness of the various cross-sectional study entities (financial and non-financial institutions). Thus, it was used to validate the efficiency of the model by testing whether the activities in the financial industry influence that of the nonfinancial industry. The test was conducted on all three models. The following hypotheses were tested:

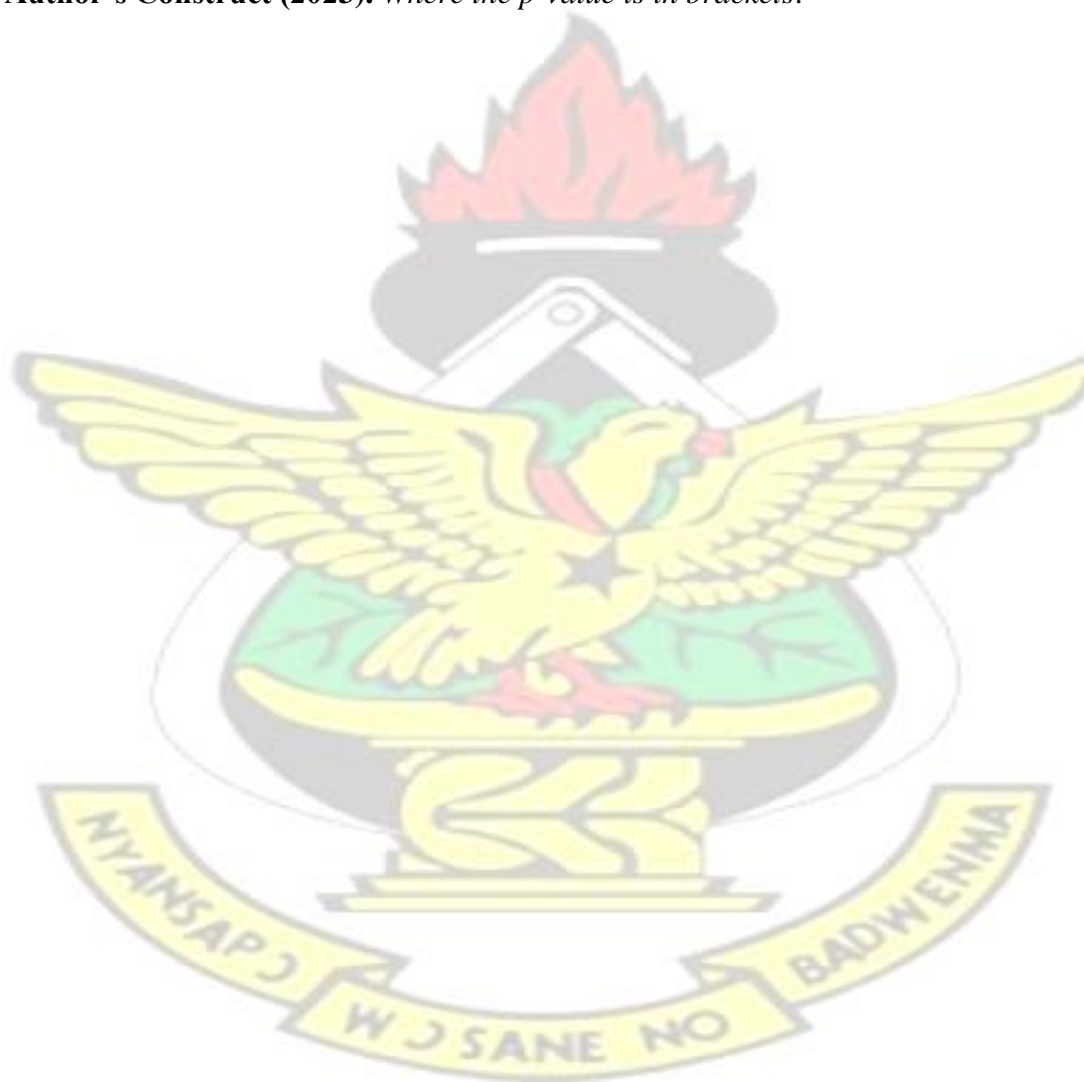*H₀: No cross-section dependence (correlation) in residuals.*

H₁: Existence of cross-section dependence (correlation) in residuals.

59

Consider the results in Table

Table 4. 6 Results of Cross-Sectional Dependence

	Model 1-test-statistic	Model 2-test statistic	Model 3-test statistic
Breusch-Pagan LM	16.0838 (6.05992e-05)	2.34257 (0.96867)	0.246646 (0.619447)
Pesaran scaled LM	0.4514 (0.6517)	0.9010(0.3676)	2.2534(0.0022)
Bias-corrected scaled LM	-0.0031 (0.9975)	0.4464(0.6553)	
Pesaran CD	1.44302 (0.1490)	3.32553 (0.00088)	0.8653(0.387)

Author's Construct (2023). *Where the p-value is in brackets*.

The results showed that the three models have their p-values greater than 0.05 (except model 3) when the Breusch-Pagan LM test was conducted. As a result, the study failed to reject the null hypothesis and conclude that there is no cross-section dependence in the residuals.

CHAPTER FIVE

SUMMARY OF KEY FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter summarized the results and findings obtained in the preceding chapter. It drew conclusions on the findings and gave recommendations for policy adoption and future studies.

5.1 Summary of Findings

The study set out to assess the topic: "The impact of corporate social responsibility on firm financial performance: Does industry type matter?" As a result, three key objectives were examined in order to (1) determine the effect of corporate social responsibility (CSR) on financial performance, (2) examine the effect of industry type on financial performance, and (3) investigate the moderating effect of industry type on the relationship between corporate social responsibility and financial performance. The study employed a static model to assess the objectives. Thus, the Fixed Effect and Random Effect models were the static models. The Hausman test results showed that the random effect model was more consistent than the fixed effect model. The results of each of the objectives are summarized into themes as follows:

5.1.1 Effect of Corporate Social Responsibility (CSR) on Financial Performance

The results of the three random effect models showed that there exists no significant relationship between CSR and the financial performance (measured by ROA and Tobin's Q) of firms. However, when the financial performance was measured by ROE, CSR tended to reduce the financial performance of the firms. Thus, CSR has a negative influence on firm performance.

5.1.2 Effect of Industry Type on Financial Performance

The study results from models 1 and 2 showed that industry type related positively to the financial performance of firms. As a result, financial institutions are more profitable than the manufacturing firms. Indicatively, there is a difference between the performances of financial and nonfinancial firms over the study period.

5.1.3 Moderating Effect of Industry Type on CSR and Financial Performance

The results indicated that with ROE as the dependent variable, the type of industry moderated a positive influence of CSR on the performance of the firms. However, with ROA and Tobin's Q as the dependent variables, the industry type induced a nonsignificant moderation effect of industry type on the link between CSR and financial performance.

5.2 Conclusion

Corporate social responsibility (CSR) of firms creates a connection between the industry and the outside world. Thus, it serves various purposes for the social well-being of the people and also has an effect on the corporation's performance. Therefore,

the current study was positioned to investigate the relationship between CSR and the financial performance of firms, with a particular interest in the moderating role of industry type. The study used 10 Ghanaian financial and nonfinancial firms over a study period of 12 years. The static (RE) panel regression was used, and the results showed that increases in the CSR initiative of firms will lead to a decrease in the financial performance (ROE) of both financial and nonfinancial firms. The results also showed that firms in the financial sector experienced better financial performance compared to those firms in the nonfinancial industry. Also, the study found that industry type moderated a positive influence of CSR on financial performance (ROE), whereas it moderated a negative interplay between CSR and financial performance when profitability is measured by Tobin's Q, though not statistically significant. Therefore, despite the fact that CSR provides valuable benefits for stakeholders and the environment, firms should take caution when investing in CSR initiatives, as it can have deleterious implications on firm performance due to Agency cost. Likewise, firms should consider their industry type as key when investing in CSR.
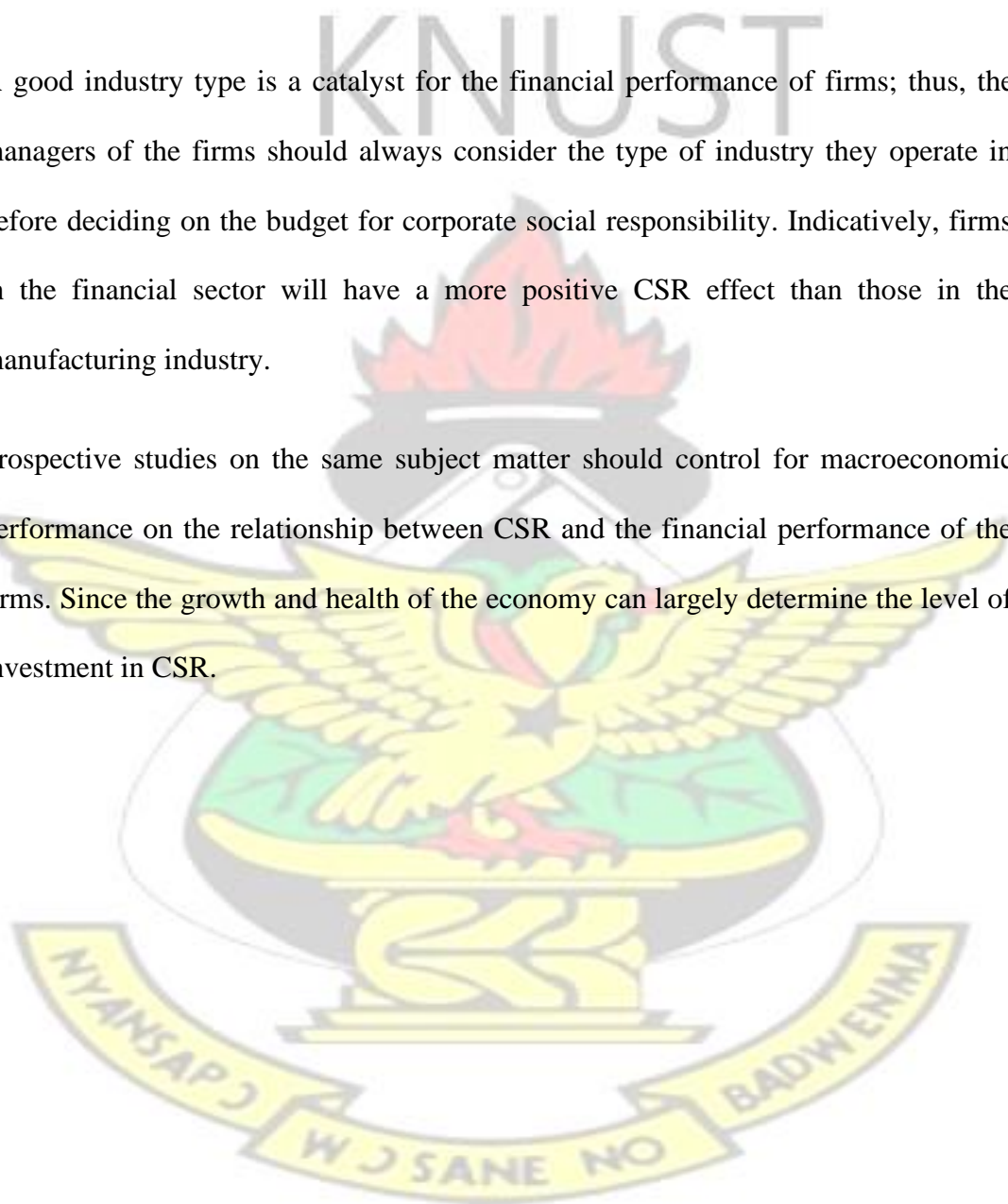
5.3 Recommendations and Suggestions for Future Studies

On the foregoing result and conclusion drawn, the study outlines the following suggestions for policy adoption and future study directions. Despite the fact that CSR improves the lives of the beneficiary society and also serves as a channel for the firms to advertise their product to customers, investment in CSR should be rationalized to avoid the issues of agency problems associated with CSR budgeting. Thus, the negative effect of CSR implies that when more capital is invested in CSR initiatives, it reduces their financial performance.

With the positive moderation role of industry type on the relationship between CSR and firm performance, the study avers that the financial industry continues to be a more lucrative sector than other sectors. Thus, investors who have intentions to increase their gains should choose the financial industry, specifically banks.

A good industry type is a catalyst for the financial performance of firms; thus, the managers of the firms should always consider the type of industry they operate in before deciding on the budget for corporate social responsibility. Indicatively, firms in the financial sector will have a more positive CSR effect than those in the manufacturing industry.

Prospective studies on the same subject matter should control for macroeconomic performance on the relationship between CSR and the financial performance of the firms. Since the growth and health of the economy can largely determine the level of investment in CSR.

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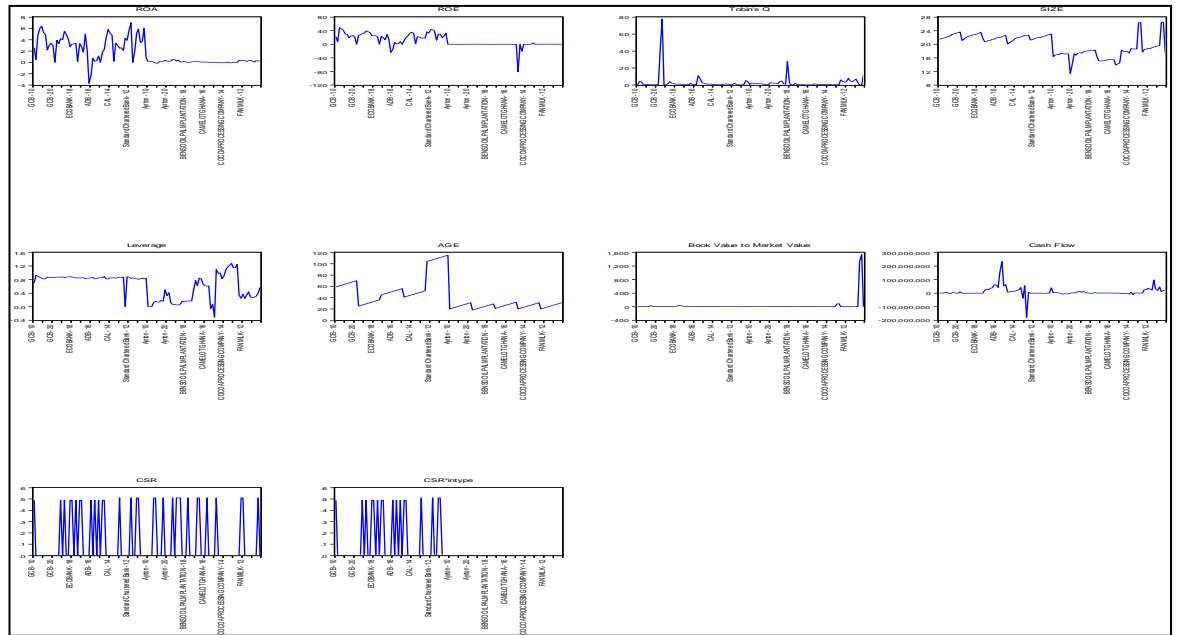Zeng, T. 2021. Corporate social responsibility (CSR) in Canadian family firms. *Social Responsibility Journal, 17*(5), pp. 703-718, doi: 10.1108/SRJ-12-2019-0410.

Figure 4. 1 Trend Analysis