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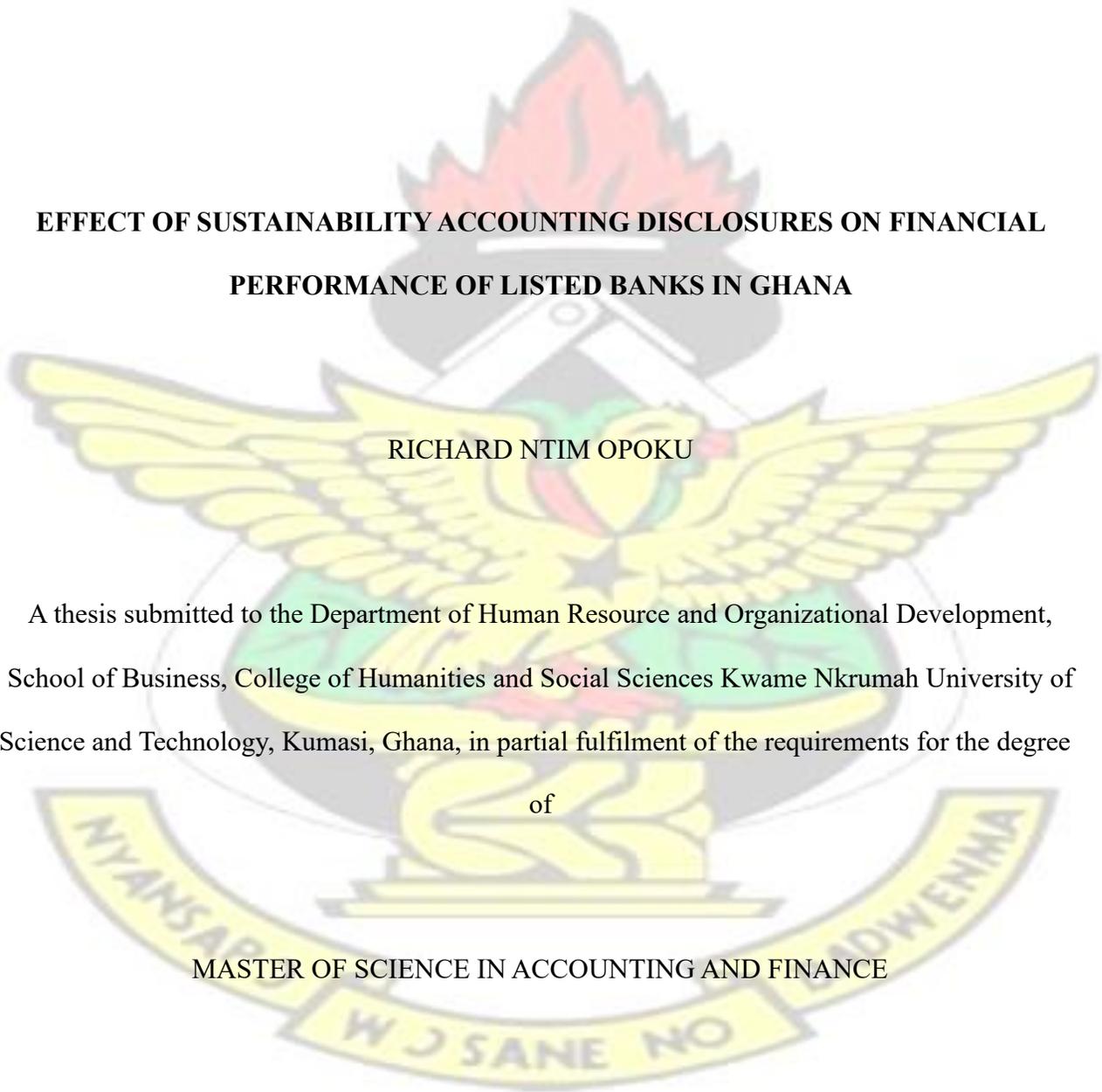
**EFFECT OF SUSTAINABILITY ACCOUNTING DISCLOSURES ON FINANCIAL
PERFORMANCE OF LISTED BANKS IN GHANA**

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A thesis submitted to the Department of Human Resource and Organizational Development,
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Science and Technology, Kumasi, Ghana, in partial fulfilment of the requirements for the degree

of

MASTER OF SCIENCE IN ACCOUNTING AND FINANCE



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 by another person or any material which has been accepted for the award of any other degree of the University, except where due acknowledgment has been made in the text.

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DEDICATION

I dedicate this project work to the Almighty God for His blessings and mercies granted upon me to undertake this work successfully and my Supervisor Dr. Kwame Mireku who have been given me directions as to how to go about this work.

Also, to all my dear ones who helped me in one way or the other during my studies. I say, may God bless them all, Amen!

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My greatest thanks go to the Almighty God, by whose Grace this research is well undertaken.

I would like to express our sincere gratitude once again to Dr. Kwame Mireku whose proven experience and patience in respect of supervision helped me to produce this work.

I also express my profound gratitude to all the Lecturers who helped me through my studies.



ABSTRACT

The study explores the effect of sustainability accounting disclosures on the financial performance of banks in Ghana listed on the Ghana Stock Exchange. The study adopts the explanatory research design and a quantitative approach involving data generation in quantitative form. There were a total of eight financial institutions which were involved in the study. The census method is adopted for this study and data was collected from 2015-2021. The data were analysed using descriptive analysis and Pearson Correlation and Regression Analysis. The findings indicate that Ghanaian banks exhibit a commendable dedication to sustainability disclosure, achieving an overall score of 65.92%. However, there is a discrepancy in reporting focus, with financial sustainability prominently covering (98.7%), while social (67.6%) and environmental (30.6%) aspects need enhancement. A significant and positive correlation emerges between sustainability disclosure and financial performance, assessed through return on equity (ROE). In addition, firm size and leverage positively and significantly correlate with ROE. The model accounts for 67.8% of ROE variance, highlighting the dual impact of sustainable practices on ethics and finances. Lastly, when considering firm size, a positive correlation between larger banks and economic sustainability reporting is evident. This suggests a potential interplay between firm size, sustainable practices, and economic performance. Recognizing the positive correlation between sustainability disclosure and financial performance, banks should intensify their sustainability considerations into their core strategies. By aligning social and economic sustainability initiatives with financial goals, banks can harness the potential benefits of sustainable practices more effectively.

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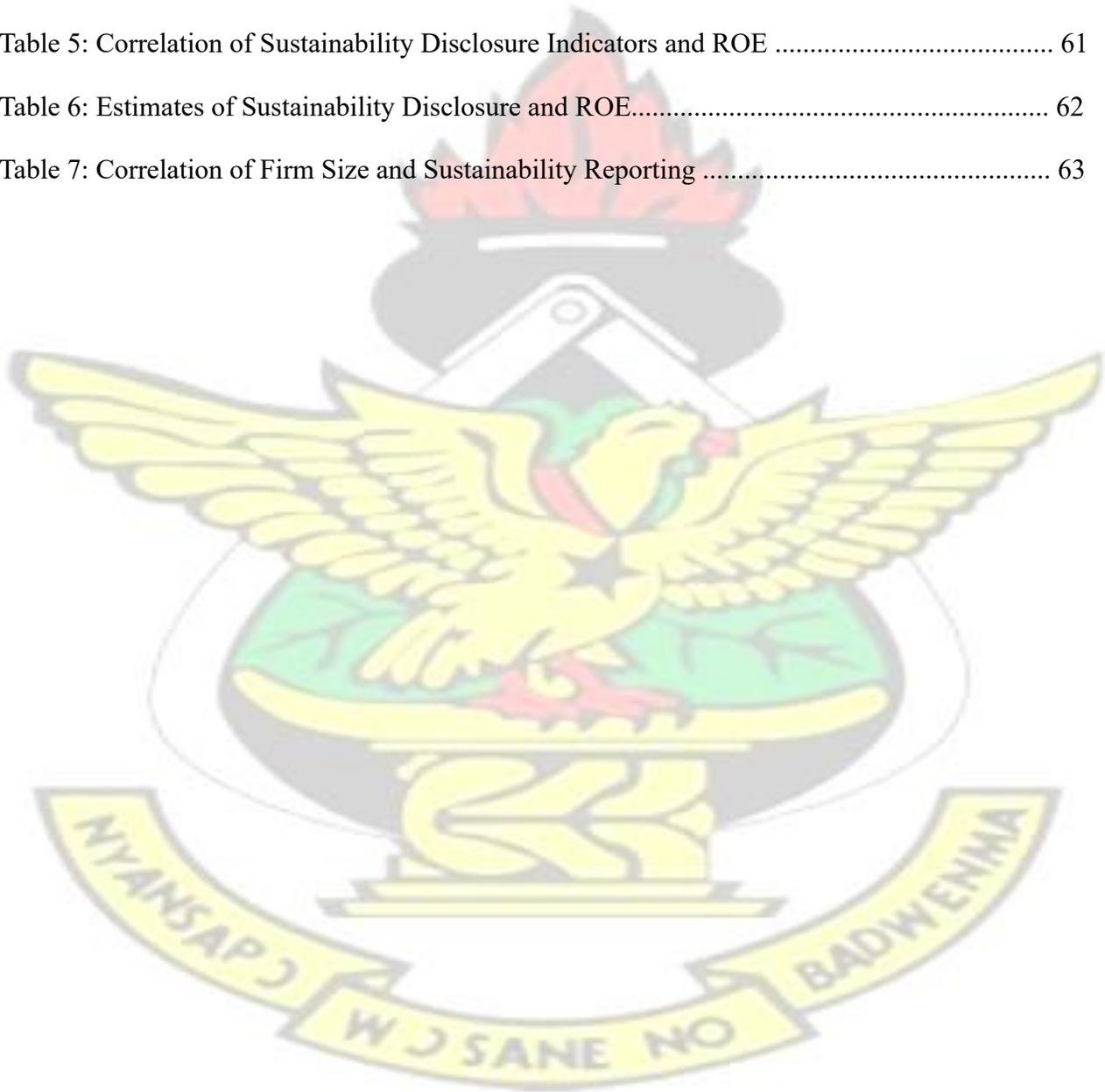
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LIST OF ABBREVIATIONS/ACRONYMNS

KPMG Klynveld Peat Marwick Goerdeler

GSE Ghana Stock Exchange

EVA Economic Value Added

ROA Return on Assets

ROE Return on Equity



CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND OF THE STUDY

The banking sector is essential to the functioning of the contemporary economy because of its capacity to exert influence over monetary markets. According to Buallay (2019), banks constitute the primary source of external financing for sectors that have considerable adverse effects on the environment. Therefore, their performance in terms of sustainability is an essential component of transparency and disclosures, which has an effect on a number of other businesses. According to Azzam, Alqudah and Haija (2020), the goal of achieving sustainable development necessitates the regulation of businesses operating in the financial services sector since these businesses frequently fund and benefit from activities that are not sustainable and have an effect on the environment. In a report jointly released by Accenture and the United Nations Global Compact (UNGC), it was revealed that a significant 80% of executives perceive sustainability disclosure as a strategic tool employed by modern organizations to gain a competitive advantage in today's global marketplace. This conclusion was drawn from the results of a survey conducted by Accenture. Following that, most financial institutions have responded to the requirement of delivering accountability through the implementation of sustainability disclosures.

According to Maryana and Carolina (2021), sustainability disclosure evaluates and reports the performance of a company in terms of its impact on the environment, society, and the economy. As indicated by Nwaigwe, Ofoegbu, Dibia and Nwaogwugwu (2022), sustainability disclosure is a report that an organization creates to convey information about the organization's economic, social, and environmental details. As a result, sustainability

disclosure offers a high-level view of the governance practices of an organization. Improved sustainability disclosure enables businesses to better assess, understand, and communicate their performance across economic, social, and environmental dimensions, as well as to establish objectives for the future (Fadilah, Uzliawati, & Mulyasari, 2022). According to Botchwey, Soku and Awadzie (2022), there are three primary factors that explain why businesses reveal sustainability information. To begin, the need to project a favourable public image and win acceptance before key stakeholders are driving some companies to disclose their sustainability practices. Secondly, the goal to improve public transparency of risks, lower the cost of capital, and achieve a favourable capital market orientation motivates the disclosure of sustainability disclosure by other 'firms. The last possible driver of sustainability disclosure is the desire to enhance strategic planning and performance monitoring within the organisation.

From the study of Abdi, Li and Càmara-Turull (2022), sustainability disclosures are more crucial than ever in light of the world's complicated climate, social, and geopolitical problems. The new normal for businesses is uncertainty, and in order for banks to keep their footing in the economy, they must gain the trust of their clients by providing the relevant data to the people who matter to them (Botchwey et al., 2022). According to Nwobu, Owolabi and Iyoha (2017), a company's financial success cannot be accurately determined without first assessing its influence in economic, environmental, and social terms, and then disclosing both positive and negative social and environmental external users. Sustainable disclosure is a significant tool for companies to achieve credibility and legitimacy from stakeholders (Fahad & Nidheesh, 2020; Gunawan, Djajadikerta, & Smith, 2019). The concept is that if a company is successful in implementing sustainability

disclosure techniques, it will gain a positive reputation, which will in turn boost support for its efforts to generate financial gains. Additionally, Abdulsalam and Babangida (2020) posited that socially responsible businesses benefit from an increase in overall customer and employee satisfaction, as well as an improvement in the company's corporate image and reputation, which in turn leads to increased consumer loyalty.

However, in most nations, especially those in the developing world, sustainability disclosure is entirely optional (Oware & Awunyo-Vitor, 2021). Studies have therefore concluded that the motivation behind sustainability disclosures rests on the financial benefits that will be accrued (Doğan & Kevser, 2021; Nizam, Ng, Dewandaru, Nagayev, & Nkoba, 2019; Zarefar, Agustia, & Soewarno, 2022). Finally, it's worth noting that there is a scarcity of research that specifically focuses on the aspect of long-term sustainability within the banking segment of the financial industry (Abdi et al., 2022; Al Amosh, Khatib, & Ananzeh, 2022; Kumar, Kumari, Poonia, & Kumar, 2021). The reason for this is that previous research has mainly concentrated on extremely polluting industries like mining. However, the banking industry is distinct, with its own standards and levels of environmental sensitivity, thus the results of studies conducted in other fields may not be applicable to the banking sector.

1.1 STATEMENT OF THE PROBLEM

Within the space of 8 years (from 2012-2018), Ghana experienced a setback in the banking sector where many banks and non-banking financial institutions in Ghana, leaving their consumers out several billion cedis in deposits and investments (Banahene, 2018). As per a 2020 report from Klynveld Peat Marwick Goerdeler (Klynveld Peat Marwick Goerdeler, 2020), the primary cause behind these banks collapse stemmed from

their inability to transparently disclose information related to economic, environmental, and social factors, thus failing to accurately represent the banks' actual condition. The report added that most banks concentrated on economic reporting which does not give the actual state of the firms. Studies reveal that public confidence in capital markets has dramatically dropped as a result of people losing faith in corporations' ability to provide accurate and transparent financial information (PWC, 2019). There is a consensus that standalone financial reporting is neither transparent nor accountable since it fails to include information on how a company's activities affect the natural world and people's lives (Ahenkan, Aboagye, & Boon, 2018). As one of the key tools for luring investors and boosting businesses' bottom lines, this viewpoint is crucial for Ghana.

However, companies have to expend more effort and make their strategy vulnerable to competition when they provide information related to sustainability Zraqat, Zureigat, AlRawashdeh and Okour (2021). Given the time and effort required to compile sustainability reports, some question whether or not the benefits of sustainability disclosure outweigh the costs for banks. More so, there is a dearth of research on sustainability disclosure in developing nations (Orazalin, Mahmood, & Narbaev, 2019; Oware & Awunyo-Vitor, 2021; Oyewo, 2018; Wasara & Ganda, 2019). It's important to avoid assuming that research findings from developed nations can be broadly applied to developing countries. This is due to substantial disparities in culture, infrastructure, and society between developed regions like Europe and North America and developing ones like Africa. To bridge the contextual gap in understanding sustainability disclosure and its influence on financial performance, it is imperative to conduct research specifically targeting banks in less affluent countries, such as Ghana.

1.2 RESEARCH OBJECTIVES

The objective of this study is to examine the influence of disclosing sustainable practices on the financial performance of banks in Ghana listed on the Ghana Stock Exchange. The subsequent objectives will guide the study's direction.

1. To examine the level of sustainability disclosure practices of commercial banks in Ghana.
2. To examine the effect of sustainability disclosure on the financial performance of commercial banks in Ghana
3. To determine whether there is any significant relationship between sustainability disclosure and the size of the bank.

1.3 RESEARCH QUESTIONS

The research questions guiding the study are:

1. What is the level of sustainability disclosure practices of commercial banks in Ghana?
2. What is the effect of sustainability disclosure on the financial performance of commercial banks in Ghana?
3. What is the relationship between sustainability disclosure and the size of the bank?

1.4 SIGNIFICANCE OF THE STUDY

Given the inconclusive results and the limited availability of empirical research on the role of sustainability disclosure in improving financial performance in developing countries, this study is motivated to explore the implications of sustainability disclosures on financial performance. The primary objective of this research is to analyze the influence of sustainability disclosures on financial performance. The findings will help stakeholders,

investors, and policymakers in the banking industry in Ghana make more well-informed decisions based on sustainability disclosure in financial reports. These findings will contribute to the body of literature on the topic of sustainability disclosure's impact on banks' financial performance, provide top management with evidence in support of sustainability-related decisions, and accurately portray the advantages of sustainability to the institution's stakeholders. Banks will find the methods employed by other industries to assess the impact of sustainability accounting disclosures on business performance more relatable.

1.5 SCOPE OF THE STUDY

The aim of this research is to investigate the impact of sustainability accounting disclosures on the financial well-being of Ghana's banking sector. The analysis focuses on the extent of environmental, social, and economic sustainability information disclosed by banks in Ghana. In the second phase, there is an evaluation of how these disclosures relating to environmental, social, and economic sustainability affects the performance of banks in Ghana.

Geographically, the study is conducted among eight banks listed on the Ghana Stock Exchange. These banks include Access Bank Ghana, A.D.B. Bank, Cal Bank, Ecobank Ghana Limited, G.C.B. Bank Limited, Republic Bank (Ghana), Standard Chartered Bank Ghana Limited, and Societe Generale. Data is collected from 2015-2021.

1.6 LIMITATIONS OF THE STUDY

Only one dimension of the economy of Ghana is examined in this study, and that is the banking industry. As a direct result of this, the study's focus is limited to a selected group of companies traded on the Ghana Stock Exchange. Additionally, a drawback of this study

is its reliance on secondary data. The use of secondary data precludes the possibility of interactive interaction with the institutions, which may have been able to shed light on the causes for particular patterns that would be detected in the data.

1.7 ORGANIZATION OF THE STUDY

The initial chapter of this thesis provides an introductory framework by presenting an overview that includes the context of the study, an exploration of the research problem, the research objectives, the significance of the study, and the key questions that must be addressed to achieve the study's goals. This thesis is crafted for academic purposes and is structured into five (5) chapters, each of which is further subdivided into a range of subchapters. In the next chapter, the work of prior scholars on this topic in context will be reviewed as a literature pertinent to this study. The methodology that will be used to compose the research is discussed in Chapter 3. Within this section, the methodology employed in this study will be delved into. This encompasses the chosen research strategy, the methods used for data collection, and the statistical analysis techniques applied. The discussion will encompass various aspects, including the study's background, the population under examination, the sampling method employed, the determined sample size, the selected research strategy, the methodology for data collection, the study's design, the empirical estimation model utilized, considerations regarding variables, measurements taken, the data processing procedure, and the approach to analysis. In the fourth chapter, the results of the study will be looked at, offering our interpretations of the data gathered and providing visual representations of the findings when possible. The observations, conclusions, and suggestions are summed up in chapter 5. After this chapter are the notes and supplemental materials.

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CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter presents a comprehensive literature review concerning sustainability disclosures and their impact on a company's financial performance. The literature review is divided into three key segments: the theoretical review, the conceptual review, and the empirical review. The theoretical review primarily centres on the foundational theories that guide this research, which include stakeholder theory, signaling theory, and legitimacy theory. The conceptual review, on the other hand, builds upon the existing body of knowledge regarding sustainability disclosures, financial performance, and the intricate interplay between the two. It delves into the concepts surrounding sustainability disclosures and financial performance, as well as exploring the relationships existing between them. For the empirical review, the study looks at what previous studies have discovered on the study.

2.1 CONCEPTUAL REVIEW

2.1.1 Sustainability Disclosures

As stated by Botchwey et al. (2022), sustainability disclosure entails a company's management of its impact on economic, social, and environmental factors, aimed at identifying risks and opportunities that can enhance performance and boost competitiveness. Additionally, Higgins and Coffey (2016) described sustainability disclosure as a strategic approach to reporting a firm's performance within the broader global context, supplementing traditional reports focused on profit maximization,

diversification, and product differentiation. According to Orazalin et al. (2019), sustainability disclosure serves as a mechanism enabling companies and financial institutions to assess their performance concerning social, economic, and environmental aspects, followed by the dissemination of a summarized version of this information to the public. This marks a crucial conceptual stride towards achieving intelligent, sustainable, and holistic growth, which harmonizes long-term profitability, social equity, and environmental stewardship. For those engaged in reporting, this represents a significant and positive direction.

In accordance with Al-Dhaimesh and Al-Zobi (2019), the primary objective of sustainability reporting is to shape public perception and bolster a corporation's credibility by providing an impartial evaluation of the company's present performance. This is achieved through the disclosure of information pertaining to the company's environmental, social, and economic impacts. Consequently, the act of divulging sustainability-related information holds substantial importance for investors. Notably, within the banking sector, assessing a company's performance in the context of its impact on the community and environment is vital, as risks aren't readily discerned from financial reports (Githaiga & Kosgei, 2022). Also, the growing recognition among investors that companies' responses to environmental and social risks are a key signal of their efforts to enhance corporate transparency and governance. The Global Reporting Initiative (G.R.I.) emphasizes that fostering trust, propagating societal values, and encouraging firms to take responsibility for their actions are essential strides toward forging a stable global economy. Achieving these goals is feasible through the practice of sustainability.

As stated by Buallay (2019), there exist more than three hundred diverse international standards and guidelines that function as widely recognized benchmarks for corporate sustainability disclosure, serving as frameworks for monitoring social and environmental performance. Furthermore, the Global Reporting Initiative (GRI) has emerged as a predominant standard for reporting on corporate social responsibility and sustainability, adopted by over 50 nations worldwide (Al-Gamrh & Al-Dhamari, 2016). In light of the transformations in the global economy, sustainability disclosure has evolved into a potent instrument capable of enhancing the growth and performance of companies by upholding the trust of numerous stakeholders. As a result, sustainability disclosure is poised to play a pivotal role in enhancing shareholder value, bolstering the company's competitiveness, and making a constructive contribution to the advancement of sustainable development (Al-Gamrh & Al-Dhamari, 2016; Gnanaweera & Kunori, 2018).. According to AlDhaimesh and Al Zobi (2019), investors hold a positive view of businesses with robust sustainability disclosure due to its favourable impact on the firm's social reputation, agency costs, and customer loyalty. The GRI sustainability reports are structured around three fundamental pillars: economic, environmental, and social aspects. Additionally, each major category encompasses various levels of classification and specific indicators.

2.1.2 Economic Sustainability Disclosures

Economic sustainability is the first factor, and it refers to a company's potential to maintain its market position over time through improved financial results (Oyewo, 2018). How local, national, and international stakeholders and economic systems are impacted by an organization is quantified by looking at the economic dimension of sustainability

(Al-Dhaimesh & Al Zobi, 2019). Economic sustainability, as a concept, signifies the ability of a production system to meet present consumption needs without compromising future demand (Azzam et al., 2020). A more nuanced interpretation of economic sustainability, proposed by Marrewijk (2017), defines it as "the capacity to consume during a period while still maintaining the same level of well-being at the period's conclusion." For businesses to endure, they must sustain their current economic prosperity well into the foreseeable future. According to Higgins and Coffey (2016), the concept of "economic sustainability" underscores a company's ability to meet the needs of both the present and future generations. The economic system, according to Franzoni and Allali (2018), is the result of labour and the way that it is structured. The work of the people in each country, he said, is what makes it prosperous. Chamo (2020) argued that one may gauge the intensity of one's motivations by the lengths to which one is willing to go monetarily. Labour is linked to economic sustainability in classical economics, but neoclassical economics and economic policy theory place an emphasis on investors (Githaiga & Kosgei, 2022). The concept of economic sustainability for a country, as described by Tihamiyu, Oyedokun and Adeyemo (2021), involves the process in which a nation's real per capita income steadily grows over an extended period. This definition is contingent upon two key conditions: first, that the population living below an absolute poverty line does not increase, and second, that the distribution of income does not become more unequal (Tihamiyu et al., 2021). Effects on the economy can be quantified by looking at things like GDP growth, new jobs created, and revenue generated in different industries. Maintaining a surplus of income over expenditures is a far more direct representation of a company's fundamental purpose and is crucial to its economic viability. Profits, net income, and return on investment are three metrics that reveal a company's economic health.

2.1.3 Environmental Sustainability Disclosures

There has been a rise in awareness of environmental consequences in recent years (Hörisch, Ortas, Schaltegger, & Álvarez, 2015). For environmental disclosure to be considered sustainable, it must be possible to meet human needs without impairing the ability of the world's ecosystems to regenerate the resources on which humans depend or cause a loss of biodiversity. A sustainable environment is one in which human needs are addressed without jeopardizing the ecological balance of the area (Kumar et al., 2021). To be environmentally sustainable means to meet current needs with available resources without depleting them to the point where future generations will suffer. The idea of resiliency is fundamental to the concept of sustainability. Measures of environmental effects include the company's efforts to reduce or eliminate emissions of greenhouse gases including carbon monoxide, carbon dioxide, and nitrogen; the company's efforts to recycle water; and the company's management of solid waste.

This facet emphasizes against putting the environment in a situation that could endanger its people, and instead concentrates on preventing harm to the environment and enhancing its protection (Al-Dhaimesh and Al Zobi, 2019). There are four primary factors that make up the environmental sustainability: energy, water, emissions, and materials. Enforcement of environmental disclosures is more important now than ever before, as traditional concerns are no longer as influential as environmental issues (Azzam et al., 2020). Stakeholders' priorities have altered, and they now give more weight to the impact that enterprises' day-to-day activities have on the natural world. For instance,

a company's success in the greenhouse market was not bolstered by its efforts to reduce its gas emissions to their absolute minimum (Gnanaweera & Kunori, 2018).

Furthermore, Al- Dhaimesh (2019) found that companies' financial performance was unrelated to their environmental sustainability disclosure.

Al-Naser, Riyadh and Albalaki (2021) made the optimistic assumption that modern businesses are increasingly aware of environmental concerns and the needs of their business partners, and are working to improve as corporate citizens. The result is that managers need to adopt significant adjustments to adapt more appropriately to their environmental impact, regardless of the source of inspiration (concern for partner pressures or financial advantage, government standards, society, or the environment). The current debate's lack of resolution on the topic of social and environmental costs' relationship to company efficiency offers new avenues for inquiry, particularly when considering companies operating within the energy sector.

2.1.4 Social Sustainability Disclosures

Thirdly, a company's social sustainability practices serve as a strong indicator of its ability to make enduring positive contributions to the well-being of society (Caesaria & Basuki, 2017). This includes aspects such as workplace health and safety, training and education, the eradication of discrimination, and safeguarding the rights of all employees in case of accidents or illnesses or sickness are all areas where such activities may be taken, among others, are charitable work, reducing social disparity, safeguarding human rights, and providing care to employees (Clarissa & Rasmini, 2018; Laskar, Chakraborty, & Maji, 2017). Labour policies, including a secure workplace, and the enforcement of human rights,

social responsibility, and product accountability are two more social dimensions. As stated by Abubakari and Thurania (2021), the central aim of social sustainability is to ensure that members of the community and the broader population continue to engage in and uphold sound social norms and practices.

Through social sustainability practices, corporations participate in community service in response to stakeholder pressure (Fadilah et al., 2022). At the core of social sustainability lies the well-being of individuals, both in the present and for generations to come. Key factors encompassed within this concept include unemployment rates, female workforce participation percentages, life expectancy adjusted for health, and the percentage of the population living in poverty are all common measures of a country's ability to maintain its social fabric over time. Indicators for societal sustainability could be sorted in accordance with their respective subcategories (Maryana & Carolina, 2021). The G.R.I. primary objective is to disseminate knowledge to stakeholders so that they may make well-informed decisions about the resources they commit to or the products they purchase.

The "social dimension" of sustainability is the data it discloses regarding how its operations affect society as a whole (Laskar, 2019). Stakeholders' perceptions of the company's treatment of the human resources in its immediate vicinity will be influenced by the disclosure of sustainability report components on social performance (Clarissa & Rasmini, 2018). Businesses in the banking industry can benefit from social responsibility efforts and transparency in reporting those efforts in three ways: improved financial performance; increased employee welfare and loyalty; and decreased staff turnover.

Because of its capacity to boost productivity inside an organization, it may even enhance profits. Welbeck, Owusu, Bekoe and Kusi (2017) conducted a study that delved into the

predominant forms of information commonly furnished by businesses, the patterns observed in disclosures, and the underlying motivations propelling environmental disclosures by businesses in Ghana.

2.1.5 Financial Performance

The financial performance of a bank is the ultimate outcome of decisions made with a thorough assessment of the bank's potential to generate profits, meet both present and future obligations in a timely manner, and utilize its resources efficiently (Azzam et al., 2020). These decisions are rooted in an evaluation of the bank's capability to not only earn profits but also ensure the fulfilment of its current and future liabilities while efficiently managing its resources. This is of paramount importance for the manufacturing sector, as emphasized by Kipruto, Wepukhulu and Osodo (2017), to maintain ongoing operations and secure equitable returns for investors. Additionally, this is a critical concern for supervisors, as it ensures stronger solvency ratios, even in a potentially riskier business environment. As stated by Kipruto, Wepukhulu, and Osodo (2017), a company's performance can be gauged by its capacity to consistently generate sustainable profitability. It is imperative that managers of businesses use risk-adjusted measures in order to facilitate the balancing of growth, return, and risk (Okaro & Ndukaife, 2016).

Traditional, economic, and market-based metrics are all different ways to evaluate performance. For instance, Stern and Stewart's Economic Value Added (E.V.A.) model considers stockholders' opportunity cost when determining whether or not a company provides an economic rate of return greater than the cost of invested capital, hence increasing the company's market value (Odonkor, 2018). Numerous surrogates have been used by academics as metrics to gauge the manufacturing industry's financial success, with

the data coming from the existing literature. Financial ratios analysis, benchmarking, and performance against budget were all components of such measures (Noman, Pervin, Chowdhury, & Banna, 2015).

Numerous other metrics are also available, including return on assets, return on equity, and net interest margin, among others. This research, however, utilizes return on assets (ROA) as a key metric to evaluate a company's financial performance. ROA is a vital indicator widely employed in academic research, serving as a proxy for an organization's financial success. It signifies the earnings generated per unit of assets and, importantly, showcases how efficiently management utilizes financial and tangible investment resources to generate earnings (Kishori & Jeslin, 2017). It is worth noting that ROA can be influenced not only by a company's actions and policies but also by external factors like the state of the economy and government-enacted legislation.

In their study, Kipruto et al. (2017) claimed that ROA is the most accurate indicator of financial performance since it is unaffected by large equity multipliers. Supporting this standpoint, Okaro and Ndukaife (2016) argue that academics should focus on and rely on ROA when assessing profitability to mitigate most of the challenges associated with alternative accounting financial performance proxies. They emphasize this to underscore the preference for using ROA in the analysis of profitability over other accounting financial performance indicators. To reiterate, ROA gauges the effectiveness of management in utilizing the organization's resources.

As highlighted by Tran et al. (2019), because it serves as a strong measure of a company's financial success concerning both profitability and management efficiency, a higher ratio

indicates superior profitability performance. The return on equities ratio (ROE) is the third indication of profitability since it demonstrates the extent to which a firm earns profit using the capital contributed by its shareholders. Generally speaking, a higher ratio indicates a more effective profitability performance. These ratios serve as tools for evaluating both the efficiency of a company's management and the overall financial well-being of the organization. For instance, Aminu and Shariff (2016) explored the mediating role of access to finance in the connection between strategic orientation and financial performance. Meanwhile, Okaro and Ndukaife (2016) utilized Return on Equity (ROE) as an additional gauge of financial performance in their examination of the profitability of commercial banks in Qatar.

In a similar vein, Aminu and Shariff (2016) delved into the mediating impact of access to finance on the correlation between strategic orientation and financial performance, employing ROE as a metric for assessing the overall financial performance of the banks. Your company's success for its owners and investors can be gleaned from its return on equity, which can be found in financial statements. In a nutshell, it clarifies for investors whether or not they are receiving a satisfactory return on their investments, and it is also an excellent method for determining how well your business is able to make use of the equity in the company.

2.1.6 Firm Size and Sustainability Disclosure

The magnitude of an organization's resources can be determined by looking at how big it is (Grougiou, Dedoulis, & Leventis, 2016). Assessing a company's overall size can involve an examination of its total assets, total sales, and average sales rate. In line with research by Fadilah et al. (2022), the larger the size of assets or sales, the greater the capital invested,

and the higher the financial turnover, all of which contribute to the organization's credibility. The size of a company plays a significant role in determining its perceived credibility among the general public, aligning with the principles of legitimacy theory.

As noted by Putri, Hakim and Bramanti (2019), various metrics are employed to gauge a company's size, including total assets, total sales, the number of employees, and market capitalization. Moreover, the extent of a company's influence in environmental reporting is also influenced by its size. Firms with a greater number of employees have an advantage over those with fewer workers in terms of longevity and overall effectiveness.

The reason for this is that larger corporations have access to more resources (Caesaria & Basuki, 2017). As a result of the company's increased visibility and legitimacy in the eyes of the public, sustainability disclosures are likely to grow increasingly extensive for businesses that choose to make them.

Companies with a large total asset base and an established history of success are more likely to provide useful information and maintain a high standard of transparency. As per the findings of Antara, Putri, Ratnadi and Wirawati (2020), research indicates that the size of a firm exerts a positive and substantial influence on the extent of its sustainability disclosure. The study of Fadilah et al. (2022) found no correlation between company size and CSR disclosure. According to prior studies by Fahad and Nidheesh (2020), a company has different features when it comes to S.R. disclosure. One is that the public and the government are paying greater attention to, and hence having more resources available for, large corporations to undertake sustainable disclosure (Bhatia & Tuli, 2017). Factors like business size and leverage, according to the research, are also major drivers of sustainable disclosure (Boukattaya & Omri, 2021).

While the impact of major corporations is widespread, that of smaller ones is more localised (Shuaibu, 2020). The level of detail in sustainability reports may vary depending on the size of the company. The size of a corporation can be inferred by altering the total assets to get a count of the number of assets it owns. Large corporations not only face more community pressure, but also have a far greater impact on their surrounding environment as a result of their many daily operations (Norman, Aryusmar, & Indriaty, 2021). A company's size is likely to have an impact on its sustainability report, as some major businesses use their status to motivate employees to participate in corporate social responsibility initiatives. The more assets a corporation has, the more transparent it is about its environmental practices. The disclosure of sustainability reports has a positive and statistically significant link with the size of a firm.

2.2 THEORETICAL REVIEW

A theory is a set of claims about an idea that purports to account for or explain certain facts or events (Gnanaweera & Kunori, 2018). Sustainability reports can be approached from many theoretical perspectives; however, stakeholder, legitimacy, and signalling theories are used in this investigation.

2.2.1 Stakeholder Theory

The Stakeholder Theory, which is formulated by Edward Freeman in 1984 and discussed in Harrison, Freeman and Cavalcanti (2015) explores the dynamic between a company and

its diverse stakeholders, such as shareholders, employees, consumers, and suppliers. Rooted in the capitalist perspective, this theory posits that a business's primary objective is to generate profits for its owners. It emphasizes that a business's fundamental purpose is profit generation for its proprietors. As asserted by Duran and Rodrigo (2018), a crucial facet of this approach is ensuring the preservation of ethical and moral standards in business management.

According to Rudyanto and Siregar (2018), organizational management and business ethics based on the Stakeholder Theory take into consideration a broad spectrum of interested parties. These stakeholders encompass employees, suppliers, local communities, creditors, and various other individuals or groups. According to stakeholder theory, many interest groups have varying viewpoints on how an organisation should be run. Therefore, it is important to include the viewpoints of a wide range of parties, such as investors, buyers, and advocates (Al-Gamrh & Al-Dhamari, 2016). Al-Gamrh and Al-Dhamari (2016) went on to argue that the concept of corporate environmental responsibility has a legitimate right to be considered by firms and their stakeholders. According to Miles (2017), one way to analyze corporate sustainability disclosure is to look at the trade-offs made by individual companies in order to please their most vocal and influential customers. The indication is that businesses should go above and above for their customers. Stieb (2009) further noted that firms are investing more heavily in sustainability initiatives, starting with those that safeguard the environment. Based on the findings of Stieb (2009), the author classified the financial benefits of sustainability disclosure into two categories: first, sustainability is now seen as desirable by investors because of the long-term value it produces, and second, sustainability executives are expected to report improved financial results to the company.

As such, it is crucial to investigate the impact of sustainability disclosures, as this is the only way for businesses to learn how to address the information requirements of various stakeholder groups. Sustainability is likely to boost the trust and confidence of stakeholders who might increase their investments and make the bank achieve competitiveness. Accordingly, the financial performance of the firm is likely to be boosted. According to stakeholder theory, their relationship includes the firm's external stakeholders as well. Accordingly, businesses are becoming increasingly mindful of their accountability and the effect of their actions on various stakeholders.

Consequently, investors represent a critical category of stakeholders who can be swayed by transparent sustainability reporting. A company that commits to securing its long-term sustainability is viewed as more appealing to investors, as it demonstrates a proactive stance in mitigating potential future risks. This enhanced commitment enhances the company's competitiveness in the eyes of investors. Stakeholders' decisions may be negatively impacted if they are led to believe that the firm is in poor health due to a lack of sustainability disclosures. Investors are increasingly likely to view a company's commitment to sustainable practices as a sign of responsible management and a key to the company's future success. The mere act of reporting their behaviour aids the company in managing its reputation risk. This knowledge must be shared with concrete steps taken to protect the environment and uphold social standards.

2.2.2 Legitimacy Theory

Legitimacy theory was first conceptualized and developed by Dowling and Pfeffer in 1975 (Hazaima, Low, & Allen, 2017). They proposed that the values and principles of a group or individual are deemed legitimate when they align with the broader societal norms and

structures to which they belong. This alignment grants legitimacy to the organization or individual. This must be so if legitimacy is to exist. When a company's beliefs diverge from those of its surrounding community, whether those differences are genuine or imagined, the legitimacy of the business is threatened. Companies are assumed to take great pains to ensure that their practices are in line with preexisting social laws and conventions (Pistor, 2013). In the long run, a business has a better chance of survival if its mission and values are widely known and appreciated.

Therefore, Gehman, Lefsrud and Fast (2017) argue that the concept of a social compact is intrinsic to the legitimacy theory. It is hoped that a more discerning approach will raise approval from key constituencies and the general public, which might lead to significant stock price gains for the corporations involved (Azzam et al., 2020). To ensure they can satisfy society and their various stakeholders, businesses are enhancing their sustainability disclosures (Gnanaweera & Kunori, 2018; Jayakumar & Suprabha, 2020).

In addition, businesses with social approval have a lower risk of facing social sanctions, increasing their chances of securing the funding they need to achieve their societal and commercial goals. Consequently, numerous factors, stemming from both internal and external sources, exert influence on a company's prosperity or downfall. This evaluation considers not only the company's financial assets but also its non-financial assets. In order to maximize the return on investment for all parties involved, a problem-free chain of activities necessitates the availability of such resources.

When this theory is employed within the realm of business, it becomes evident that for businesses to reach their maximum potential, they must offer value to their customers and

maintain competitiveness in the market, thereby enhancing their profits and contributing positively to society. This perspective underscores that, when applied to the study of business, its significance becomes even more apparent. This can be achieved by the provision of additional information as a valid system, and businesses may make use of the capabilities provided by the system to meet stakeholder expectations. To help make its financial statements and disclosures more appealing, a firm could, for instance, embrace legislative laws regarding environmental issues and bring the attention of stakeholders and interested parties to its actions. Therefore, businesses are believed to increase their level of social approval by making use of sustainability disclosures. Therefore, corporations may utilize sustainability disclosure as a legitimate approach to improve how the public views their performance in this area. This is because an implicit social compact between a corporation and society is what gives the enterprise its legitimacy to operate in society. The implication is that a company's "social license to operate" might be revoked if it consistently fails to meet community standards.

A commonly accepted belief asserts that a company's enduring stability, ongoing existence, expansion, and reputation hinge significantly on the backing of the community in which the company operates. This belief rests on the premise that a company's reputation is intimately linked to its capacity to attract and retain customers. To secure such community support, enterprises are expected to willingly provide specific information in an endeavour to convince the community that their activities are lawful, ethical, genuine, and supportive. The company is transparent about its efforts to promote sustainability in order to illustrate its dedication to the well-being of the economy, society, and environment. This is done in order to improve the likelihood that the company will be well-received by the community.

The corporation was under the impression that as soon as they gained the approval of society, their performance would improve, which would increase the company's profit.

2.2.3 Signaling Theory

Michael Spence was the first person to develop the concept of "signaling theory," and he did it in response to perceived knowledge gaps between organizations and prospective employees (Moratis, 2018). As outlined in the research conducted by Connelly, Certo, Ireland and Reutzel (2011), the concept of signalling proves valuable when characterizing behaviour in situations where two parties, be they individuals or organizations, possess differing sets of information. In most cases, one party, termed the sender, holds the responsibility for determining whether and how to communicate (or signal) this information, while the other party, known as the receiver, is tasked with interpreting the signal. The sender plays a pivotal role in choosing whether and how to convey (or signal) this information.

For signalling theory to be effective in rectifying information asymmetry (Celani & Singh, 2011), it is essential to understand the perspectives and perceptions of the participants in this process, which, in this context, refer to the employees. Gaining insights into the viewpoints and outlooks of these actors is crucial as it aids in minimizing distortions.

The concept of signalling can be deconstructed into three main components: the sender, the signal itself, and the receiver. Those within an organization, such as management or executives, who possess privileged information not accessible to the general public regarding an individual, organization, or product, are referred to as signalers. This information might pertain to an individual's, organization's, or product's attributes. Insiders often hold insights, both positive and negative, that can be advantageous to those on the

outside. This knowledge encompasses various specifics, including details about products and services, early sales figures, or updates on other aspects of the organization, such as labour negotiations and ongoing legal matters. This confidential information assists insiders in shaping their perceptions of the underlying quality of the person, product, or organization they are familiar with (Karasek & Bryant, 2012). In simpler terms, this information aids insiders in forming their opinions about the essential attributes of the person, product, or organization they are acquainted with. A signal is a communication cue used to influence a result by one party over another (Giones & Miralles, 2015). When insiders learn something about the company, whether good or bad, they have the option of sharing that information with the public. A common practice among leaders of emerging companies undergoing an initial public offering (IPO) is to assemble a diverse and reputable board of directors. This strategic move serves the dual purpose of conveying a message of the company's legitimacy to potential investors and deliberately refraining from sending negative signals (Hampshire, Hamill, Mariwah, Mwanga, & Amoako-Sakyi, 2017). The intent here is to establish the firm's legitimacy in the eyes of potential investors.

According to Hampshire et al. (2017), signaling theory predominantly revolves around the proactive dissemination of positive information to create a favourable image of the organization among target audiences. Nevertheless, negative signals can inadvertently emerge. One instance of this is the issuance of new shares, which unintentionally conveys a negative signal to external stakeholders. This occurs when management opts to issue equity when they believe the company's stock price is overvalued. In this context, "signalling" refers to a set of practices used to overcome the problem of having unequal amounts of data about what might happen in the future. Distribution of the superior

information agents is planned so as to increase the amount of positive feedback received from stakeholders. More importantly, it provides a rationale for sustainability disclosures, which show investors and other stakeholders that the company isn't only out for the bottom line. Therefore, if investors believe the company has great potential, they will respond to the news by purchasing shares. Because of this, businesses try to send forth a good impression to their stakeholders through their actions.

Information asymmetry issues, where specific shareholders may incorrectly gauge a company's performance, can arise due to a breakdown in trust between the firm's owners and their representatives. Managers can shape the tone and content of reports about the company's operations and present a positive picture of their role in shaping the business. Managers may boost sustainability disclosures to show they care about the community and are cognizant of the role their business plays in meeting societal demands. A company's willingness to embrace several regulations and participate in multiple events may, for example, send a signal to shareholders that the company is operating efficiently, it can yield a favourable influence on the company's stock value and its overall financial performance. Another possible outcome of this conflict of interest is that stakeholders will judge a company's performance differently depending on the depth to which it discloses financial information. Given this scenario, there is a strong incentive for businesses to enhance and broaden their disclosures regarding sustainability matters. This proactive step sends an unequivocal message to stakeholders that these companies are dedicated to social responsibility, thus rendering them a more attractive investment choice for socially conscious investors. In essence, businesses are encouraged to enhance and expand their sustainability disclosures to firmly convey their commitment to social responsibility.

2.3 EMPIRICAL LITERATURE REVIEW

The empirical review of this work is presented in the following part. The empirical review provides documentation of the findings of investigations that are very closely related to one another. The empirical review for this study is organized under four areas that are congruent with the research objectives, and these headings are as follows: Environmental reporting by Ghanaian businesses, social reporting by some Ghanaian businesses and chosen businesses in other countries, social reporting on selected industries, and the features of Ghanaian businesses in relation to sustainability disclosure.

2.3.1 The Extent of Sustainability Disclosure

Gunawan, Djajadikerta and Smith (2019) examined how much information is being shared by companies about their sustainability efforts in Indonesia. They discovered that managers do not fully appreciate the value of corporate sustainability disclosure, which leads to a lack of transparency. Theoretically, a company's financial performance can improve if it presents a good image to the public, gains public credibility, and differentiates itself from competitors by reporting on its sustainability investments. From the findings, disclosure related to sustainability was determined to be on the moderate end.

Welbeck, Owusu, Bekoe and Kusi (2017) determined what kinds of environmental information are most frequently disclosed by firms in Ghana, to track the evolution of these disclosures, and to explore the factors that influence the frequency with which businesses in Ghana share this information with the public. Welbeck et al. (2017) conducted a content analysis of the corporate annual reports of 17 companies listed on the Ghana Stock Exchange (GSE) spanning the years 2003 to 2012. They aimed to determine the cumulative environmental disclosure scores of the selected companies, utilizing the Global Reporting

Initiative (G.R.I.) index as a reference point for bench-marking. This research used regression analysis to identify the factors that contribute to environmental disclosures. According to the findings even though the level of disclosure is minimal, some environmental information advocated by G.R.I. is disclosed by listed corporations in Ghana. Additionally, they found a favourable correlation between the degree of disclosure made by environmentally conscious companies and their bottom line.

Fadilah et al. (2022) investigated motivations for compiling a sustainability disclosure on one's own time and the state of sustainability reporting among privately held businesses. The data collection process encompassed several methods, including author interviews regarding sustainability reports, content analysis of sustainability reports and corporate websites, and more. The research findings underscore two primary motivations for initiating voluntary sustainability reporting: the imperative to engage stakeholders (including customers, the community, and suppliers) and the presence of mandates from specific customers and the parent company. This underscores the importance of engaging stakeholders, such as consumers, the community, and suppliers.

In their sustainability reports, companies demonstrate their familiarity with pertinent sustainability themes and their utilization of frameworks like the GRI Standards and SDGs. Various departments, including sustainability, quality, environment, human resources, marketing, and communication, play roles in creating these reports. Notably, none of the companies mentioned the finance department's involvement. The existence of separate sections for annual reports and sustainability reports on a company's website highlights the need for businesses to improve the integration of financial data with information concerning environmental and social responsibility.

2.3.2 Sustainability Disclosure and Financial Performance

In light of the economic, environmental, and social implications of sustainability during the period spanning 2008 to 2014, Abdelfattah (2016) conducted an assessment of the financial performance of Jordanian Islamic banks, using metrics such as return on assets (ROA), return on equity (ROE), and earnings per share (EPS). The study was carried out in Jordan, focusing on two pivotal Islamic financial institutions in the country, namely the Jordan Islamic Bank and the Arab Islamic Bank. These institutions were selected due to their Islamic nature. To gather the necessary data for the years 2008 to 2014, an indepth analysis of annual reports, financial statements, sustainability reports, and social responsibility reports of Islamic banks in Jordan was conducted. The research outcomes revealed that the financial performance of Islamic banks in Jordan could be categorized into two distinct facets: return on assets (ROA) and earnings per share (EPS). Surprisingly, when examining the return on equity (ROE) of these banks, no statistically significant association was found between the various dimensions of sustainability and ROE.

Furthermore, Wasara and Ganda (2019), document environmental disclosures had a minimal impact on the value of mining companies trading on the Johannesburg Stock Exchange. The correlation between corporate sustainability disclosure and ROI was studied by Wasara and Ganda (2019). Ten mining companies registered on the Johannesburg Stock Exchange (J.S.E.) served as the sample for this study, and data was collected from their sustainability reports covering the years 2010 to 2014. To that end, a content-analysis strategy was used for data collecting. The connection between environmental disclosure and ROI was studied using a multi-regression approach. The correlation between ROI and social disclosure was calculated using the same statistical

method. The findings indicate an inverse connection between environmental disclosure and ROI. But the data also shows a positive link between social disclosure and ROI. The implication is that more openness about social issues in business reporting improves bottom-line results by boosting return on assets.

Abdi, Li and Càmara-Turull (2022) conducted a study to explore the influence of ESG ratings on both the market capitalization and return on investment of airlines. Additionally, they investigated whether company size and age might act as moderating factors in this context. The analysis primarily concentrates on examining the interaction between full-service and low-cost airlines. The analysis of data from 38 airlines throughout the globe from 2009-2019 reveals that funding governance measures raise a company's market-to-book value. The results also discovered that social and environmental initiatives are considerably and positively rewarded by companies with improved financial efficiency. Furthermore, company size played a moderating role in the relationship between sustainable practices disclosure and market value.

Zafar, Agustia and Soewarno (2022) conducted research to investigate the impact of sustainability reporting on financial outcomes. This study not only explores the correlation between sustainability reporting and stock performance but also delves into how the presence of family ownership influences this relationship. Between 2014 and 2020, the Indonesian stock exchange will list 850 companies from the primary and secondary sectors as part of the study's sample. The panel model with Generalized Least Squares (G.L.S.) regression is used to get the outcomes of this investigation. Market- and accounting-based businesses benefit from sustainability disclosure, according to the findings of this study. As

an added finding, family businesses further fortify the correlation between sustainability reporting and profit.

Wasara and Ganda (2019) conducted research to examine the influence of factors such as firm size and profitability on the extent of social responsibility disclosure by businesses.

This study used the Return on Assets (ROA) ratio as a proxy for profitability and the natural logarithm of total assets as a measure of company size. The research employed purposive sampling to select a sample of 62 manufacturing firms, and multiple linear regressions were employed for the analysis. The results indicated that both profitability and company size had a positive impact on the amount of social responsibility information disclosed.

Azzam, Alqudah and Haija (2020) used a panel data collection of 1,705 firm-year observations of firms listed on the Amman Stock Exchange to look at this problem in a developing country like Jordan. Analysis of the data is performed using fixed effect regression with trustworthy standard errors. As can be seen from the findings, environmental disclosures do not have a same beneficial relationship to financial performance as do social and governance disclosures. Interestingly, a highly favourable and significant correlation was revealed between sustainability disclosures when they are analysed as a whole.

Al-Naser, Riyadh and Albalaki (2021) found that earnings management acted as a moderator between the disclosure of social and environmental costs and the bottom line.

This study used a quantitative approach with primary data gathered from the Amman Stock Exchange to achieve its goals. A questionnaire was utilised to gather information from 127 businesses for this investigation. In order to analyse the information, the Smart Partial Least

Squares (P.L.S.) method is applied. The study found that companies' bottom lines were dramatically improved after they began disclosing their social and environmental expenses. Theories of agency, legitimacy, and stakeholders all agreed with this. Consequently, businesses may benefit from greater openness regarding the money they spend on collecting and reporting social and environmental data.

Furthermore, Micah, Ofurum and Ihendinihu (2012) sampled 52 companies and found that Human Resources was the most representative department for social reporting. Evident from the positive association between their results and financial performance is the need for reporting on human capital by stakeholders. The researchers went on to suggest developing criteria for measuring and identifying human resources. Human capital can therefore be evaluated, reported consistently, and compared among individuals.

An investigation of data from companies located within specific three-digit zip code regions in the United States, as conducted by Jiraporn, Jiraporn, Boeprasert and Chang (2014), offers supporting evidence for the notion that businesses exhibiting stronger social performance tend to receive more favourable credit ratings. Bouslah, Kryzanowski, and M'Zali (2018) further determined that an amalgamated measure of social performance played a significant role in reducing fluctuations during the period of the Great Recession. These conclusions stem from the examination of data obtained from a representative cross-section of American enterprises.

Qiu, Shaukat and Tharyan (2016) uncovered a correlation between increased social disclosures and elevated market values as they studied the FTSE350 index. Delving into

the realm of Hungarian logistics companies, Oláh, Bai, Karmazin, Balogh and Popp (2017) explored the influence of social trust on financial performance and flexibility, revealing a positive impact in both domains associated with higher levels of social trust. The prevailing body of research aligns in asserting that companies operating within environmentally sensitive industries tend to be more inclined to furnish comprehensive and transparent disclosures concerning their environmental and social endeavours. This trend becomes particularly pronounced in matters concerning social responsibility.

Nuber, Velte and Hörisch (2020) conducted an empirical inquiry into the connection between financial performance and sustainability performance, grounded in the framework of stakeholder agency theory. Examining data from the German DAX30, MDAX, and TecDAX over the period spanning 2008 to 2017, their study employed a time-lagged and curved regression analysis. Interestingly, their findings revealed the existence of a U-shaped relationship between sustainability performance and financial performance. In contrast to prior research focused on the German market, which primarily emphasized a straightforward linear association between sustainability performance and financial performance, this study's outcomes diverged. Considering the paramount importance of satisfying investors and other stakeholders, it becomes logical to assert that a sustainability management strategy aiming to enhance financial performance should prioritize the attainment of exceptionally high standards in corporate sustainability.

Oryzalin, Mahmood and Narbaev (2019) looked into how several sustainability performance metrics affected the security of the emerging economy's financial system. This research was conducted by employing panel data analysis, focusing on sustainability performance metrics and financial data sourced from the leading 45 oil and gas companies

traded on the Russian Trading Stock Exchange between 2012 and 2016. The financial data was gathered from the firms' official websites, relying on audited financial statements, while information regarding the companies' sustainability performance levels was derived from the scrutiny of their annual reports and sustainability reports. Empirical evidence suggests that in order to mitigate risk and strengthen financial security, businesses are enhancing their sustainability performance measures. These findings also highlight the significance of firm-level determinants in determining financial distress and stability, including financial capacity, leverage, business size, and age. Financial stability can be enhanced, and financial distress can be mitigated, with the help of the information provided by the study's findings to managers and practitioners. Furthermore, investors and industry experts should take into account supplementary factors, including a company's financial strength, debt levels, organizational size, and tenure, as these elements have the capacity to impact a company's overall financial resilience.

2.3.3 Firm Size and Sustainability Disclosures

Fadilah, Uzliawati and Mulyasari (2022) evaluated how company age and size influenced sustainability reporting and how it affected earnings management. In this investigation, we employ Global Reporting Initiative's (GRI's) metrics for sustainability reporting as an independent variable (G.R.I.). This study's sample consists of mining firms trading on the Indonesia Stock Exchange between 2015 and 2019. The study used a purposive sampling technique to select 14 businesses, yielding 70 total responses. Based on the data, there was a positive correlation observed between a firm's longevity and its extent of sustainability disclosure, as well as between the firm's size and the extent of its sustainability reporting. The study also found that the S.R. economic dimension has a positive correlation with

earnings management, while the S.R. environmental dimension has a negative correlation. But the social aspect of S.R. has no bearing on profit maximization.

Maryana and Carolina (2021) evaluated the link between the G.R.I. score and firm size, leverage, age, media presence, and industry membership in order to determine the importance of these factors in sustainability disclosure. In this investigation, multiple linear regressions were performed using the E-views programme. In addition, this analysis incorporates emissions from companies included in the B.E.I.'s L.Q. 45 index between 2014 and 2018. Eighteen businesses were chosen at random for the study. Simultaneously analyzed data from this study reveals that a company's extent of sustainability reporting is notably influenced by several factors. These factors encompass the company's size, debt levels, longevity, visibility in the media, and profitability. Interestingly, the size of the company and its media presence had relatively minor impacts on sustainability reporting. However, a substantial and negative inverse relationship was observed between debt levels and company age with sustainability reporting, while there was a prominent and positive inverse connection between profitability and sustainability disclosure.

Norman, Aryusmar and India (2021) aimed to evaluate how factors including firm size, profitability, and leverage influence the sustainability report's candour. This information originates from the Indonesia Stock Exchange's annual sustainability reports for the years 2015 through 2018. Descriptive statistics for the Fixed Effect Method regression equation and hypothesis testing were extracted from panel data using Eviews9. Profitability and leverage were found to positively impact sustainability report disclosure, whereas the size of the organization was not a significant factor. Accordingly, it concluded that a rise in

profitability and leverage, but not in firm size, would improve the sustainability report's disclosure.

Tyas and Khalid (2020) collected empirical data to examine how corporate governance moderates the impact of profitability, leverage, and firm size on the disclosure of sustainability report information. The LQ45 firms listed from 2015 to 2017 comprise the population, which consists of a total of 40 different businesses. This study made use of the methodology of purposive sampling for its data collection. For the purpose of this study, seventeen (17) different companies, and collected 51 different units of analysis. The examination of the data consisted of using regression analysis and the absolute value of the difference. The findings demonstrated that profitability and leverage do not have an effect on the sharing of sustainability disclosure information. Disclosure in sustainability reports is significantly hindered when companies are of a larger size.

In the realm of aviation, Abdi et al. (2022) conducted a study to investigate the influence of Environmental, Social, and Governance (ESG) ratings on the value and financial performance of organizations. They also explored whether firm size and age play a moderating role in unraveling the connections in this context. Contributions to governance initiatives were found to increase a company's market-to-book ratio, as determined by our analysis of data collected from 38 airlines located all over the world during the period of 2009 to 2019. Additionally, the study found that a higher level of financial efficiency serves as a substantial and positive incentive for a company's engagement in social and environmental endeavours. Furthermore, within the airline transportation sector, the size of the company emerges as the chief moderator influencing the relationship between sustainability disclosure and both firm value and financial performance (FP). This is mainly

attributed to the fact that sustainability disclosure exhibits a positive correlation with firm value.

2.4 CONCEPTUAL FRAMEWORK

The study is guided by the conceptual framework indicated in Figure 2.1.

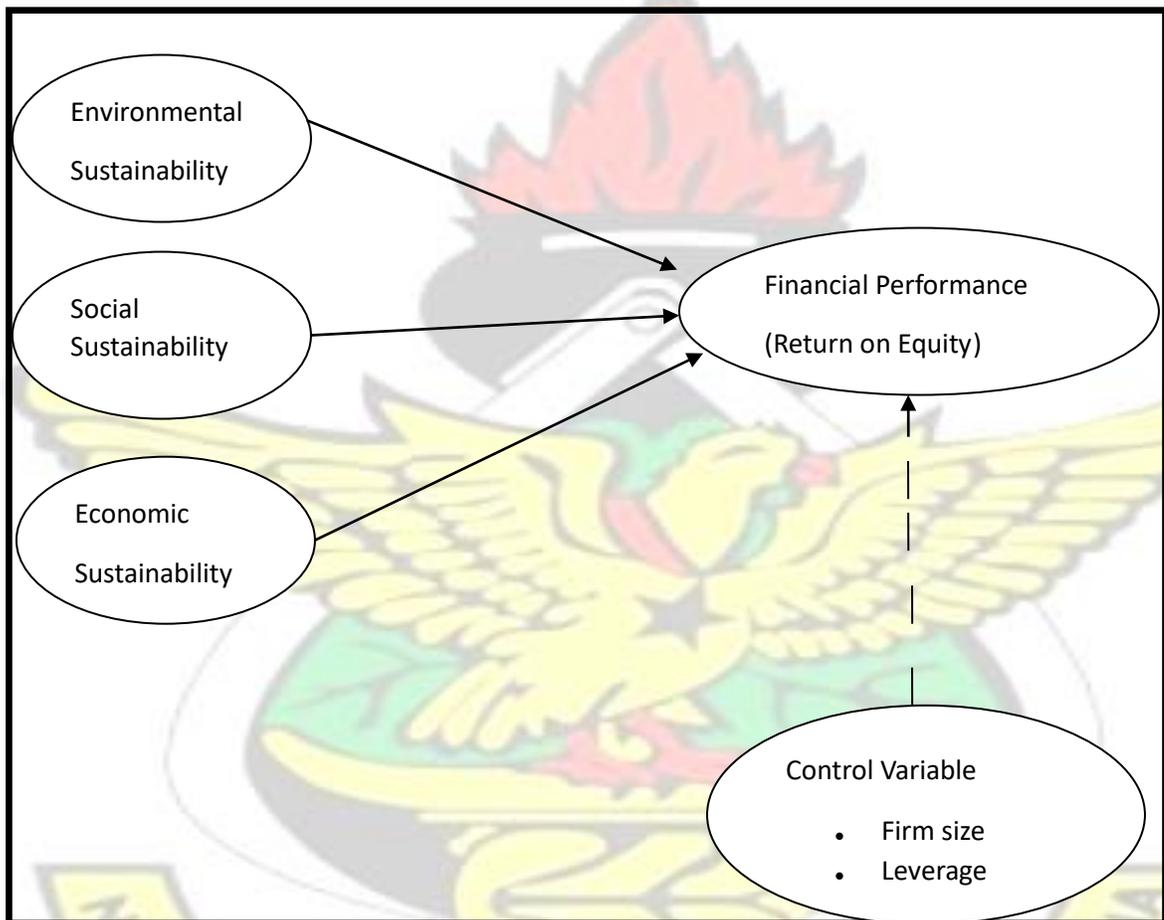


Figure 1: Conceptual Model

Source: Author (2023)

The purpose of this research is to determine whether or not the banks in Ghana are benefiting from sustainability accounting disclosures. Sustainability disclosures made by banks in Ghana are analysed with regard to environmental, social, and economic indicators.

The expectation is that firms that implement environmentally sustainable practices, such as energy efficiency measures, waste reduction, and resource conservation, can lead to significant cost savings over time. Lower operational costs can directly contribute to higher profits, which in turn can increase ROE. In addition, firms that invest in sustainability often innovate to create more eco-friendly products and processes. These innovations can give them a competitive edge in the market, allowing them to charge premium prices and gain market share, ultimately leading to increased profitability and higher ROE.

Also, companies that actively engage in social sustainability initiatives, such as environmental conservation, community development, and fair labour practices, tend to build a positive reputation and strong brand value. This can lead to increased customer loyalty and trust, which can result in higher sales and improved profitability, ultimately contributing to higher ROE. Economic sustainability, which encompasses responsible and environmentally conscious business practices, can positively impact a firm's Return on Equity (ROE). Companies that are committed to economic sustainability often enjoy a positive reputation among consumers, investors, and stakeholders. A strong brand image can lead to increased sales and pricing power, which can improve profitability and ROE. In conclusion, increasing the amount of information available about a company's environmental impact (such as its gas emissions, water use, and pollution levels) can go a long way toward fostering stakeholder confidence in the company's operations, which in turn can boost the company's bottom line. For this reason, businesses need to ensure that their sustainability reports not only satisfy stakeholders but also boost the company's return on equity.

Investors' capital is at risk in addition to the possibility of a return on investment from the company. Policy decisions might be informed by the company's financial standing. In order to prevent an exodus of shareholders, companies must be able to improve their net profit, based on the policies adopted by those shareholders. Companies will be motivated to maximise their net profit as a percentage of their total assets if their shareholders have faith in them. If a business can have a positive impact on the local economy, it will be more attractive to potential investors and generate more interest from consumers, both of which can boost sales.

2.5 SUMMARY

This chapter has furnished an outline of the applicable conceptual and theoretical framework for this investigation. Furthermore, it has delved into significant challenges identified by prior empirical studies conducted by fellow researchers. Concerning sustainability disclosure in general and G.R.I. reporting in particular, the chapter commences with a comprehensive review of pertinent academic literature that precedes this study in the academic realm. The scrutiny of previous literature on this subject matter exposes certain limitations, justifying the necessity for this current research endeavour. In the upcoming chapter, we will elucidate the methodologies employed in conducting this research.

CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

This chapter elucidates the methodologies employed by the researcher to address the study's inquiries. It encompasses aspects such as the research design, the study population, sample

size determination, data collection tools, data analysis procedures, and the sampling methodology.

3.1 RESEARCH DESIGN

According to Saunders et al. (2019), research is either qualitative, quantitative, or mixed. In qualitative research, the focus is on the participants rather than the overall data, so researchers can learn more about their perspectives, motivations, and experiences (John W. Creswell & Clark, 2017). It is through this method that researchers are able to better comprehend intricate concepts, social processes, and cultural occurrences. Methods of gathering qualitative data include interviews, focus groups, research findings, article analyses, and life stories told orally.

In quantitative studies, data gathering, analysis, and interpretation are essential processes (Creswell & Poth, 2017). The strategy relies on numerical and statistical analysis to establish reality and root causes. It is employed in the gathering of quantitative data suitable for statistical analysis. Statistics are the primary tool in quantitative studies (Kelly, 2016). It is useful for seeing patterns and drawing broad conclusions. The goal of quantitative research is to amass data that may be used to generalize about a sizable population, as well as to analyse the ways in which particular data points are related to one another and preexisting knowledge and theories. Bryman (2013) argued that accurate degree estimates can only be calculated through the use of objective measurements that allow for obvious comparisons between individuals based on observable traits. Surveys, questionnaires, interviews, document reviews, and experiments are all examples of the types of instruments that can be used to do quantitative research (Pathirage, Amaratunga, & Haigh, 2005).

Blending the two strategies, sometimes known as a mixed-method or triangulated approach, is becoming the norm in the research community. The need to guarantee the constraints of both methodologies are overcome to enable more robust and extensive investigations is a major factor driving the rising trend (Creswell, 2013). Since it is assumed that a deeper comprehension of a phenomenon can be attained by the examination of a large quantity of data, the mixed-method approach combines quantitative and qualitative techniques to conduct an observation with the aim of generalizing the phenomenon (Creswell, 2003). As a result, it's useful for grasping both the quantitative and qualitative perspectives in equal measure.

The research methodology used in this study is quantitative. Rather than relying on exploratory designs, quantitative studies typically lean heavily on descriptive and explanatory models. As a result, the emphasis here is on the quantitative method of scientific inquiry. Quantitative analysis is conducted primarily to offer supporting evidence to the decision-maker. The connections between phenomena are also clarified. Bacon-Shone (2015) stated that with a quantitative approach, data is typically presented as numbers and statistics in the form of tables, charts, and figures.

A longitudinal study is a research design that involves the repeated observation or measurement of the same individuals or groups over an extended period of time (Bryman, 2006). Data is collected from 2015-2021. Unlike cross-sectional studies that collect data at a single point in time, longitudinal studies aim to track changes and developments within a sample population over the course of months, years, or even decades. This type of research design is valuable for examining trends, patterns, and relationships that unfold over time, providing insights into the dynamic nature of various phenomena.

An explanatory research design is chosen to facilitate the successful achievement of the study's objectives. Explanatory research is particularly well-suited for addressing three key areas: elucidating the circumstances or issues at play (answering "what happened"), unraveling the underlying patterns associated with the phenomenon under investigation (answering "why it happened"), and clarifying the link between graduate education and entrepreneurship. Bryman (2016) underscored the value of explanatory studies in enhancing our comprehension of complex problem dynamics. Given that the primary aim of this study is to discern the relationship between sustainable disclosure and financial success, the explanatory research design emerges as the most suitable method for this investigation. As a result, the study investigates a cause and effect that necessitates the adoption of an explanatory research design based on the quantitative research approach.

3.2 POPULATION OF THE STUDY

The research primarily focuses on financial institutions listed on the Ghana Stock Exchange (GSE), with a particular emphasis on banks. These banks and financial institutions include Access Bank Ghana, A.D.B. Bank, Cal Bank, Ecobank Ghana Limited, G.C.B. Bank Limited, Republic Bank (Ghana), Standard Chartered Bank Ghana Limited, and Societe Generale. Consequently, the study's population comprises these eight distinct banks and financial entities that are listed on the Ghana Stock Exchange.

The study therefore comprises of eight banks and data is collected from 2015-2021.

3.3 CENSUS

For this analysis, a census is used. This is because using a census enables researchers to examine every member of the population. The choice of this sampling method is apt because it allows for straightforward control of the population size without necessitating

the collection of samples. This characteristic makes it particularly well-suited for the study's objectives. Furthermore, the reliability of the findings obtained through the census method can be attributed to the fact that each and every member of the population is surveyed during the research process.

3.4 DATA COLLECTION

The research is conducted by gathering data from preexisting sources. As per Basu (2017), secondary data pertains to information that has been previously acquired, in contrast to primary data, which is gathered through a distinct method. All of the information for this study comes from secondary resources. Materials such as official reports, websites, books, journals, internal records, etc., are examples of secondary data sources. All companies trading on the Ghana Stock Exchange have their websites, annual reports, and separate sustainability reports analyzed by the researcher. All of the selected banks' annual reports, sustainability reports, and financial statements are searched through for information. Data is collected from 2015-2021.

The researcher assembles annual reports and deducts sustainability reports directly from the official websites of individual companies. These reports are collected for analysis in order to assess sustainability practices within listed banks in Ghana. Through a systematic examination, the researcher conducts targeted word searches for sustainability indicators across both the reports and corporate websites of these banks. To track and document instances of sustainability disclosure, a tick box methodology is employed. This method involved marking boxes to denote the presence of sustainability-related information within annual reports, standalone sustainability reports, or on the banks' official websites. This

method is adopted to effectively identify and record evidence of sustainability commitment and disclosure within the banks' various public documents.

3.5 DATA ANALYSIS

In analyzing the gathered responses for this study, the researcher employs both descriptive and inferential methods. Descriptive analysis relied on percentages, means, and standard deviations. Inferential analysis, on the other hand, encompasses correlation analysis and multiple regression analysis. SPSS software version 22 is used for the analysis.

The initial aim of the research is to assess the sustainability disclosure practices of banks in Ghana in relation to the country's social, economic, and environmental conditions. This assessment is conducted using mean scores and percentages.

The second objective is to investigate how the presence of sustainability disclosure indicators influence the return on assets generated by the banks in Ghana. The study adopts correlation and multiple regression.

The third objective aims to ascertain whether there exist an observable disparity in the disclosure of sustainability metrics between Ghana's larger and smaller financial institutions.

3.6 MODEL SPECIFICATION AND DESCRIPTION OF VARIABLES

The study is based on the multiple regression analysis. A multiple regression model is a statistical technique used to analyze the relationship between a dependent variable and two or more independent variables. It extends the concept of simple linear regression, where a single independent variable is used to predict the variation in a dependent variable. In a

multiple regression model, the goal is to understand how a combination of independent variables influences the variability in the dependent variable. The model is expressed in the form

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + \dots + B_nX_n + \epsilon \dots \dots \dots (1)$$

where X_n ($n = 1, 2, 3 \dots n$) are the independent variables (predictors) and Y the dependent variable (response or predicted).

In this study, the model is expressed in the form.

$$ROE = B_0 + B_1(\text{enviromental sustainability}) + B_2(\text{social sustainability}) + B_3(\text{economic sustainabiliy}) + B_4(\text{Firm Size}) + B_5(\text{Leverage}) + \epsilon \dots \dots \dots (1)$$

3.6.1 Variable Description

Table 1: Variable Description

Variable	Aspect	Measures	Authors
Dependent Variables			
Financial Performance	R.O.E.	Net income/shareholder's equity	Fijałkowska et al. (2018); Micah et al. (2012); Norman et al. (2021); Abdulsalam and Babangida (2020)
Independent Variables			
Environmental Dimension	Materials	Disclosure of plastic bottle consumption	Wasara and Ganda (2019); Abdi et al. (2022); Akbas (2014); Laskar, Chakraborty and Maji (2017); Azzam, Alqudah and Haija (2020)
		Disclosure of paper consumption	
	Energy	Disclosure of vehicle fuel consumption	
		Disclosure of heating fuel consumption	
		Disclosure of electricity consumption	

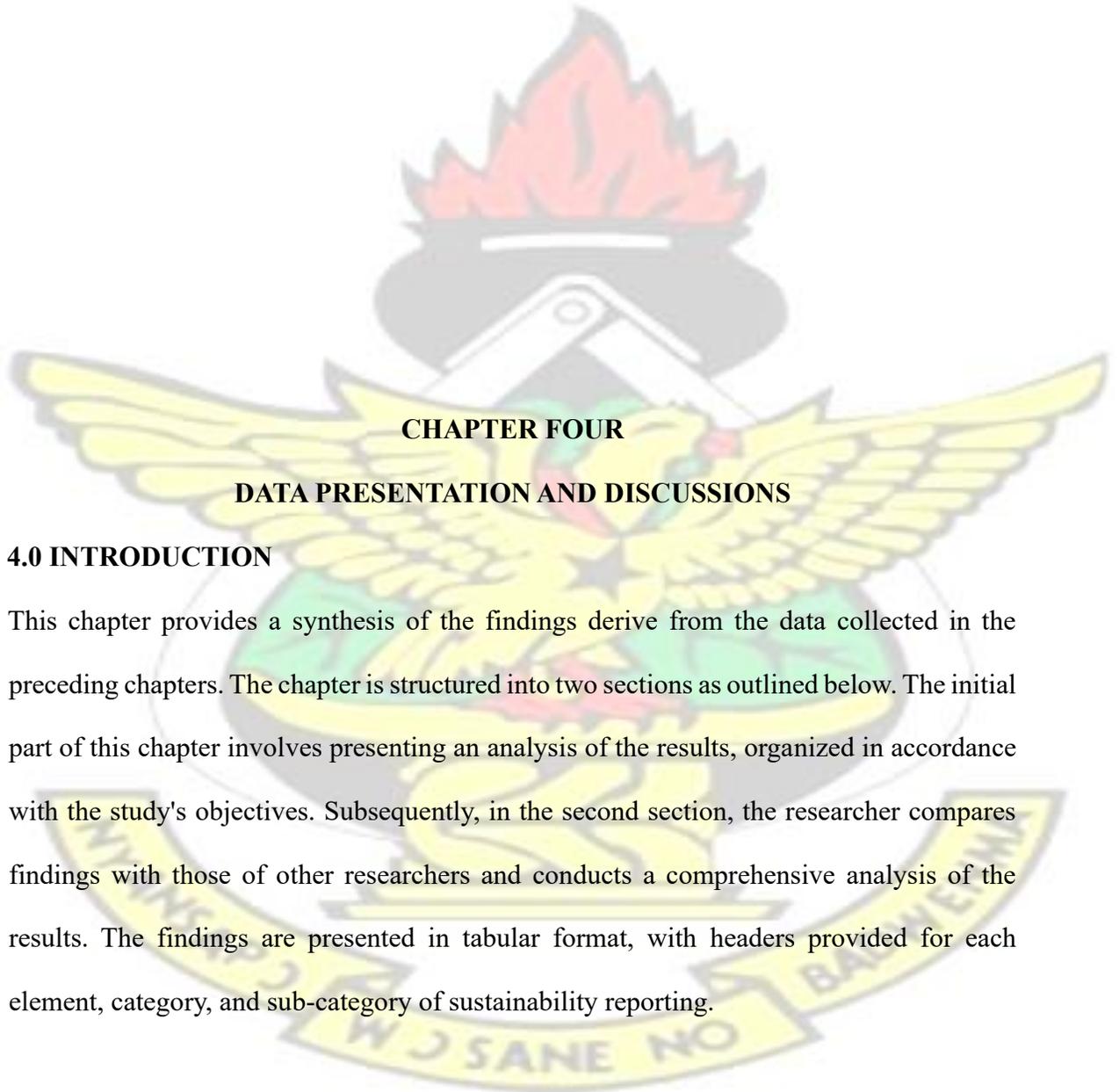
	Water	Disclosure of water consumption	
	Emissions	Disclosure of greenhouse gas emissions	
Social Dimension	Employees	Disclosure of employment policies	Wasara and Ganda (2019); Abdi et al. (2022); Laskar, Chakraborty and Maji (2017); Azzam, Alqudah and Haija (2020)
		Disclosure of training and education projects	
		Disclosure of diversity and equal opportunity	
		Disclosure of equal remuneration for men and women	
	Human rights	Freedom of Association Child Labour	
	Product responsibility	Security practices	
	Social	Disclosure of the number of branches	
		Disclosure of social projects (Impacts on community)	
		Public policy	
		Compliance with general legislation	
Economic Dimension		Disclosure of Direct economic value generated	Wasara and Ganda (2019); Abdi et al. (2022); Laskar,
		Disclosure of Direct economic value distributed	Chakraborty and Maji (2017); Azzam, Alqudah and Haija (2020)
		Disclosure Risks and opportunities	
Control Variables			
Size of Firm		Log of total assets	Azzam, Alqudah and Haija (2020); Carmo and Miguéis (2022); Wasara and Ganda (2019); Kumar, Kumari, Poonia and Kumar (2021)
Leverage		Borrowed fund (debt)	Fijałkowska et al. (2018); Fadilah, Uzliawati and Mulyasari (2022); Sofia (2019); Abdi et al. (2022)

3.6.2 Diagnostic Tests

Diagnostic test is carried out. The test includes the assumption for linearity, the normality test and the multicollinearity analysis. To check the linearity of the study, the Probability-Probability (P-P) plots, also known as P-P probability plots is adopted. P-P plots are graphical tools used to assess the assumption of linearity in regression models. These plots compare the observed cumulative distribution function (CDF) of the residuals against the expected cumulative distribution function under the assumption of linearity.

Deviations from normality are major challenge in statistical analyses when trying to determine whether the coefficients of the estimated model are significant different from zero. In this study, the researcher adopts the Variance Inflation Factor and the Normal Probability Plot (Histogram) to ascertain whether the data are normally distributed with a constant mean and zero standard deviation. The normal probability plot shows error distribution fractals against fractals with the same mean and variance of a normal distribution. When the plot depicts a bow-shaped pattern with diagonals being extremely skewed, it indicates a non-symmetrical distribution which incorporate so many large errors. For normality, the plot should be symmetrical.

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CHAPTER FOUR

DATA PRESENTATION AND DISCUSSIONS

4.0 INTRODUCTION

This chapter provides a synthesis of the findings derive from the data collected in the preceding chapters. The chapter is structured into two sections as outlined below. The initial part of this chapter involves presenting an analysis of the results, organized in accordance with the study's objectives. Subsequently, in the second section, the researcher compares findings with those of other researchers and conducts a comprehensive analysis of the results. The findings are presented in tabular format, with headers provided for each element, category, and sub-category of sustainability reporting.

4.1 LEVEL OF SUSTAINABILITY REPORTING OF BANKS

Sustainability reporting is examined in relation to environmental, social and economic sustainability. All the indicators of sustainability reporting are evaluated. Each indicator had sub-variables which are measured using a dummy variable; thus, one if a firm reported on a variable and 0 if it did not. Afterwards, the total count for all the indicators is performed to arrive at the overall level. This method of analysis is consistent with previous studies (Gürtürk & Hahn, 2016; Higgins & Coffey, 2016; Taufique, Vocino, & Polonsky, 2017). Any indicator with a mean less than 0.5 is considered low; a mean from 0.50 – 0.70 is interpreted as a moderate level and a mean greater than 0.70 is interpreted as a high level. The result is indicated in Table 2.

Table 2: Level of Sustainability Reporting of Banks

	N	Freq	Percentage	Mean	Std. Dev
Environmental Sustainability					
Disclosure on Material	56	15	26.8	0.27	0.447
Energy	56	14	25.0	0.25	0.437
Water	56	9	16.1	0.16	0.371
Biodiversity	56	2	3.6	0.04	0.187
Emissions	56	5	8.9	0.09	0.288
Observance of environmental laws	56	47	83.9	0.84	0.371
Expenditure on environmental issues	56	28	50.0	0.50	0.505
Overall	392	120	30.6	0.310	0.372
Social Sustainability					
Employment Policies	56	49	87.5	.87	.334
Relationship between management and	56	36	64.3	.64	.483
Occupational health and safety	56	6	10.7	.11	.312
Training and Education	56	56	100	1.00	.000
Diversity and opportunity	56	43	76.8	.77	.426
Investment and procurement policy	56	56	100	1.00	.000

Non-discrimination	56	22	39.3	.39	.493
Freedom of Association	56	0	0.00	.00	.000
Child Labour	56	0	0.00	.00	.000
Security practices	56	56	100	1.00	.000
Impacts on community	56	56	100	1.00	.000
Public policy	56	56	100	1.00	.000
Compliance with general legislation	56	56	100	1.00	.000
Overall	728	492	67.6	0.68	0.158
Economic Sustainability					
Direct economic value generated	56	56	100	1.00	0.000
Direct economic value distributed	56	56	100	1.00	0.000
Risk and opportunities	56	53	95	0.95	0.227
Practices for financial misappropriation	56	56	100	1.00	0.000
Overall	224	221	98.7	0.99	0.057

Source: Field Data (2022)

Based on the findings detailed in Table 2, the overall environmental sustainability of the banks exhibits a mean score of 0.310 and a standard deviation of 0.372. These results suggest that the banks generally perform sub optimally in terms of their environmental impact. To provide a more specific breakdown, there is a high level of adherence to environmental regulations, as indicated by a mean score of 0.84 with a standard deviation of 0.371. However, the banks allocate only a modest portion of their resources to environmental concerns, reflected in a mean score of 0.50 with a standard deviation of 0.505. For all other environmental sustainability indicators, the mean values are below 0.50, indicating relatively less attention. The disclosure of materials used has a mean of 0.27 with a standard deviation of 0.447, while reporting on energy performance has a mean of 0.25 with a standard deviation of 0.437. Similarly, water performance (mean = 0.16, standard deviation = 0.371), biodiversity (mean = 0.04, standard deviation = 0.187), and emissions (mean = 0.09, standard deviation = 0.288) are areas with limited attention. Regarding percentages, 26.8% of the companies report on materials, while 25.0% report on energy, 16.1% report on water, and 3.6% report on biodiversity. Furthermore, the

findings indicate that 8.9% of the selected companies report on their compliance with environmental legislation, 83.9% report on their environmental expenditures, and only 8.9% report on their emissions.

The overall performance mean for social sustainability reporting is 0.68, with a standard deviation of 0.158. This reflects the reporting of social sustainability aspects. Notably, the study finds that 67.6% of the companies included in the analysis report on their social performance. In essence, the selected companies exhibit a commendable level of social sustainability reporting.

Specifically, all companies are required to report information on training and education reporting (mean = 1.00, standard deviation = 0.000), security practices (mean = 1.00, standard deviation = 0.000), impacts on the community (mean = 1.00, standard deviation = 0.000), public policy (mean = 1.00, standard deviation = 0.000), and compliance with general legislation (mean = 1.00, standard deviation = 0.000). The banks also demonstrate strong responses in areas such as employment policies (mean = 0.87, standard deviation = 0.334), labour-management relations (mean = 0.64, standard deviation = 0.483), and diversity and equal opportunities (mean = 0.77, standard deviation = 0.426). However, the banks provide relatively limited information regarding occupational health and safety (mean = 0.11, standard deviation = 0.312), freedom of association (mean = 0.00, standard deviation = 0.000), and child labour (mean = 0.00, standard deviation = 0.000).

Economic sustainability is however, highly reported on with an overall mean of 0.99 and standard deviation of 0.057. Thus, 98.7% of all dimensions of economic sustainability are disclosed by the banks. In particular, all the banks report on their economic values generated, their economic values distributed and practices for financial sustainability.

Disclosure on risk and opportunities have 95% disclosure level.

The study also analyses the level of banks' sustainability disclosure in relation to years.

The result is presented in Table 3.

Table 3: Level of Sustainability Reporting Due to Year

Year		Environmental Sustainability	Social Sustainability	Economic Sustainability	Total
2015	Mean	.2857	.7019	0.9063	0.6313
	Std. Deviation	.20203	.10432	.12939	0.14525
2016	Mean	.3036	.6827	1.0000	0.6621
	Std. Deviation	.20825	.10432	.00000	0.10419
2017	Mean	.3214	.6827	1.0000	0.668
	Std. Deviation	.22588	.10432	.00000	0.11007
2018	Mean	.3214	.6827	1.0000	0.668
	Std. Deviation	.22588	.10432	.00000	0.11007
2019	Mean	.2857	.6827	1.0000	0.6561
	Std. Deviation	.20203	.10432	.00000	0.10212
2020	Mean	.3036	.6827	1.0000	0.6621
	Std. Deviation	.22181	.10432	.00000	0.10871
2021	Mean	.3214	.6827	1.0000	0.668
	Std. Deviation	.21258	.10432	.00000	0.10563
Total	Mean	.3061	.6760	.9870	0.6592
	Std. Deviation	.20282	.09870	.05780	0.11977

From the results, the overall total sustainability reporting of the firm is 0.6592 implying that 65.92% of sustainability disclosure components are disclosed by commercial banks in the Ghana Stock Exchange. The total sustainability reporting is seen to experience an upward movement from an average of 63.13% in 2015, 66.21% in 2016 and 66.8% in 2017. The reporting remains constant at 66.8% in 2018 but declines to 65.61% in 2019. This decline can be due to the onset of COVID-19 which disrupted the entire economy and hence forcefully pushing management to disclose lower sustainability reporting. From

2019, total sustainability reporting increases to 66.21% in 2020 and finally to 66.8% in 2021. The findings also indicate that firms concentrate more on financial sustainability reporting (98.7%) as against social sustainability (67.6%) and environmental sustainability (30.6%). Base on the outcomes, the comprehensive sustainability reporting score for the firm is determined to be 0.6592, suggesting that commercial banks listed on the Ghana Stock Exchange disclose approximately 65.92% of the various sustainability indicators. The results further highlight a notable focus on financial sustainability reporting (98.7%), with a comparatively lower emphasis on social sustainability (67.6%) and environmental sustainability (30.6%).

The findings that environmental sustainability reporting is at a lower level, with a score of 30.6%, raise concerns about the extent to which banks are disclosing their environmental impacts and initiatives. As environmental issues gain prominence globally, banks' efforts to measure, manage, and disclose their environmental performance are crucial. Encouraging higher levels of environmental sustainability reporting can drive banks to adopt more environmentally responsible practices and contribute to broader environmental protection goals. Past studies, including the one conducted by Welbeck et al. (2017), which examines the prevalent types of environmental-related information disclosed by businesses in Ghana, reveals that environmental performance is the least frequently reported aspect by businesses in the country. Likewise, Afum (2020), Buallay (2019), and Nigri and Baldo (2018) all documents low levels of reporting on environmental and human rights issues, as well as minimal reporting on social matters. However, there are satisfactory levels of reporting in the areas of financial performance, diversity and equal opportunity, occupational health and safety, and environmental expenditure. Furthermore, a satisfactory

degree of compliance with environmental legislation is observed. Social sustainability includes social performance, governance reporting and social issues. There is a high level of social sustainability among the firms. In effect, the selected firms have a moderate level of social performance reporting, a high level of governance reporting among the firms and a high level of reporting on social issues. Gunawan et al. (2019) examines how much information is being shared by companies about their sustainability efforts in Indonesia. From the findings, disclosure related to sustainability is determined to be on the moderate end.

The significant emphasis on financial sustainability reporting, with a score of 98.7%, reflects the banks' prioritization of disclosing financial-related sustainability indicators. This could be due to regulatory requirements, investor expectations, and the historically established reporting practices within the financial sector. While financial sustainability reporting is crucial for assessing economic performance, the study's findings indicate that other dimensions of sustainability need greater attention for a more balanced assessment of a bank's overall sustainability performance.

The study identifies a relatively moderate focus on social sustainability reporting, with a score of 67.6%. This suggests that while banks acknowledge the importance of disclosing social impact indicators, there is still a gap to be addressed. Enhancing social sustainability reporting could involve disclosing information about initiatives related to employee well-being, community engagement, diversity and inclusion, and other socially responsible practices. Increasing attention to social sustainability reporting can demonstrate the banks' commitment to addressing broader societal concerns.

Similar to these findings, Al-Hadi et al. (2019) suggest that organizations often lag behind in social and environmental sustainability reporting compared to financial aspects. This trend might be due to the relatively well-established frameworks for financial reporting and less standardized guidelines for social and environmental reporting. However, as environmental and social concerns gain more attention, there is an increasing push for comprehensive sustainability reporting that covers all three dimensions. According to Carmo and Miguéis (2022) companies that effectively manage environmental and social risks and opportunities can enhance their reputation, reduce operational costs, attract socially responsible investors, and strengthen their long-term sustainability.

4.2 DIAGNOSTIC TEST

4.2.1 Linearity Test

The normality test is verified using the P-P plot. The plot is shown in Figure 4.2. The P-P plot compares the observed cumulative distribution function (CDF) of the standardized residual to the expected CDF of the normal distribution. If the distribution is normal, then the data points will be clustered around the horizontal line.

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: ROE

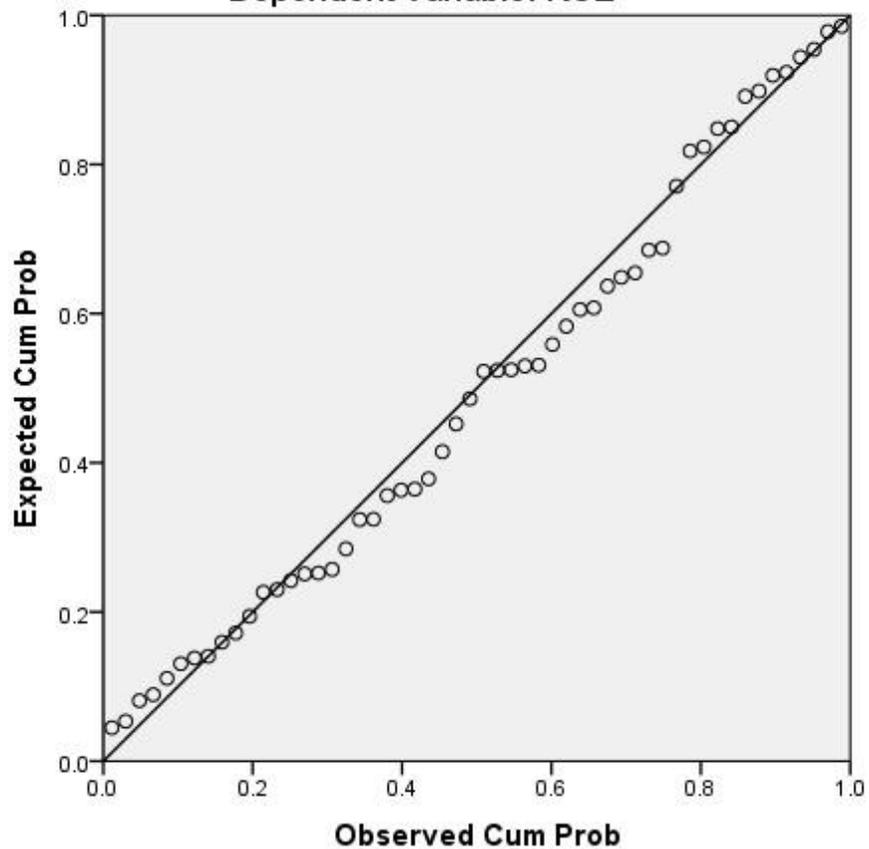


Figure 2: Normal P-P Plot

The results indicate the normality of the data since the data is clustered around the linear plotted line. Data on ROE, environmental sustainability, social sustainability, economic sustainability, leverage and firm size all satisfy the linearity test.

4.2.2 Multicollinearity Test with Variance Inflation Factor

When there is a correlation between predictor variables or independent variables in a model, it is called multicollinearity. The presence of multicollinearity can adversely affect the outcome of the results. To determine multicollinearity, the study adopts the variance inflation factor (VIF). A high VIF indicates that the associated independent variable is

highly collinear with the other variables in the model. The Variance Inflation Factor indicates the extent to which the variance is inflated for every variable. The decision is that a VIF values greater than 5 indicate the existence of multicollinearity.

Table 4: Collinearity Statistics

	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Environmental Sustainability	.546	1.833
Social Sustainability	.661	1.512
Economic Sustainability	.817	1.224
Firm Size	.577	1.735
Leverage	.378	2.646

Source: Field Data (2022)

The results indicated in Table 4 depict that there is absence of multicollinearity. This is because all the VIF values are less than 5.

4.2.3 Normality Test

Violations of normality create problems for determining whether model coefficients are significantly different from zero and calculate confidence intervals for forecasts. This is checked using the Histogram.

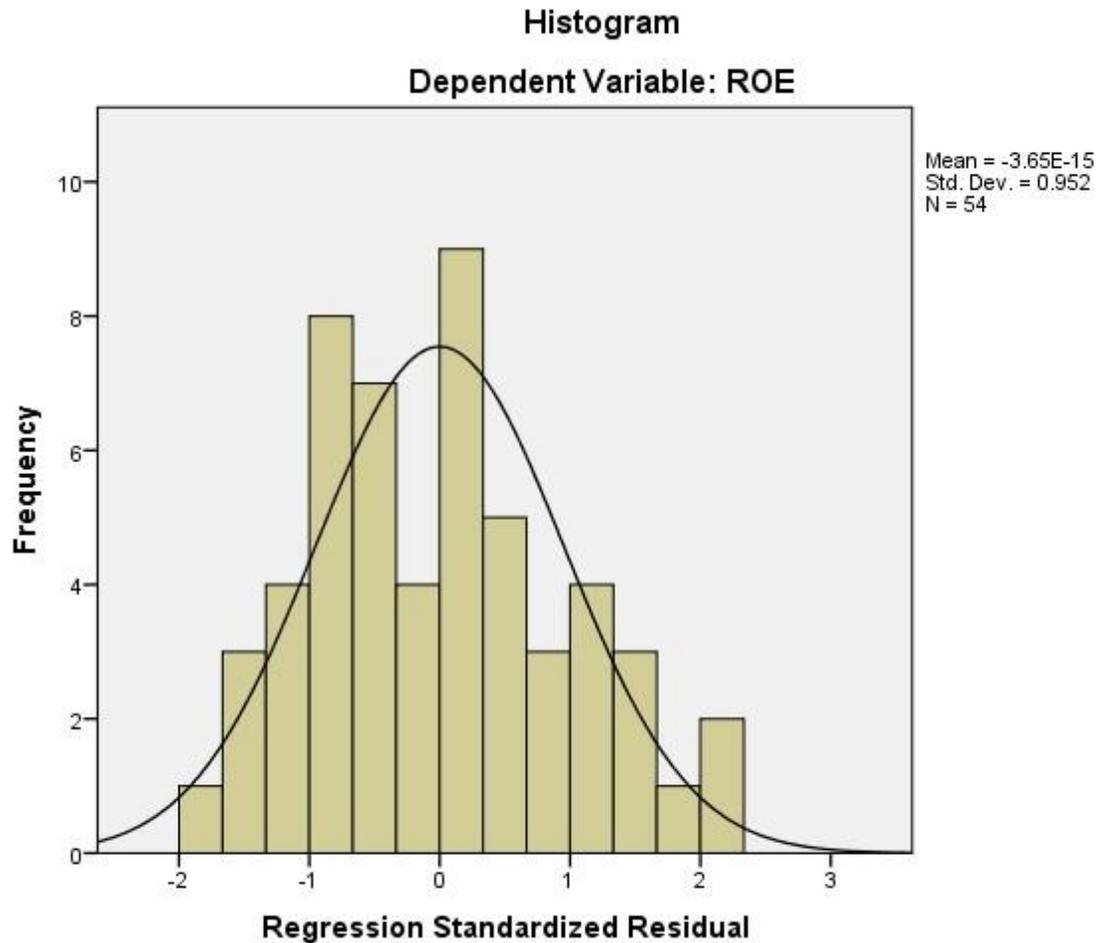


Figure 3: Normality Test

The classical bell-shaped, symmetric histogram indicated in Figure 3 with most of the frequency counts bunched in the middle and with the counts dying off out in the tails indicate that the data meets the assumption for normality.

4.3 EFFECT OF SUSTAINABILITY DISCLOSURE ON FINANCIAL PERFORMANCE

The sustainability disclosure indicators considered in the study include environmental sustainability, social sustainability and economic sustainability. The study adopts the Pearson correlation and Regression analysis. Table 4 shows the correlation analysis results.

Results from the study indicated in Table 4 show that there is a significant and positive correlation between ROE and social sustainability ($r = 0.554$, $p = 0.000 < 0.05$) and significant and positive correlation between ROE and economic sustainability ($r = 0.305$, $p = 0.024 < 0.05$). The implication is that increased in social and economic sustainability will result in increased in ROE of the firms. However, the correlation between social sustainability and ROE is greater than between economic sustainability and ROE. Thus, increase in social sustainability will result in a more corresponding increase in ROE. In addition, firm size ($r = 0.556$, $p = 0.000 < 0.05$) and leverage ($r = 0.367$, $p = 0.005 < 0.05$) positively and significantly correlated with ROE.

Table 5: Correlation of Sustainability Disclosure Indicators and ROE

		Environmental ROE sustainability	Social sustainability	Economic sustainability	Firm Lev Size	
ROE	Pearson	1	.230	.554**	.305*	.556** .367**
	Correlation Sig.		.088	.000	.024	.000 .005
Environmental sustainability	Pearson	.230**	1	.546**	-.140	-.082 .356**
	Correlation Sig.	.000		.000	.314	.546 .007
Social sustainability	Pearson	.548**	.546**	1	.045	.001 .357**
	Correlation Sig.	.000	.000		.746	.994 .007
Economic sustainability	Pearson	.108**	-.140	.045	1	.346* .016
	Correlation Sig.	.000	.314	.746		.010 .907
Firm Size	Pearson	.556**	-.082	.001	.346*	1 -.011
	Correlation Sig.	.000	.546	.994	.010	.938
Lev	Pearson	.367**	.356**	.357**	.016	-.011 1
	Correlation Sig.	.005	.007	.007	.907	.938

Source: Field Data (2023)

There is however, no significant but positive correlation between ROE and environmental sustainability ($r = 0.230$, $p = 0.088 > 0.05$). The correlation of ROE with social sustainability is higher than that of economic sustainability.

The impact of the sustainability disclosure indicators (environmental sustainability of firm, social sustainability and economic sustainability) on ROE is then ascertained using the regression analysis. The estimates of the analysis are indicated in Table 5

Table 6: Estimates of Sustainability Disclosure and ROE

Variable	Coefficient	Standard Error	Tvalue	Probability
(Constant)	-240.739	30.718	-7.837	0.000
Environmental Sustainability	-4.896	6.789	-0.721	0.474
Social Sustainability	69.892	13.751	5.083	0.000
Economic Sustainability	19.582	8.824	2.219	0.039
Firm Size	27.367	4.476	6.114	0.000
Leverage	15.609	6.763	2.308	0.025
<i>R-value</i>	0.824			
<i>R-Square</i>	0.678			
<i>F-Statistics</i>	20.251			
<i>Probability</i>	0.000			

Dependent Variable: ROE

Source: Field Data (2023)

From the results, social sustainability (coefficient = 77.401, sig = 0.000) and economic sustainability (coefficient = 63.856, sig = 0.019) positively and significantly predict ROE.

This implies that improvement in social sustainability and economic sustainability

reporting will lead to improvement in the ROE of banks. Social sustainability is observed to highly predict ROE than economic sustainability of the banks. Similarly, firm size (coefficient = 27.367, sig = 0.000) and leverage (coefficient = 15.609, sig = 0.025) significantly and positively predict ROE.

However, environment sustainability did not predict ROE of firms. The model equation for the regression model is

$$ROE = -240.739 + 69.892 (\text{social sustainability}) + 19.582 (\text{economic sustainability}) + 27.367 (\text{Firm Size}) + 15.609 (\text{Leverage}) + \varepsilon$$

4.4 SIZE OF FIRM AND SUSTAINABILITY REPORTING

The study adopts the Pearson correlation. The correlation analysis is used to determine whether firm size relate to sustainability reporting. Table 6 shows the correlation analysis results.

Table 7: Correlation of Firm Size and Sustainability Reporting

		Environmental Size	Social Sustainability	Economic Sustainability	
Size	Pearson Correlation	1	-.082	.001	
	Sig. (2tailed)		.546	.994	
	Environmental Sustainability	Pearson Correlation	-.082	1	.546**
		Sig. (2tailed)	.546	.000	
	Social Sustainability	Pearson Correlation	.001	1	.546**
		Sig. (2tailed)	.546	.000	.314
	Economic Sustainability	Pearson Correlation	.001	.546**	1
		Sig. (2tailed)	.546	.000	.045

	Sig. (2tailed)	.994	.000	.746	
Economic Sustainability	Pearson Correlation	.346*	-.140	.045	1
	Sig. (2tailed)	.010	.314	.746	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed). Source:
Field Data (2023)

The provided table (Table 6) outlines the correlation coefficients between measures of sustainability; environmental, social, and economic; and the size of firms. Starting with the relationship between firm size and Environmental Sustainability, the Pearson correlation coefficient of -0.082 suggests a weak negative correlation. However, the pvalue of 0.546 indicates that this correlation is not statistically significant at the common significance level of 0.05. On the relationship between firm size and Social Sustainability, the correlation coefficient of 0.001 indicates an almost negligible positive correlation. With a p-value of 0.994, the lack of statistical significance implies that the relationship between firm size and social sustainability is likely not meaningful and might be coincidental.

However, the correlation between firm size and Economic Sustainability is significant. The correlation coefficient of 0.346 suggests a moderate positive correlation. The associated p-value of 0.010 is below the 0.05 significance level, indicating that the correlation is statistically significant. This finding suggests that larger firms tend to report higher levels of economic sustainability, implying a potential link between firm size and economic performance in sustainable practices.

4.5 DISCUSSION OF FINDINGS

4.4.1 Level of Sustainability Reporting among Firms

Base on the outcomes, the comprehensive sustainability reporting score for the firm is determined to be 0.6592, suggesting that commercial banks listed on the Ghana Stock Exchange disclose approximately 65.92% of the various sustainability indicators. The results further highlight a notable focus on financial sustainability reporting (98.7%), with comparatively lower emphasis on social sustainability (67.6%) and environmental sustainability (30.6%).

The findings that environmental sustainability reporting is at a lower level, with a score of 30.6%, raises concerns about the extent to which banks are disclosing their environmental impacts and initiatives. As environmental issues gain prominence globally, banks' efforts to measure, manage, and disclose their environmental performance are crucial. Encouraging higher levels of environmental sustainability reporting can drive banks to adopt more environmentally responsible practices and contribute to broader environmental protection goals. Earlier studies such as Welbeck et al. (2017), who examined the type of environmental-related information firms disclose mostly in Ghana, found that firms in the country least report on environmental performance. Similarly, low environmental and human rights issues and low levels of reporting on social issues were recorded by Afum. (2020), Buallay (2019), and Nigri and Baldo (2018). There is a moderate level of environmental expenditure, compliance with environmental legislation, occupational health and safety reporting, diversity and opportunity reporting and financial reporting.

Social sustainability includes social performance, governance reporting and social issues.

There is a high level of social sustainability among the firms. In effect, the selected firms

have a moderate level of social performance reporting, a high level of governance reporting among the firms and a high level of reporting on social issues. Gunawan et al. (2019) examined how much information is being shared by companies about their sustainability efforts in Indonesia. From the findings, disclosure related to sustainability is determined to be on the moderate end.

The significant emphasis on financial sustainability reporting, with a score of 98.7%, reflects the banks' prioritization of disclosing financial-related sustainability indicators. This could be due to regulatory requirements, investor expectations, and the historically established reporting practices within the financial sector. While financial sustainability reporting is crucial for assessing economic performance, the study's findings indicate that other dimensions of sustainability need greater attention for a more balanced assessment of a bank's overall sustainability performance.

The study identifies a relatively moderate focus on social sustainability reporting, with a score of 67.6%. This suggests that while banks acknowledge the importance of disclosing social impact indicators, there is still a gap to be addressed. Enhancing social sustainability reporting could involve disclosing information about initiatives related to employee well-being, community engagement, diversity and inclusion, and other socially responsible practices. Increasing attention to social sustainability reporting can demonstrate the banks' commitment to addressing broader societal concerns.

Similar to these findings, Al-Hadi et al. (2019) suggest that organizations often lag behind in social and environmental sustainability reporting compared to financial aspects. This trend might be due to the relatively well-established frameworks for financial reporting and less standardized guidelines for social and environmental reporting. However, as

environmental and social concerns gain more attention, there is an increasing push for comprehensive sustainability reporting that covers all three dimensions. According to Carmo and Miguéis (2022) companies that effectively manage environmental and social risks and opportunities can enhance their reputation, reduce operational costs, attract socially responsible investors, and strengthen their long-term sustainability.

4.4.2 Effect of Sustainability Disclosure Indicators on Financial Performance

The findings indicate a positive and significant relationship between financial performance (measured using ROE) and social sustainability and a significant and positive correlation between ROE and economic sustainability. Similarly, there is a positive relationship between ROE and firm size as well as ROE and leverage. The model is found to predict 67.8% ROE among the banks. This means that banks can enhance their financial performance by strategically incorporating and emphasizing social and economic sustainability practices. This might involve initiatives such as improving corporate social responsibility, fostering positive relationships with stakeholders, ensuring ethical business conduct, and adopting financial strategies that promote longterm viability. For banks, this means that sustainability should not be treated as a mere compliance exercise, but as a strategic driver that can positively influence financial outcomes.

Nuber et al. (2020) conduct an empirical investigation into the relationship between financial performance and sustainability performance. Their analysis is based on the stakeholder-agency theory. According to the findings, sustainability management that aims to improve financial performance should make an active effort to achieve very high levels of corporate sustainability to cater to the requirements of investors and other stakeholders.

Abdi et al. (2022) showed evidence that companies with superior social performance enjoy more favourable sustainability disclosures by using data from U.S. companies from the three-digit zip code areas. According to Afum et al. (2020), the market value of a company is positively correlated with the amount of social information it discloses. Orazalin et al. (2019) concluded that the level of social trust that is formed has a favourable impact on the financial performance and flexibility of Hungarian logistics companies.

According to Chang et al. (2019), financially sound banks also tend to have strong corporate social and environmental performance programmes. Azzam, Alqudah and Haija (2020) used a panel data collection of 1,705 firm-year observations of firms listed on the Amman Stock Exchange. Analysis of the data found that, environmental disclosures do not have a same beneficial relationship to financial performance as do social and governance disclosures. Interestingly, a highly significant and significant correlation is revealed between sustainability disclosures when they are analysed as a whole.

4.4.3 Firm Size and Sustainability Reporting

Results from the study indicates a significant and positive correlation between sustainability reporting and firm size. In more precise terms, firm size positively predicts sustainability reporting. The observation that large firms tend to report higher levels of economic sustainability is in line with expectations. Large organizations often have more resources to allocate toward sustainability reporting and initiatives. However, as small firms tend to lag behind, there is a need for targeted support, capacity building, and awareness initiatives to help them engage effectively in sustainability practices and reporting.

According to Welbeck et al. (2017) research, major indicators of firms' environmental disclosure procedures include firm size, auditor type, firm age, and the type of industry in which the company operates. The research conducted by Arthur (2016) looked into the disclosure of performance metrics in the sustainability reports of significant mining firms in Ghana. They concluded that the age of the company, its profitability, and its size all served as predictors of sustainability reporting. According to Chang et al. (2019), another reason in favour of sustainability reporting is that a company's financial performance can be impacted by factors such as the age of the company, the size of the company, and the profitability of the company. According to the findings of the study, a positive influence of profitability and leverage on sustainability report disclosure was found, however, the size of the organisation did not significantly affect the findings.

According to the legitimacy theory, a company's size is a factor in whether or not the public will consider it credible. Total assets, total sales, staff count, and market capitalization are some measures of a company's size (Putri et al., 2019). According to Antara et al. (2020), company size has a favourable and significant impact on

Sustainability disclosure. A company's size is likely to have an impact on its sustainability report, as some major businesses use their status to motivate employees to participate in corporate social responsibility initiatives. The more assets a corporation has, the more transparent it is about its environmental practises.

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CHAPTER FIVE

SUMMARY AND RECOMMENDATIONS

5.0 INTRODUCTION

This chapter presents a valuable opportunity to encapsulate the findings from the analysis. The survey results are scrutinized, and recommendations are formulated in light of these findings.

5.1 SUMMARY OF FINDINGS

The first objective of this study assesses the extent of sustainability disclosure indicators within the financial institutions in Ghana, considering environmental, social, and economic dimensions. From the results, the overall total sustainability reporting of the firm is 0.6592

implying that 65.92% of sustainability disclosure components are disclosed by commercial banks in the Ghana Stock Exchange. The findings also indicate that, firms concentrate more on financial sustainability reporting (98.7%) as against social sustainability (67.6%) and environmental sustainability (30.6%).

The second objective of this study is to examine the influence of sustainability disclosure on the financial performance of companies. The findings reveal a positive correlation between financial performance, assessed through return on equity, and both social and economic sustainability reporting. The sustainability dimensions of social and economic sustainability predict 39.1% ROE among commercial banks.

The third objective examines how a company's size influences its reporting on sustainability initiatives. The study's results demonstrate a significant connection between a company's size and its reporting on sustainability efforts. This finding suggests that larger firms tend to report higher levels of economic sustainability, implying a potential link between firm size and economic performance in sustainable practices. However, environmental and social sustainability reporting is found not to depend on the size of the firm.

The study investigates sustainability disclosure practices among banks in Ghana and their effects on financial performance, while also considering the impact of firm size on these practices. The findings indicate that banks in Ghana exhibit a commendable dedication to sustainability disclosure, achieving an overall score of 65.92%. However, there's a discrepancy in reporting focus, with financial sustainability prominently covered (98.7%), while social (67.6%) and environmental (30.6%) aspects need enhancement. The degree of sustainability disclosure exhibits a robust and positive correlation with a

company's return on equity (ROE), serving as an indicator of financial success. Social and economic sustainability reporting account for 39.1% of ROE variance, highlighting the dual impact of sustainable practices on ethics and finances. Lastly, when considering firm size, a positive correlation between larger banks and economic sustainability reporting is evident. This suggests a potential interplay between firm size, sustainable practices, and economic performance.

5.2 IMPLICATIONS OF THE STUDY

5.2.1 Encouraging Comprehensive Sustainability Reporting

The fact that banks in Ghana are found to concentrate more on financial sustainability reporting compared to social and environmental sustainability suggests that there is room for improvement in terms of disclosing a well-rounded set of sustainability components.

Policymakers could encourage and incentivize banks to provide more comprehensive sustainability disclosures that cover all three dimensions equally, thereby promoting a holistic approach to sustainability.

5.2.2 Addressing Environmental Sustainability Reporting

The relatively low level of environmental sustainability reporting (30.6%) suggests a need for policies that encourage and support banks to improve their environmental disclosures. Environmental sustainability is a crucial aspect of overall sustainability, and its underrepresentation in disclosures could be addressed through regulations or incentives that promote greater focus on environmental performance and transparency.

5.2.3 Firm Size And Sustainability Reporting

As per the results of the study indicating a positive relationship between a company's size and the extent of economic sustainability reporting, it is evident that larger companies tend

to disclose higher levels of economic sustainability. However, this finding also highlights a potential gap in sustainability reporting among smaller firms. Policymakers might consider developing targeted programs to assist and encourage smaller banks and businesses to engage in sustainability reporting, potentially levelling the playing field and promoting sustainable practices across the banking sector.

5.2.4 Capacity Building and Awareness

Since social and environmental sustainability reporting appears to be less prominent than financial sustainability reporting, policies could focus on capacity building, training, and awareness programs to help banks better understand the importance of holistic sustainability practices. This could lead to improved sustainability disclosures across all dimensions.

5.3 RECOMMENDATIONS

Here are some suggestions based on the study's findings to enhance sustainability disclosure practices among banks in Ghana and leverage the connection between sustainability and financial success:

1. First, while the banks are effectively communicating their financial performance and stability, they need to enhance their disclosure efforts when it comes to the social and environmental impacts of their operations. This can involve sharing information about their efforts to contribute positively to society, such as community engagement, employee well-being, diversity and inclusion programs, and ethical practices. Additionally, the banks should improve the transparency of

their environmental practices, including their efforts to reduce their carbon footprint, conserve resources, and mitigate negative environmental effects.

2. Recognizing the positive correlation between sustainability disclosure and financial performance, banks should intensify their sustainability considerations into their core strategies. By aligning social and economic sustainability initiatives with financial goals, banks can harness the potential benefits of sustainable practices more effectively. Furthermore, the Securities and Exchange Commission of Ghana and the Bank of Ghana should intensify their educational initiatives to enhance banks' understanding of the potential advantages of sustainability reporting and the essential nature of its adoption. Such efforts would facilitate greater acceptance of the idea of integrating sustainability reporting into their practices by bank management.
3. Given the lower emphasis on environmental sustainability reporting, banks should focus on improving their disclosure in this area. Incorporating transparent reporting on carbon emissions, resource consumption, and eco-friendly practices can not only contribute to their environmental responsibility but also align with growing consumer demands for eco-conscious banking.
4. Moreover, smaller financial institutions should recognize the positive relationship between company size and the disclosure of sustainability information. While resource limitations might exist, these banks can adopt a targeted approach to sustainability disclosure, focusing on areas that align with their capacities and customer preferences. Thus, rather than trying to cover all aspects of sustainability reporting, smaller banks can focus on specific areas that align with their capacities, strengths, and the preferences of their customers. By identifying the sustainability

issues that are most relevant and important to their stakeholders, such as their local community or specific customer segments, these banks can make meaningful and impactful disclosures.

5.4 SUGGESTIONS FOR FURTHER STUDIES

The study's results reveal that environmental sustainability policies does not exert a direct and significant influence on the return on equity (ROE) of the examined companies. This suggests that, while environmental sustainability remains an important ethical consideration and can have broader benefits for society and the environment, it might not be a major driver of financial performance in the specific context of the studied firms.

However, it's important to note that this finding does not negate the importance of environmental sustainability efforts; it simply indicates that the direct impact on ROE might not be as pronounced in this particular study. This implication underscores the intricacy of the relationship between environmental sustainability and financial performance, emphasizing the necessity for further research and analysis.

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APPENDIX A: SECONDARY DATA

Bank	Year	Material	Energy	Water	Biodiversity	Emissions, effluents, and waste	Compliance with environmental legislation	Environmental expenditure	Employment Policies	Labour/ management relations
Access BK	2021	1	0	0	0	0	0	1	1	1
Access BK	2020	1	0	0	0	0	0	1	1	1
Access BK	2019	1	0	0	0	0	1	1	1	1
Access BK	2018	1	0	0	0	1	1	1	1	1
Access BK	2017	1	0	0	0	1	1	1	1	1
Access BK	2016	1	0	0	0	0	1	1	1	1
Access BK	2015	1	0	0	0	0	1	1	1	1
ADB BK	2021	0	0	0	0	0	1	0	0	0
ADB BK	2020	0	0	0	0	0	1	0	0	0
ADB BK	2019	0	0	0	0	0	1	0	0	0
ADB BK	2018	0	0	0	0	0	1	0	0	0
ADB BK	2017	0	0	0	0	0	1	0	0	0
ADB BK	2016	0	0	0	0	0	1	0	0	0
ADB BK	2015	0	0	0	0	0	1	0	0	0
Calbank	2021	0	0	0	0	0	1	0	1	0
Calbank	2020	0	0	0	0	0	1	0	1	0
Calbank	2019	0	0	0	0	0	1	0	1	0
Calbank	2018	0	0	0	0	0	1	0	1	0
Calbank	2017	0	0	0	0	0	1	0	1	0
Calbank	2016	0	0	0	0	0	1	0	1	0
Calbank	2015	0	0	0	0	0	1	0	1	0
Ecobank	2021	0	1	0	1	1	1	0	1	0

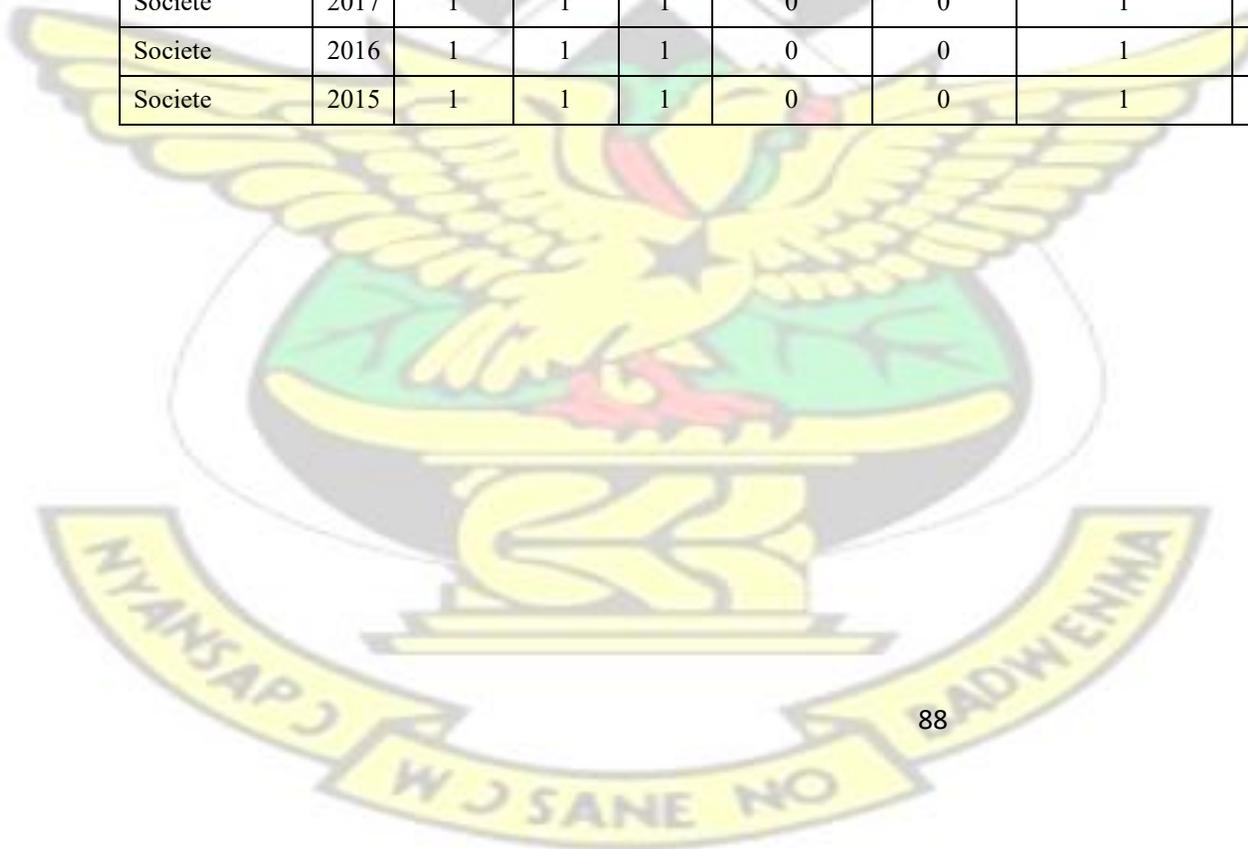
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Ecobank	2020	0	1	0	1	1	1	0	1	0
Ecobank	2019	0	1	0	0	0	1	0	1	0

Ecobank	2018	1	1	0	0	0	1	0	1	0
Ecobank	2017	0	1	1	0	0	1	0	1	0
Ecobank	2016	0	1	0	0	1	1	0	1	0
Ecobank	2015	0	1	0	0	0	1	0	1	1
GCB	2021	0	0	0	0	0	1	0	1	1
GCB	2020	0	0	0	0	0	1	0	1	1
GCB	2019	0	0	0	0	0	1	0	1	1
GCB	2018	0	0	0	0	0	1	0	1	1
GCB	2017	0	0	0	0	0	1	0	1	1
GCB	2016	0	0	0	0	0	1	0	1	1
GCB	2015	0	0	0	0	0	1	0	1	1
Republic	2021	0	0	1	0	0	0	1	1	1
Republic	2020	0	0	0	0	0	0	1	1	1
Republic	2019	0	0	0	0	0	0	1	1	1
Republic	2018	0	0	0	0	0	0	1	1	1
Republic	2017	0	0	0	0	0	0	1	1	1
Republic	2016	0	0	0	0	0	0	1	1	1
Republic	2015	0	0	0	0	0	0	1	1	1
StanChart	2021	0	0	0	0	0	1	1	1	1
StanChart	2020	0	0	0	0	0	1	1	1	1

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StanChart	2019	0	0	0	0	0	1	1	1	1
StanChart	2018	0	0	0	0	0	1	1	1	1
StanChart	2017	0	0	0	0	0	1	1	1	1
StanChart	2016	0	0	0	0	0	1	1	1	1
StanChart	2015	0	0	0	0	0	1	1	1	1
Societe	2021	1	1	1	0	0	1	1	1	1
Societe	2020	1	1	1	0	0	1	1	1	1
Societe	2019	1	1	1	0	0	1	1	1	1
Societe	2018	1	1	1	0	0	1	1	1	1
Societe	2017	1	1	1	0	0	1	1	1	1
Societe	2016	1	1	1	0	0	1	1	1	1
Societe	2015	1	1	1	0	0	1	1	1	1



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APPENDIX B: SECONDARY DATA

Bank	Year	Occupational health and safety	Training and education	Diversity and opportunity	Investment and procurement policy	Non-discrimination	Freedom of association and collective bargaining	Child labour and forced labour	Security practices	Impacts on community
Access BK	2021	1	1	1	1	0	0	0	1	1
Access BK	2020	1	1	1	1	0	0	0	1	1
Access BK	2019	1	1	1	1	0	0	0	1	1
Access BK	2018	1	1	1	1	0	0	0	1	1
Access BK	2017	1	1	1	1	0	0	0	1	1
Access BK	2016	1	1	1	1	0	0	0	1	1
Access BK	2015	1	1	1	1	0	0	0	1	1
ADB BK	2021	0	1	0	1	0	0	0	1	1
ADB BK	2020	0	1	0	1	0	0	0	1	1
ADB BK	2019	0	1	0	1	0	0	0	1	1
ADB BK	2018	0	1	0	1	0	0	0	1	1
ADB BK	2017	0	1	0	1	0	0	0	1	1
ADB BK	2016	0	1	0	1	0	0	0	1	1
ADB BK	2015	0	1	0	1	0	0	0	1	1
Calbank	2021	0	1	1	1	0	0	0	1	1
Calbank	2020	0	1	1	1	0	0	0	1	1
Calbank	2019	0	1	1	1	0	0	0	1	1
Calbank	2018	0	1	1	1	0	0	0	1	1
Calbank	2017	0	1	1	1	0	0	0	1	1
Calbank	2016	0	1	1	1	0	0	0	1	1

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Calbank	2015	0	1	1	1	1	0	0	1	1
Ecobank	2021	1	1	0	1	1	0	0	1	1

Ecobank	2020	1	1	0	1	1	0	0	1	1
Ecobank	2019	1	1	0	1	1	0	0	1	1
Ecobank	2018	1	1	0	1	1	0	0	1	1
Ecobank	2017	1	1	0	1	1	0	0	1	1
Ecobank	2016	1	1	0	1	1	0	0	1	1
Ecobank	2015	0	1	1	1	0	0	0	1	1
GCB	2021	0	1	1	1	0	0	0	1	1
GCB	2020	0	1	1	1	0	0	0	1	1
GCB	2019	0	1	1	1	0	0	0	1	1
GCB	2018	0	1	1	1	0	0	0	1	1
GCB	2017	0	1	1	1	0	0	0	1	1
GCB	2016	0	1	1	1	0	0	0	1	1
GCB	2015	0	1	1	1	0	0	0	1	1
Republic	2021	0	1	1	1	0	0	0	1	1
Republic	2020	0	1	1	1	0	0	0	1	1
Republic	2019	0	1	1	1	0	0	0	1	1
Republic	2018	0	1	1	1	0	0	0	1	1
Republic	2017	0	1	1	1	0	0	0	1	1

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Republic	2016	0	1	1	1	0	0	0	1	1
Republic	2015	0	1	1	1	1	0	0	1	1
StanChart	2021	0	1	1	1	1	0	0	1	1
StanChart	2020	0	1	1	1	1	0	0	1	1
StanChart	2019	0	1	1	1	1	0	0	1	1
StanChart	2018	0	1	1	1	1	0	0	1	1
StanChart	2017	0	1	1	1	1	0	0	1	1
StanChart	2016	0	1	1	1	1	0	0	1	1
StanChart	2015	0	1	1	1	1	0	0	1	1
Societe	2021	0	1	1	1	1	0	0	1	1
Societe	2020	0	1	1	1	1	0	0	1	1
Societe	2019	0	1	1	1	1	0	0	1	1
Societe	2018	0	1	1	1	1	0	0	1	1
Societe	2017	0	1	1	1	1	0	0	1	1
Societe	2016	0	1	1	1	1	0	0	1	1
Societe	2015	0	1	1	1	1	0	0	1	1

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APPENDIX C: SECONDARY DATA

Bank	Year	Public policy	Compliance	Direct economic value generated	Direct economic value distributed	Risk and opportunities	Practices for financial misappropriation	Total assets	Firm size	Roe
Access BK	2021	1	1	1	1	1	1	7,491,295	6.875	37
Access BK	2020	1	1	1	1	1	1	5,823,778	6.765	36.1
Access BK	2019	1	1	1	1	1	1	4,711,698	6.673	33.2
Access BK	2018	1	1	1	1	1	1	3,540,941	6.549	23.4
Access BK	2017	1	1	1	1	1	1	3,199,566	6.505	26.7
Access BK	2016	1	1	1	1	1	1	2,679,608	6.428	17.9
Access BK	2015	1	1	1	1	1	1	2,424,439	6.385	18.7
ADB BK	2021	1	1	1	1	1	1	6,454,119	6.810	12.09
ADB BK	2020	1	1	1	1	1	1	5,715,794	6.757	7.69
ADB BK	2019	1	1	1	1	1	1	4,577,659	6.661	1.87
ADB BK	2018	1	1	1	1	1	1	3,597,395	6.556	0.92
ADB BK	2017	1	1	1	1	1	1	3,545,143	6.550	5.53
ADB BK	2016	1	1	1	1	1	1	3,035,493	6.482	- 17.78
ADB BK	2015	1	1	1	1	1	1	2,134,147	6.329	- 23.34
Calbank	2021	1	1	1	1	1	1	10,039,979	7.002	17.3
Calbank	2020	1	1	1	1	1	1	7,924,586	6.899	18.9
Calbank	2019	1	1	1	1	1	1	7,048,498	6.848	17.8
Calbank	2018	1	1	1	1	1	1	5,419,299	6.734	19.7
Calbank	2017	1	1	1	1	1	1	4,223,138	6.626	22.8
Calbank	2016	1	1	1	1	1	1	3,618,858	6.559	2

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Calbank	2015	1	1	1	1	1	1	3,364,500	6.527	32
Ecobank	2021	1	1	1	1	1	1	17,925,529	7.253	22

Ecobank	2020	1	1	1	1	1	1	15,882,414	7.201	26
Ecobank	2019	1	1	1	1	1	1	13,197,574	7.120	25
Ecobank	2018	1	1	1	1	1	1	10,457,596	7.019	30
Ecobank	2017	1	1	1	1	1	1	9,098,692	6.959	36
Ecobank	2016	1	1	1	1	1	1	8,025,510	6.904	36
Ecobank	2015	1	1	1	1	1	1	6,587,487	6.819	39
GCB	2021	1	1	1	1	1	1	18,404,927	7.265	27
GCB	2020	1	1	1	1	1	1	15,453,897	7.189	22
GCB	2019	1	1	1	1	1	1	12,524,084	7.098	25
GCB	2018	1	1	1	1	1	1	10,720,925	7.030	25
GCB	2017	1	1	1	1	1	1	9,627,061	6.983	21
GCB	2016	1	1	1	1	1	1	6,049,604	6.782	29
GCB	2015	1	1	1	1	1	1	4,641,166	6.667	30
Republic	2021	1	1	1	1	1	1	4,226,259	6.626	13.19
Republic	2020	1	1	1	1	1	1	3,647,785	6.562	9.3
Republic	2019	1	1	1	1	1	1	3,326,242	6.522	14.6
Republic	2018	1	1	1	1	1	1	2,857,988	6.456	10.6
Republic	2017	1	1	1	1	1	1	2,079,096	6.318	-6.6
Republic	2016	1	1	1	1	1	1	1,856,171	6.269	-2.6
Republic	2015	1	1	1	1	1	1	1,566,419	6.195	-1.4

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StanChart	2021	1	1	1	1	1	1	10,120,576	7.005	26.6
StanChart	2020	1	1	1	1	1	1	8,031,674	6.905	32.6
StanChart	2019	1	1	1	1	1	1	7,618,622	6.882	25.5
StanChart	2018	1	1	1	1	1	1	5,961,495	6.775	21
StanChart	2017	1	1	1	1	1	1	4,776,984	6.679	32.3
StanChart	2016	1	1	1	1	1	1	4,373,564	6.641	34
StanChart	2015	1	1	1	1	1	1	3,369,448	6.528	12
Societe	2021	1	1	1	1	1	1	5,437,022	6.735	21.1
Societe	2020	1	1	1	1	1	1	5,115,206	6.709	26.2
Societe	2019	1	1	1	1	1	1	4,443,909	6.648	19.2
Societe	2018	1	1	1	1	1	1	3,431,356	6.535	11.8
Societe	2017	1	1	1	1	1	1	2,789,742	6.446	13.2
Societe	2016	1	1	1	1	1	1	2,448,836	6.389	12.3
Societe	2015	1	1	1	1	1	1	2,002,741	6.302	9.8