

**SUSTAINABILITY REPORTING AND FINANCIAL PERFORMANCE OF
LISTED ENTITIES IN NIGERIA**

BY

**Dirisu ALIU
MGS2007398**

**DEPARTMENT OF ACCOUNTING
FACULTY OF MANAGEMENT SCIENCES
UNIVERSITY OF BENIN
BENIN CITY.**

APRIL, 2024

**SUSTAINABILITY REPORTING AND FINANCIAL PERFORMANCE OF
LISTED ENTITIES IN NIGERIA**

BY

**Dirisu ALIU
MGS2007398**

**A PROJECT SUBMITTED TO THE DEPARTMENT OF ACCOUNTING
FACULTY OF MANAGEMENT SCIENCES,
IN PARTIAL FULFILMENT FOR THE REQUIREMENT OF THE
AWARD OF BACHELOR OF SCIENCE (B.SC.) DEGREE IN
ACCOUNTING, UNIVERSITY OF BENIN, BENIN CITY.**

APRIL, 2024

DECLARATION

I declare that:

- I. This project is based on a study undertaken by me in Department of Accounting, University of Benin, under supervision of **DR. J.P OTAKEFE**
- II. This work has not been previously submitted for the award of any degree elsewhere.
- III. All ideas and views are products of my personal research and where the views of others have been expressed; they have been duly referenced and acknowledged.
- IV. Any liability arising from this work is be wholly borne by me alone.

Dirisu ALIU

MGS2007398

Date

CERTIFICATION

We the undersigned certify that this research work was carried out by **Dirisu ALIU** with Matriculation number **MGS2007398** in the Department of

Accounting, Faculty of Management Sciences, University of Benin, in partial fulfilment of the award of Bachelor of Science (B.Sc) Degree in Accounting.

DR. J.P Otakefe
(Project Supervisor)

Date

Dr. Ikhu-Omoregbe Godstime
(Project Coordinator)

Date

Dr. Osasu Obaretin
(Head of Department)

Date

DEDICATION

This body of research is dedicated to Almighty God for providing me with the strength to complete this research work.

.

ACKNOWLEDGEMENTS

I am eternally grateful to god Almighty who through his grace and mercies granted me protection, strength and direction throughout my academic program. My sincere appreciation goes to my project supervisor DR. J.P Otakefe for his support, corrections and directions during this research.

My appreciation goes to my wonderful parents (late chief oligboji Aliu) and my beloved brothers. Dino structure, Suaibu, Abudu, Akim, Santop, David, Stephen, Matto and Igor owesa,. and to all my dearest sisters for their endless support, love and prayers throughout this academic journey.

TABLE OF CONTENTS

Title Page	-	-	-	-	-	-	-	-	i
Declaration-	-	-	-	-	-	-	-	-	ii
Certification	-	-	-	-	-	-	-	-	iii
Dedication	-	-	-	-	-	-	-	-	iv
Acknowledgements	-	-	-	-	-	-	-	-	v
Table of Contents		-	-	-	-	-	-	-	vi
Abstract	-	-	-	-	-	-	-	-	ix

CHAPTER ONE: INTRODUCTION

1.1	Background to Study	-	-	-	-	-	-	-	1
1.2	Statement of Research Problem	-	-	-	-	-	-	-	3
1.3	Objectives of the Study	-	-	-	-	-	-	-	5
1.4	Statement of the Hypothesis	-	-	-	-	-	-	--	5
1.5	Scope of the Study	-	-	-	-	-	-	-	6
1.6	Significance of the Study	-	-	-	-	-	-	-	6

CHAPTER TWO: LITERATURE REVIEW

2.0	Introduction	-	-	-	-	-	-	-	7
2.1	Conceptual review	-	-	-	-	-	-	-	8
2.2	Theoretical Review	-	-	-	-	-	-	-	39
2.3	Empirical Review	-	-	-	-	-	-	-	46

CHAPTER THREE: METHODOLOGY

3.0	Introduction	-	-	-	-	-	-	53
3.1	Research Design	-	-		-	-	-	53
3.3	Population	-	-	-	-	-	-	53
3.4	Sample and Sampling Technique				-	-	-	54
3.5	Sources of Data	-	-	-	-	-	-	55
3.6	Data Analysis and Model Specification				-	-	-	56
3.7	Operationalisation of Variables				-	-	-	57

CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS OF RESULTS

4.1	Introduction	-	-	-	-	-	-	60
4.2	Presentation and Analysis of Result	-	-		-	-	-	60
4.3	Diagnostic Tests and Analysis of Regression Results						-	64
4.4	Test of Hypotheses	-	-	-	-	-	-	67
4.5	Discussion of Findings				-	-	-	69

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

5.1	Introduction	-	-	-	-	-	-	71
5.2	Summary of Findings	-	-	-	-	-	-	71
5.3	Conclusion	-	-		-	-	-	72
5.4	Recommendations	-	-	-	-	-	-	74
	References		-	-	-	-	-	76

ABSTRACT

This study evaluated the impact of sustainability reporting on financial performance of listed companies in the industrial and consumer goods sector on the Nigerian Exchange Group from 2018 to 2022.

The study was carried out by extracting data from the annual reports for the period on which the descriptive statistics test, correlation analysis and the panel regression analysis were used. Sustainability reporting was represented by economic disclosure, environmental disclosure, and social disclosure, and three research hypotheses were formulated from each of the variables.

The result of the findings revealed that all the variables (economic disclosure, environmental disclosure, and social disclosure) had a positive and significant relationship with financial performance in the selected entities. The study recommends that companies should develop a national sustainability reporting framework for consistent reporting across Nigerian companies, listed entities should integrate sustainability into their corporate strategy and decision-making, investors should consider sustainability disclosures in investment decisions, and educational institutions should incorporate sustainability reporting into curricula to build relevant skills.

CHAPTER ONE

INTRODUCTION

1.7 Background to Study

Profitability and optimum shareholders' welfare are the core objectives of a business. In achieving these primary objectives, the operations of the business organization impact the immediate environment. Globally, reporting how these impacts are dealt with has become a major concern. Sustainability has become a major issue (Akabom & Dada, 2018). As defined by Brundtland (1987) sustainability is ensuring that future generations are able to meet their needs while meeting the needs of present generation. Investors and other stakeholders of business entities are beginning to demand and emphasize the need for sustainable activities and this has led to a rise in sustainable reporting. According to Elkington (2004) sustainability reporting is the disclosure of economic, social, and environmental issues in corporate reporting. Sustainability as a concept holds that social and environmental concerns are in place while an organization strive to maximize profit. Sustainability is an advancement of corporate reporting; it includes standard of performance and actions to positively contribute to the environment where an organization operates (Murray 2010).

Business environment, societies, and employees are increasingly being affected by business activities, which have led to the examination of corporations. Business is faced with consequence from their negligence that are results of noticeable

mismanagement activities. While there are existing practices and procedures prescribed by law to regulate corporate actions and activities, compliance by corporate bodies still waver and corporate mismanagement still prevalent, hence a prominent reason why stakeholders emphasize the need to exhibit socially responsible behavior (Whetman, 2017).

In recent years non- financial reporting such as sustainability reporting has gained coverage. Reports on sustainability are now produced annually by various companies with different reason for disclosure. It has been seen to expand transparency and general disclosure to stakeholders, it has been used as a tool to measure firm's activities towards sustaining the future (Isa, 2014).

As oftentimes ego follow success, when a company consistently desires to attain more, it begins to do so at the detriment of it's social, economic, and natural environment. Known as sustainable practice, these environments are taken into consideration, the damning and obvious activities of the companies are being identified and actions are taken not to disregard societies and environment. Some companies have in attempt begin to direct resources to socially responsible activities, whereas some still believe sustainable or socially responsible activities do not align with profit maximization (Whetman, 2017). As found by Stubbs, Higgins, & Milne (2013) sustainability reporting is seen by some managers to be costly, resource consuming, and immaterial, it is perceived as a means to reduce available resources for core responsibilities and operations of management. It is sometime believed that non-disclosing firms do not have enough resources to engage in sustainable activities

despite wanting to, and pressure does not make them undertake reporting. The findings revealed that management are of the opinion that using organizational resources for reporting is not the only way to deal with firm issues, the findings states that managers are aware of the impact of their activities on the environment.

Organizations over the years have been able to meet through sustainability reporting the growing needs of investors, other stakeholders, and the society at large (Martinez, *et al.*, 2016). Through sustainable reporting environmental, economic, and social impact of corporate activities are disclosed, allowing organizations to increase transparency and reduce information asymmetries (Nobanee and Ellili, 2016). This increased transparency has been seen to aid more accurate valuations, provide investors with greater knowledge that orient their investment towards organizations with more positive impact. It is believed to translate into better positioning for competition (Francarolli Nunes, and Lee pack, 2017) and greater market advantage (Milne and Gray, 2013) for companies, that by disclosing their sustainable behavior, responsibility, and social commitment, are able to obtain social acceptance and legitimacy needed to be successful (Martinez, *et al.*, 2016). In light of this, organizations are beginning to pay more attention to sustainability issues and reporting (Motions, *et al.*, 2017).

1.8 Statement of Research Problem

The pressure on organizations to address sustainable issues is growing, the world is changing. Companies are increasingly being scrutinized to ensure they incorporate actions and activities that reduce their impact on the environment and society.

Sustainability now plays an important role in investment decisions and organizational processes. As the importance grows it leads to a strategic shift in how businesses operate.

Corporate sustainability and financial performance have over the years emerged as an important and significant area of research. It is widely believed and suggested by world leaders and researchers that in today's business environment, corporate profitability and overall performance is likely to be influenced by corporate sustainability. Several studies such as Weber (2017), Alshehhi et al. (2018), Bartolacci and Caputo (2020), etc., have been performed in this area to examine the relationship. The results however have been either mixed or contradictory, reporting sometimes negative and other times positive. Moreover, only few of the previous studies such as Weber (2017), Aifuwa (2020), Nguyen et al. (2021), etc., have been conducted in the context of a developing country and these few have been carried out using a particular focus industry. Though using a single focus industry can offer focused insight, it comes with certain limitations. This study therefore examines the relationship between sustainability reporting and corporate financial performance of mixed industry companies quoted in Nigeria.

In light of the above problem, this research work is motivated to answer the following questions:

- 1) What is the effect of economic disclosure on financial performance of listed entities in Nigeria?

- 2) What is the effect of environmental disclosure on financial performance of listed entities in Nigeria?
- 3) What is the effect of social disclosure on financial performance of listed entities in Nigeria?

1.9 Objectives of the Study

The main objective of this study is to examine the impact of sustainability reporting on financial performance of listed entities in Nigeria. The specific objectives are stated below:

- 1) examine the effect of economic disclosure on financial performance of listed entities in Nigeria;
- 2) ascertain the effect of environmental disclosure on financial performance of listed entities in Nigeria; and
- 3) access the effect of social disclosure on financial performance of listed entities in Nigeria.

1.10 Statement of the Hypothesis

The research hypotheses are stated in the null form. These hypotheses are formulated in line with the specific objectives as follows:

- 1) There is no significant relationship between economic disclosure and financial performance of listed entities in Nigeria.

- 2) There is no significant relationship between environmental disclosure and financial performance of listed entities in Nigeria.
- 3) There is no significant relationship between social disclosure and financial performance of listed entities in Nigeria.

1.11 Scope of the Study

This study covers a period of five years from 2018 to 2022. The population of this study comprises one hundred and fifty-five (155) companies listed on the Nigerian Exchange Group (NGX) as at 31st December, 2022. Data on economic performance, environmental performance, social performance, and financial performance were extracted under the year of study.

1.12 Significance of the Study

The outcome of this research study will significantly contribute to the unresolved issues of sustainability reporting in the Nigeria context. This study would provide added insight on economic disclosure, environmental disclosure, and social disclosure in relation to financial performance. It will increase the level at which companies desire to monitor and report sustainable activities when they see how it affects their corporate performance.

The study would also be of great importance to existing and potential investors as it will help them understand and know what to expect from a reporting and non-reporting firm. Academic researchers would benefit also as it would serve as a guide for further study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter of the study provides a comprehensive overview by exploring existing literature on sustainability reporting and financial performance of listed entities in Nigeria. This segment of the research embarks on a comprehensive exploration of existing literature to illuminate the intricate relationship between sustainability reporting and the financial performance of listed companies in Nigeria. By delving into scholarly works, this review seeks to provide a detailed understanding of sustainability reporting practices and their impact within the context of Nigerian listed entities. The synthesis of conceptual, theoretical, and empirical perspectives aims to unravel the historical evolution of sustainability reporting in response to demands for corporate transparency and accountability. This literature review endeavours to contribute to the scholarly discourse by distilling key themes, methodologies, and gaps in understanding. Through a condensed analysis of relevant studies, it sets the stage for the subsequent chapters, offering a concise overview of the academic conversation surrounding the critical interplay between sustainability reporting, financial performance, and the resilience of listed companies in Nigeria.

2.1 Conceptual review

2.1.1 Sustainability Reporting

Sustainability reporting does not have a single, widely recognised definition. It is a general phrase that refers to the reporting that a business provides on its social, environmental, and economic performance (Mishra & Suar 2010). Although the terms "triple bottom line reporting," "corporate responsibility reporting," and "sustainable development reporting" are sometimes used interchangeably, they now have more defined definitions and are therefore considered subsets of sustainability reporting (Klynveld Peat Marwick Goerdeler KPMG, 2008). The term "sustainability" which was adapted by John in 1994, the founder of the British consultancy Sustainability, is also known as "triple bottom line". He made the argument that companies ought to have three separate bottom lines. One of these is the standard gauge of corporate profitability. In the profit and loss report, the "bottom line." The second is the foundation of a company's "people account," which represents the degree of social responsibility a company has demonstrated throughout its existence in a particular format or manner. The third is the company's "planet" account bottom line, which shows how environmentally conscious it has been. The triple bottom line, also known as sustainability reporting, is composed of the three "Ps": profit, people, and the planet. Its objective is to monitor the firm entity's performance throughout time in terms of finances, society, and the environment (Oncioiu et al., 2020). According to

Aifuwa (2020), the phrase "sustainability reporting" combines the concepts of sustainability and reporting. Sustainability, according to Aifuwa (2020), is about satisfying the needs of the current generation without compromising the needs of future generations. Reporting, on the other hand, is simply defined as disclosing corporate accounting data entirely or partially to different stakeholders who may require corporate information for different purposes. Because of this, corporate disclosure through reporting and accounting for social, environmental, and economic factors is combined to form sustainability reporting.

According to GRI (2019), sustainability reporting is the practice of measuring, disclosing and being accountable to internal and external stakeholders to achieve the goals of sustainable development. According to Umoren and Ukpong (2022), sustainability accounting is a subfield of accounting that deals with the business's operations, procedures, and systems for documenting, evaluating, and reporting the financial effects of environmental and social factors as well as the ecological and social effects of a particular economic system. This approach goes beyond simply creating reports using gathered data; rather, it is a means of enhancing and internalising an organization's dedication to sustainable development in a manner that can be proved to both internal and external parties involved. Akpan and Simeon (2021) state that by providing these disclosures, Businesses inform stakeholders about how they are incorporating sustainable integration into their everyday activities and corporate aims.

Sustainability reporting, according to Schaltegger (2004) in Udomah and Emenyi (2023), is a subset of accounting and reporting that deals with activities, methods, and systems to record, analyse, and report financial impacts that are induced by social and environmental factors as well as ecological and social effects of a defined economic system (such as a company, production site, or nation). Thirdly, the measurement, examination, and dissemination of the connections and interplay among the social, environmental, and economic concerns that comprise the tripartite aspects of sustainability are the focus of sustainability reporting (Ioannou & Serafeim, 2019). Sustainability reporting is defined by Erhirhie and Ekwueme (2019) as corporate disclosure made available by corporate organisations regarding the company's economic, environmental, and social effects caused by the company's everyday operations. The corporate worth and control model as well as the relationship between the company's strategy, policy, and duty to a sustainable global market are all depicted in sustainability reporting. This explanation emphasises that sustainability is a continuous process that business organisations need to mandate and integrate into their whole corporate philosophy, vision, and policy (Ugbogbo, & Obamwonyi, 2023). The increasing recognition that sustainability-related issues can materially affect a company's performance, the demands of different stakeholder groups for higher levels of transparency and disclosure, and the necessity for businesses (and the business community more generally) to appropriately respond to issues of sustainable development have all contributed to the rise in the popularity of sustainability reporting (KPMG, 2008; Ivan, 2009). The Australian Parliament (2010) defines

sustainability reporting as the process by which businesses and organisations quantify and disclose to the public their effects on the economy, society, and environment in order to show their commitment to corporate responsibility.

Sustainability reporting was viewed as a corporate strategy that produced long-term shareholder value by seizing opportunities and controlling risks arising from social, environmental, and economic developments by the Dow Jones Sustainability Index in KPMG (2008). Corporate sustainability leaders maximise shareholder value over the long run by directing their strategies and management to take full advantage of the market's potential for sustainable goods and services while also successfully mitigating sustainability risks and expenses. According to Arndt et al. (2006), sustainability reporting has its roots in environmental or non-financial reporting. It outlines a path for developing the idea of balanced reporting for an organisation, which frequently communicates the triple bottom line approach—also known as social sustainability reporting in business terms—or the three pillars of environmental, social, and economic performance and their interrelationships.

2.1.1.1 History of Sustainability Reporting

The push for corporate sustainability reporting by prominent governments has been gaining momentum, particularly with Brazil, Denmark, France, and South Africa joining forces in support of the United Nations Conference on Sustainable Development (Rio+20). These nations garnered the backing of influential organizations such as the Global Reporting Initiative (GRI) and the United Nations

Environment Programme (UNEP), which have become key players in the realm of sustainability reporting. The GRI has been instrumental in developing frameworks and guidelines that organizations utilize to report their sustainability efforts. These frameworks, including Reporting Guidelines with sustainability indicators, enable organizations to measure and disclose their sustainability performance effectively (Nwobu, 2017).

Furthermore, the United Nations Environment Programme (2012) underscores the importance of partnerships between countries and organizations to achieve sustainable development goals. By providing relevant information, these partnerships aim to improve quality of life for current populations while safeguarding the interests of future generations.

In another significant development, the Corporate Sustainability Reporting Coalition (CSRC), initiated by Aviva in September 2011, drafted a policy advocating for mandatory corporate sustainability reporting as a means to advance towards a green economy. Comprising a diverse coalition of financial institutions, professional bodies, NGOs, and investors with assets totalling US\$2 trillion, the CSRC calls upon member states of the United Nations to establish regulations mandating that companies' boards of directors' address sustainability issues in their annual reports and financial statements. Companies are expected to either integrate significant sustainability concerns into their reporting or provide explanations for their omission (Corporate Sustainability Reporting Coalition, 2012).

While the European Union (EU) generally promotes voluntary sustainability reporting, several EU countries such as Denmark, Finland, Sweden, Belgium, the Netherlands, and Germany have established either legislative or non-legislative bodies to drive social responsibility and sustainability reporting, as noted by Dilling (2010). The Association of Certified Chartered Accountants (2004) highlights that the first sustainability reports in Africa and the Middle East were published in 1993, with reporting gradually gaining traction since then. Notably, a significant portion of corporate sustainability reporting efforts and developments have emerged from South Africa. For example, the King Code II, later revised, in South Africa was recognized as the first in any African jurisdiction to incorporate a comprehensive section on integrated sustainability reporting. The subsequent King III code of corporate governance, effective from 2010, mandates companies to integrate sustainability reporting and disclosures into their financial reports (Integrated Reporting and Assurance Services, 2012).

The United Nations Environment Programme (2013) reveals that in 2012, South Africa, Brazil, Denmark, and France aligned to support paragraph 47 of the UN Conference on Sustainable Development. This paragraph acknowledges the importance of sustainability reporting and urges stakeholders from industry, governments, and non-governmental organizations to collaborate on realizing sustainable development goals. Additionally, governments including Austria, Colombia, Norway, and Switzerland joined the aforementioned countries in endorsing Paragraph 47 of the Rio+20 outcome document (Nwobu, 2017).

In the United Kingdom, the Department for Environment, Food and Rural Affairs (2006) mandates the inclusion of environmental considerations in the Business Review using Key Performance Indicators (KPIs). These KPIs serve as quantifiable metrics reflecting a business's environmental performance in the context of its overarching objectives. Furthermore, environmental issues can pose financial risks if not adequately managed. For instance, insufficient management of factors such as material usage, fuel consumption, energy efficiency, water usage, waste management, and assessment of suppliers based on environmental risks can potentially jeopardize the long-term value of a business (Nwobu, 2017).

The journey towards corporate sustainability reporting in Nigeria is still unfolding, marked by increasing awareness of social and environmental concerns, as highlighted by Okoye and Ngwakwe (2004). This awareness has led to calls for sustainable economic development and a shift towards stakeholder-oriented corporate governance requirements, evident in the revisions made to the Code of Corporate Governance for companies listed on the stock market. Issued by the Securities and Exchange Commission (SEC), Nigeria's stock market regulator, this code now mandates companies to integrate sustainability reporting into their corporate governance practices starting from 2012 (Securities and Exchange Commission, 2011).

In a further step towards promoting sustainability reporting, the Central Bank of Nigeria (CBN) issued a specific circular to financial institutions in September 2012, advising them to include sustainability issues in their corporate reporting by

December 31, 2013, with the aim of producing standalone sustainability reports by December 31, 2014. Financial institutions are thus expected to adhere to a set of sustainable banking principles to facilitate sustainability reporting (Central Bank of Nigeria, 2012). Christofi et al. (2012) advocate for the standardization of disclosures in sustainability reports, arguing that such standardization is crucial because investors have historically been unable to reward companies for adhering to sustainability issues or penalize those that neglect them in their investment decisions. The directives from both the SEC and the CBN for sustainability reporting align with the necessity for standardized practices in this regard. In contrast to some other regions, Africa has shown relatively limited adoption of sustainability reporting practices among stock markets. However, the Johannesburg Stock Exchange in South Africa stands out as one of the few exchanges committed to rules that promote sustainability reporting among listed companies (Nwobu, 2017).

Outside Africa, the Indian Stock Exchange's listing requirement mandates the top 100 publicly quoted companies to disclose environmental, social, and governance issues in their annual reports (United Nations Conference on Trade and Development, 2013). Similarly, several other countries and stock market regulatory bodies, including Pakistan, Malaysia, Canada, the Philippines, Singapore, China, Brazil, and the United States of America, require sustainability reporting for listed companies only (Sustainable Stock Exchange Initiative, 2013).

As per the United Nations Conference on Trade and Development (2013), the Nigerian Stock Exchange has declared its participation in the United Nations Sustainable Stock Exchanges (SSE) initiative, making Nigeria the second African nation to join this endeavour. The SSE initiative aims to explore how stock markets, along with stakeholders such as regulators, investors, and corporations, can collectively promote corporate transparency through disclosures on environmental, social, and governance (ESG) factors, while encouraging responsible investment approaches often associated with Socially Responsible Investing (Sustainable Stock Exchange Brochure, 2012).

The concept of sustainable development, as defined by the World Commission on Environment and Development (1987), entails businesses meeting present needs while ensuring the availability of resources to meet future needs. Business Action for Sustainable Development (2012) underscores the private sector's responsibility in achieving sustainability goals related to national development. The International Institute for Sustainable Development and Deloitte & Touche (1992) advocate for incorporating sustainable development policies and processes within organizations to facilitate sustainable practices in the private sector. This integration is expected to enhance accountability to stakeholders beyond business owners and managers, leading to continuous improvement in reporting practices. Such an approach contrasts with the traditional profit-centric focus of private sector enterprises.

Critiques of sustainability reporting have arisen from concerns that a heavy emphasis on corporate responsibility issues might jeopardize short-term earnings and investors' immediate returns (Murray, 2010). However, while empirical studies have not definitively proven the benefits of businesses' contributions to sustainable development, they have established causal relationships between disclosed sustainability practices and financial performance (Weber and Koellner, 2008; Buys et al., 2011). Corporate disclosure and transparency, particularly regarding expenditures on sustainable development efforts, enable researchers to assess the financial implications, whether positive or negative, of business sustainability initiatives.

Despite some criticisms regarding the pursuit of sustainable development by businesses, Lozano (2013) contends that organizations are increasingly acknowledging their role in fostering sustainable societies. Sisaye (2012) emphasizes that this approach to sustainability has spurred innovations in accounting and reporting systems, leading to greater volumes of social and environmental disclosures to stakeholders such as institutional investors. However, challenges persist, including issues of non-standardization (Sisaye, 2011) and the inability to compare disclosure contents across different companies and industries (Asaolu et al., 2011).

According to the International Federation of Accountants (IFAC) (2006), the accounting profession holds significant responsibility concerning sustainability accounting and reporting. IFAC suggests that Professional Accountants in Business

(PAIB) should go beyond merely collecting, analysing, and reporting sustainability information; they should actively influence sustainability reporting through strategic decision-making. Similarly, Burritt and Schaltegger (2010) argue that accounting for sustainability should inherently lead to sustainability reporting. Zvezdov (2012) advocates for the establishment of systems within organizations to generate, prepare, and publish sustainability-related information to enhance sustainability reporting practices.

Moreover, advancements in sustainability reporting can help managers comprehend the expectations of business stakeholders by linking sustainability performance to long-term shareholder value. Including sustainability performance metrics in annual reports can provide shareholders with a more authentic view of a company's operating performance. As Burritt and Schaltegger (2010) suggest, the more shareholders assess the quality of sustainability performance through a company's share price, the more companies will be incentivized to enhance the quality of their sustainability reporting.

The paragraphs above discuss prior studies that aimed to understand the relationship between disclosures in sustainability reports and share prices. These studies primarily focused on how disclosure of social and environmental aspects influences share price movements. Belkaoui (1976) noted the challenge of isolating the effects of pollution control expenditures on share prices due to various factors influencing market behaviour. Nonetheless, significant changes in share prices were observed for companies disclosing pollution control expenditures.

Similarly, studies by Gupta and Goldar (2005) and Murray et al. (2006) yielded mixed results regarding how the capital market rewards social and environmental activities. Gupta and Goldar found a positive relationship between environmental ratings and abnormal returns to share prices, while Murray et al. found no association between corporate social and environmental disclosures and share price returns. These studies also highlight conflicting results based on the country's level of development, with studies conducted in developed countries like the United Kingdom showing different outcomes compared to those in less developed countries like India (Nwobu, 2017).

Social disclosures, according to Plumlee et al. (2010), provide information that can enhance a company's reputation, reduce liabilities, and lower regulatory costs, suggesting a positive link between future cash flows and voluntary social reporting. Moreover, firms engaging in significant social and environmental activities and disclosing them may experience reduced information asymmetries and lower cost of capital. Hassel et al. (2005) argue that disclosure of a firm's social and environmental impact can positively influence investor decisions. Further studies by Jenkins and Yakovleva (2006) and Momin (2006) explore the potential for firms to contribute to sustainable development through social and environmental responsibility. Murray (2010) suggests that corporate accountability in these areas could lead markets toward more sustainable behaviours. These discussions underline the ongoing debate regarding the relevance of corporate social and environmental disclosures to shareholders and their potential impact on market behaviour.

Within the realm of the capital market, a series of studies (Al-Tuwaijri et al., 2004; Jones et al., 2007; Moneva & Ortas, 2008; Moneva & Cuellar, 2009; Murray et al., 2006; Murray, 2010; Kaspereit & Lopatta, 2011; Khaveh et al., 2012) have explored the relationship between aggregate stock market performance and a firm's sustainability, social, and environmental activities, as indicated by disclosures or performance ratings. These investigations have revealed both positive and negative correlations between stock market performance and corporate disclosures. Al-Tuwaijri et al. (2004) discovered a positive relationship among social disclosures, social performance, and financial performance. Similarly, Moneva and Cuellar (2009) found that companies reputed for social and environmental responsibility tend to enjoy increased market value. Khaveh et al. (2012) reported a significant positive correlation between sustainability reporting and share price, attributing it to changes in investors' perceptions regarding risk and the company's ongoing performance inferred from sustainability disclosures.

However, Moneva and Ortas (2008) observed no association between social and environmental disclosures and capital market performance. Jones et al. (2007) found a weak and negative link between abnormal share returns and sustainability disclosure. Adams et al. (2010) noted that the corporate sustainability label did not notably impact firms' financial performance, although they acknowledged its potential for creating shareholder value.

Furthermore, Kaspereit and Lopatta (2011) observed a decline in the signalling effect of sustainability reporting compared to previous years (2007 and 2008), suggesting that extensive sustainability disclosures could result in lower market values. These findings underscore the complexity of the relationship between corporate sustainability disclosures and stock market performance, with results varying across studies and over time.

2.1.1.2 Standards and Guidelines on Sustainability Reporting

A variety of standards, guidelines, and organizations play a pivotal role in shaping the landscape of sustainability reporting, as identified by Muller (2011). These include the Carbon Disclosure Project (CDP), International Standards Organization (ISO), Global Reporting Initiative (GRI), Greenhouse Gas Protocol, and United Nations Global Compact (UNGC). Oversight of sustainability disclosures and reporting is conducted by both major accounting firms, known as the "big four" (Klynveld Peat Marwick Goerdeler - KPMG, PricewaterhouseCoopers - PwC, Ernst & Young, and Deloitte), as well as non-"big four" entities such as Accountability principles, International Federation of Accountants (IFAC), and other consulting firms not affiliated with accounting.

Among these, the Global Reporting Initiative (GRI) stands out as a leading organization in corporate reporting, dedicated to promoting sustainability reporting across government, business, and non-profit sectors to contribute to sustainable development. The latest iteration of GRI's reporting principles and standard

disclosures, known as G4, was released in July 2013 (GRI, 2013a). Prior iterations include G3.1 (2011), G3 (2006), G2 (2002), and the 2000 guidelines. The G3.1 guidelines, for instance, categorize standard sustainability disclosures into strategy and profile, management approach, and performance indicators (Global Reporting Initiative, 2011). Organizations reporting based on GRI guidelines can declare their adherence level, categorized as C, B, or A. With external assurance from accounting firms, certification bodies, or sustainability consultants, organizations can further declare their application levels as C+, B+, or A+. It's important to note that the provider of assurance offers an opinion on the organization's declaration of adherence to the guidelines (GRI, 2011).

G4, the latest GRI guideline, emphasizes increased integration of sustainability reporting into financial reporting and aligns with other reporting standards such as the UNGC Principles and Guidelines for Multinational Enterprises by the Organization for Economic Co-operation and Development (OECD) (GRI, 2013a; KPMG, 2013). This alignment reflects the advocacy of Eccles and Krzus (2010) for integrated reporting, where sustainability disclosures are integrated with financial disclosures. Notable changes in G4 compared to G3.1 include heightened emphasis on materiality, clearer delineation of reporting boundaries, revised nomenclature for application levels, new governance disclosure requirements, and enhanced supply chain reporting requirements (GRI G4 guidelines summarized in KPMG, 2013), including ten new standard disclosures on governance and supply chain impacts.

The United Nations Global Compact (UNGC) operates on principles encompassing human rights, labour, environment, and anti-corruption issues, primarily focusing on the social and environmental aspects of sustainability. The United Nations Environment Programme (UNEP) is tasked with leading and fostering partnerships to promote environmental care, aiming to enhance the quality of life both presently and in the future (United Nations Environment Programme, 2012).

IPIECA, a global oil and gas industry association, offers voluntary sustainability reporting guidelines tailored to businesses in this sector. The International Standards Organization (ISO) develops and publishes international standards ensuring materials, products, processes, and services meet their intended purposes. The Carbon Disclosure Project (CDP) provides a platform for organizations to disclose and manage information related to their environmental performance concerning sustainability issues. Similarly, the Greenhouse Gas Protocol aids organizations in measuring and managing greenhouse gas emissions, crucial for corporate accountability regarding environmental operations and stakeholder relationships (Nwobu, 2017).

Accountability, a non-profit organization, introduced the AA1000 stakeholder engagement standard, emphasizing that quality sustainability disclosures hinge on quality stakeholder engagement (Accountability, 2011). The AA1000 Accountability Principles Standard (AA1000APS) framework assists businesses in identifying, prioritizing, and reporting on sustainability issues and performance. The International

Standards on Assurance Engagements (ISAE) 3000, developed by the International Federation of Accountants (IFAC), provides guidance to accounting professionals on sustainability and corporate responsibility matters (International Federation of Accountants, 2010). IFAC, an internationally recognized body of accountants, includes several national accountancy associations such as the Institute of Chartered Accountants of Nigeria and the Association of National Accountants of Nigeria. These standards, guidelines, and organizations collectively contribute to shaping and advancing sustainability reporting practices globally.

Echegaray et al. (2008) and Ernst and Young (2013) emphasize that sustainability reporting is a rapidly expanding field, urging organizations to seize the opportunities it presents by addressing pertinent issues. Adebite et al. (2012) assert that integrating sustainable practices into business operations can enhance shareholder value, improve market share, and bolster competitiveness. According to the Center for Corporate Citizenship and Ernst & Young LLP (2013), sustainability reporting delivers significant value to organizations by facilitating accurate measurement of social and environmental performance, enhancing reputation, ensuring compliance with regulations, managing risks, achieving cost savings, thereby enhancing long-term profitability and facilitating access to capital.

In Nigeria, the Securities and Exchange Commission (SEC) (2011) mandates organizations to disclose specific information as part of their engagement with stakeholders. Boards of directors are expected to annually report on sustainability

issues, including the company's social, ethical, safety, health, and environmental policies and practices. However, this requirement is narrower compared to the comprehensive framework provided by the G3.1 guidelines. Additionally, the Central Bank of Nigeria (CBN) (2012), the regulator of banks and financial institutions, issued a circular in September 2012, mandating sustainability reporting for organizations in the financial sector. Unlike the SEC's Code of Corporate Governance, the CBN's guidelines on sustainability reporting are more extensive and comprehensive.

Specifically, companies in the financial services sector are mandated to report on various aspects related to environmental and social responsibility. This includes the development of appropriate environmental and social policies, implementation of corresponding procedures, establishment of reporting criteria, and the implementation of environmental management programs targeting climate change mitigation and greenhouse gas emission reduction, water efficiency, waste management, and environmentally friendly facility construction and management. Furthermore, these reports should ensure compliance with relevant labour and social standards, the execution of community investment programs, and the application of environmental and social standards pertinent to third parties. Financial institutions were required to report on the progress of implementing these principles by December 31, 2013, and produce their first complete sustainability report by December 31, 2014. These reports could either stand alone or be integrated within annual reports. Compliance with Global Reporting Initiative (GRI) guidelines specific to the financial sector was

also expected. Additionally, independent third-party review and assurance were deemed necessary, with regulators requiring banks to have their information assured and audited (Nwobu, 2017).

The sustainability reporting guidelines for banks and financial institutions are notably more comprehensive than the disclosure requirements outlined in the SEC Code of Corporate Governance. Moreover, their adherence to these guidelines may exert influence on other business organizations outside the financial sector to comply with sustainability reporting standards. This influence stems from the potential need for financial support or assistance from the financial services sector, thus incentivizing non-financial sector entities to align with sustainability reporting requirements.

2.1.2 Economic Disclosure

Economic disclosure, also referred to as economic sustainability reporting, is geared towards maintaining the integrity of capital. Economic sustainability seeks to enhance the standard of living. In the business context, it involves the efficient utilization of assets to sustain company profitability over time (Ihimekkpen, 2021). According to Panigrati (2015), environmental disclosure refers to the provision of information that allows for the evaluation of a company's actions regarding its environment, including the economic consequences of each action. This disclosure encompasses both financial and non-financial information. Ejoh et al., (2014) defined environmental disclosures as a collection of information concerning a company's historical, current, and prospective environmental activities. Ong, Tho, Hoh, Thai, and The (2016)

described environmental disclosures as statements that illustrate a company's environmental initiatives, including its objectives, policies, and impacts on the environment. These disclosures are typically reported and published annually for the general public. Dibia and Onwuchekwu (2015) suggested that environmental disclosures enable companies to gauge public perception regarding their operations. They serve as a means of communication between the company and its stakeholders, highlighting the importance of disclosure due to the significant impact of corporate activities on the environment (Abubakar et al., 2017). Economic reporting encompasses various aspects such as financial performance, initiatives aimed at influencing demand for products and services, employee compensation, contributions to the community, and policies regarding local procurement. Economic variables primarily focus on the bottom line and the flow of money, including aspects like income, expenditures, taxes, business climate factors, employment, and business diversity. Examples of specific economic variables include personal income, cost of underemployment, establishment churn, establishment sizes, job growth, employment distribution by sector, percentage of firms in each sector, and revenue by sector contributing to gross state product (Udomah & Emenyi, 2023).

Hakeem (2014) defines corporate economic reports as documents that elucidate the impact of business operations on investments and evaluate their future implications for management, the community, and shareholders. According to Yuni (2018), economic activities aid companies in establishing and maintaining high-quality relationships with shareholders and society at large. Mohammed et al., (2017)

characterize economic information as quantitative corporate data voluntarily disclosed by firms through financial statements to ensure its reliability for stakeholders. The concept of corporate economic sustainability necessitates organizations to adopt a broader perspective on their responsibilities, extending beyond shareholders to encompass various stakeholders such as employees, suppliers, consumers, the local community, governmental entities, environmental groups, and other interest groups (Darus et al., 2020). Additionally, Darus et al. (2020) found that companies with higher levels of profitability tend to disclose more information regarding economic responsibility activities. Disclosure of economic performance can bolster corporate reputation and mitigate financial risks, indicating that companies engaged in economic and social disclosures are less likely to face bankruptcy compared to those that do not engage in such practices (Ezeagba et al., 2017).

According to Udomah and Emenyi (2023), profit, within the context of sustainability, represents the economic value generated by an organization after subtracting the costs of all inputs, including the cost of capital employed. This definition of profit differs from traditional accounting interpretations. Within a sustainability framework, the concept of "profit" extends beyond internal financial gains and encompasses the real economic benefits experienced by the broader society. It reflects the genuine economic influence that the organization exerts on its economic surroundings. While internal profit remains a crucial factor in this calculation, it serves merely as a foundational aspect within the broader context of societal economic impact.

As emphasized by the UK Government (Annual Report 2000, January 2001), maintaining high and stable levels of economic growth is a fundamental objective of sustainable development. Thus, abandoning economic growth altogether is not considered a viable option. However, sustainable development transcends mere economic growth, with equal importance placed on the quality of growth alongside its quantity. Critics of this traditional model highlight a significant deficiency in modern accounting practices, which fail to account for the costs associated with environmental damage within market prices (Hawking, 2010).

A more contemporary approach to economics acknowledges the inadequacy of incorporating ecological and social factors within the traditional economic model. This new paradigm, often referred to as new economics, recognizes the significance of natural capital (ecological systems) and social capital (interpersonal relationships), challenging the prevailing notion that continuous growth is inherently beneficial and that bigger is always better, especially when it jeopardizes the ecological and human systems (Benn et al., 2014).

2.1.3 Environmental Disclosure

Environmental disclosure, which has evolved into sustainability reporting, has emerged as a pivotal aspect of accounting and environmental management, particularly over the last two decades (Gray, 2014). Serving as a strategic framework, environmental disclosure facilitates a comprehensive reassessment of corporate performance. Despite not being a novel concept, environmental disclosure remains a

subject of significant academic interest and a highly debated issue among business managers and stakeholders alike. Defined by Deegan and Rankin (1996), corporate environmental sustainability reporting, also known as environmental disclosure, pertains to how a company communicates the environmental impacts of its activities to specific interest groups within society and to society at large. Through environmental communication, companies endeavour to shape public perceptions of their operations. Companies endeavour to portray a positive image through their engagement with the environment, encompassing various aspects such as responsible utilization of natural resources, minimizing their impact on ecosystems, adherence to environmental regulations, leadership in combating climate change, adoption of energy-efficient practices, investment in renewable energy sources, conservation of natural resources, implementation of pollution prevention programs, formulation of strategies for sustainable development, and initiatives to engage stakeholders in environmental improvement efforts. Given that accounting serves as the primary mechanism for collecting and analysing corporate information within the realm of environmental accounting, it becomes incumbent upon someone to provide explanations regarding resource utilization (Schaltegger & Burritt, 2000). Consequently, the objective of environmental accounting is to compile environmental reports for interested parties. According to the European Environmental Agency (EEA, 1998), environmental reports serve as the primary means for companies to communicate their environmental efforts, providing a transparent and credible overview of their environmental activities.

Environmental reports serve as a means to inform stakeholders about a company's environmental responsibilities, promoting transparency in business operations and establishing a reputation as a responsible contributor to environmental protection and community well-being. A critical prerequisite for effective environmental reporting is the establishment of an environmental management system, serving as the basis for substantive environmental accounting (Gray, 2014). Thus, integrating and aligning environmental management systems with environmental accounting practices is essential for comprehensively addressing environmental aspects. Environmental information disclosure can be seen as a tool to aid in the management of valuable environmental resources (Batra, 2013), demonstrating a company's commitment to addressing environmental concerns. However, implementing environmental accounting, collecting environmental data, and preparing environmental reports pose significant challenges. Numerous obstacles can impede this process, as highlighted in prior research. Factors such as knowledge gaps, attitudes of owners and managers, availability of human and financial resources, customer perceptions, operational structure of the company, and regulatory requirements all play a role in influencing the implementation of environmental practices (Doody, 2010). Hillary and Burr (2011) identified several barriers to the implementation of environmental management that could also affect the adoption of environmental reporting processes. These barriers include the failure to involve employees in environmental management processes, a lack of internal expertise, complexity in management systems, unclear benefits, limited human resources, and the cost associated with obtaining external support.

Corporate environmental disclosure serves as a crucial tool for enhancing communication, demonstrating accountability regarding environmental issues, and providing valuable information for decision-making. It encompasses systematic and comprehensive statements regarding environmental impacts and efforts within an organization's activities, including environmental policies, objectives, programs, outcomes, and organizational structures. This aligns with the general principles of environmental reporting outlined by the Ministry of the Environment of the Japanese Government (2004).

Corporate environmental reporting plays a crucial role within sustainability reporting frameworks by instilling discipline and promoting long-term thinking within companies. According to the Association of Certified Chartered Accountants (ACCA, 2013), it helps raise awareness of sustainable practices throughout the organization. These reports are the outcome of implementing internal systems for collecting, analysing, and processing data on environmental aspects, reflecting a systematic and formal approach to addressing environmental impacts and integrating environmental considerations into business processes. As societal expectations for companies to consider their environmental footprint continue to grow, accounting and disclosure of environmental matters have become integral components of environmental management (Batra, 2013). This trend underscores the importance of corporate environmental reporting in ensuring transparency, accountability, and effective management of environmental impacts.

2.1.4 Social Disclosure

Social sustainability encompasses enhancing human resource-related practices (e.g., training and development, health and safety of employees, diversity, equal opportunity, and wage discrimination issues); addressing consumer issues (e.g., health and safety of customers, product labelling, communication practices, customer complaints, and compliance with product laws); safeguarding human rights (e.g., freedom of association, elimination of child labour issues, non-discrimination and other safety measures, etc.); and addressing other issues of broader stakeholders and community concerns (GRI 3.1 2011). The organisations' ethical stance, which acknowledged the need of social responsibilities in addition to their primary goal of profit maximisation, helped the concept acquire traction.

Social sustainability encompasses a company's dedication to conducting its operations in a socially and environmentally responsible manner while simultaneously pursuing its economic objectives. This commitment extends to the company's interactions with all stakeholders, including market-related stakeholders such as customers, shareholders, and suppliers, as well as internal stakeholders like employees and the board of directors, and societal stakeholders such as government bodies and non-governmental organizations (NGOs). The recognition of various stakeholders and their concerns typically leads to the adoption of corporate responsibility practices that address economic, environmental, and social dimensions (Zink & Steimle, 2008). Social sustainability is not merely a philanthropic endeavour or a response to external

pressure; rather, it is a strategic business decision that contributes positively to the company's bottom line (Akinyomi, 2013). McWilliams and Siegel (2001) define social sustainability as engaging in activities that go beyond legal requirements and are not primarily aimed at benefiting the company but rather the broader society. Similarly, social sustainability entails a steadfast commitment by businesses, irrespective of their industry or sector, to conduct themselves in a manner that aligns with ethical principles and contributes to economic development by enhancing the well-being and quality of life for individuals within society.

Mughal (2014) contends that social sustainability involves a persistent commitment by businesses to align their behaviour with ethical principles and contribute to economic development, a notion that has become integral to governance frameworks. Tilt (1999) describes social sustainability as a mechanism through which companies disclose the social and environmental dimensions of their activities to stakeholders. Additionally, it involves the communication of information—both financial and non-financial—regarding the resources and social performance of the reporting entity (Dutta & Bose, 2007). Moreover, social sustainability is characterized by an organization's commitment to operating in an economically and environmentally sustainable manner while also acknowledging the interests of all its stakeholders (Carrol, 1991). However, Dahlsrud (2008) suggests that social sustainability is a socially constructed concept that lacks a universally applicable definition. Nonetheless, the success of any organization's corporate social disclosure depends on its corporate social orientation, values, and ethical stance (Logsdon & Yuthas, 1997).

The European Commission (2002) offered a comprehensive definition of social sustainability, emphasizing that corporate social responsibility extends beyond legal requirements and economic goals. It encompasses a wide range of responsibilities that encompass social and environmental aspects, where "social" encompasses society in a broad sense rather than just social policy issues (Ihimekkpen, 2021). Rahman (2011) further delved into the dimensions of the social sustainability concept, identifying ten dimensions that it covers: duty to society, stakeholders' involvement, enhancing life quality, economic development, moral business conduct, observance of the law, voluntarism, human rights, environmental protection, transparency, and accountability.

2.1.5 Financial Performance

Financial performance is a topic that has garnered considerable interest among scholars across various disciplines of business and strategic management (Jat, 2006). Moreover, it has been a central focus for business practitioners, including managers and entrepreneurs across different types of organizations. This focus stems from the recognition that corporate performance plays a pivotal role in the success of organizations, as it reflects their effectiveness and efficiency in managing operations and their overall contributions to the welfare of stakeholders. Conversely, organizations with poor financial performance often attribute their shortcomings to a lack of these essential attributes (Makhamreh, 2008).

Performance is indeed a complex concept, both in terms of its definition and measurement. It has been conceptualized as the outcome of activities, with the appropriate measure chosen to assess corporate performance depending on the type of organization being evaluated and the objectives sought through that evaluation (Hunger & Wheelan, 1997). According to the Encyclopaedia of Business (2011), performance measures can be broadly categorized into two types: those related to results (such as competitiveness or financial performance) and those focusing on the determinants of these results (including inputs like quality, flexibility, resource utilization, and innovation). This suggests that frameworks for measuring performance can be constructed around the concepts of both results and determinants. Zuriekat et al., (2011) view performance measurement systems as information systems used to assess both individual and organizational performance. Historically, companies have predominantly relied on financial performance measures as the basis for performance evaluation. Financial ratios, as highlighted by Lin and Liu (2005), are commonly used indicators for evaluating a firm's performance. These ratios are derived from the financial statements, providing a preliminary reference for analysing business performance. Osioma (1996) concurs, stating that financial ratios relate different values within the financial statements to each other, serving as measures or standards against which performance is evaluated.

Indeed, the traditional approach to measuring a firm's performance often revolves around financial ratios, as they offer a straightforward means of evaluating a company's financial health and performance over time (Ihimekkpen, 2021). These

ratios are typically derived from financial statements or stock market data and provide valuable insights into various aspects of a firm's operations. Berger and Patti (2002) note that common measures of firm performance include ratios calculated from financial statements or stock market prices, such as industry-adjusted operating margins or stock market returns. Glautier and Underdown (2001) emphasize two primary aspects of a company's financial performance that are of interest to investors. First, investors assess a company's ability to generate profit, which aligns with the conventional view that profit maximization leads to efficient resource allocation in competitive markets. Profitability, therefore, is often considered the most suitable measure of a firm's financial performance (Pandey, 2005; Hill & Jones, 2009).

In assessing a company's financial performance, efficiency ratios play a crucial role by examining the relationship between profit and various financial metrics such as sales or assets employed. Additionally, the value of a company's shares to investors is another important aspect of financial performance, often evaluated through ratios like earnings per share, dividend yield, and price/earnings ratios (Said & Tumin, 2011). Profitability ratios, which are a subset of financial ratios, are specifically designed to measure a firm's overall profit performance. Pandey (1995) and Khan and Jain (2004) highlight that profitability ratios can be based on either sales or investment. These ratios provide insights into a company's profitability, management efficiency in utilizing capital, and the turnover of invested capital (Osisioma, 1996). Osisioma (1996) identifies several key profitability ratios, including return on capital employed (or return on investment), return on equity, net profit margin, and gross profit margin.

Return on capital employed measures the efficiency of capital utilization, while gross profit margin and net profit margin assess the profitability of a company's operations. Moreover, earnings per share (EPS) is a widely used measure of performance, indicating the net profit attributable to each ordinary share outstanding. EPS is crucial for investors as it provides insights into the company's ability to generate profits on a per-share basis (Ofoegbu, 2003). For the purpose of this study, we're solely focusing on return on capital employed (ROCE) as our performance measure. ROCE assesses how efficiently a company generates profits from its capital investments. It provides valuable insights into capital utilization efficiency and overall profitability, making it a key metric for our analysis.

2.1.5.1 Return on Capital Employed

The return on capital employed (ROCE) ratio measures how efficiently a company utilizes its capital to generate profits (Averkamp, 2020). ROCE calculates the earnings before interest and taxes (EBIT) generated by a company relative to the total capital employed in its operations (Ihimekkpen, 2021). Specifically, ROCE is determined by dividing EBIT by capital employed. Capital employed refers to the sum of a company's shareholders' equity and debt liabilities. In simpler terms, capital employed can be calculated as total assets minus current liabilities (Ihimekkpen, 2021). Rather than using capital employed at a single point in time, analysts and investors frequently use the average capital employed over a period, calculated as the mean of opening and closing capital for the timeframe analysed (Averkamp, 2020;

Kuruez et al., 2008). A higher ROCE indicates a company is more effectively utilizing capital to generate profit. Ideally, ROCE should exceed a company's cost of capital, as a lower ROCE suggests inefficient use of capital that does not maximize shareholder value (Kuruez et al., 2008). Adjustments to the formula may be required in some cases to portray a more accurate ROCE. For instance, excess cash not actively used in operations may need to be deducted from capital employed to avoid distorting the ratio (Averkamp, 2020).

In general, investors tend to prefer companies with steady, rising ROCE over those with volatile fluctuations year-to-year (Kuruez et al., 2008). ROCE is especially useful for comparing capital-intensive sectors like utilities and telecommunications since it accounts for both equity and debt financing, unlike return on equity (ROE) which only considers equity capital (Wang, 2022). This provides a more complete representation of performance for leveraged companies. Monitoring ROCE over time can indicate improving or worsening efficiency in utilizing capital to generate profits. Companies aim to maintain stable, increasing ROCE to demonstrate effective use of investment and appeal to shareholders (Averkamp, 2020; Wang, 2022). Sudden ROCE declines may reflect emerging issues with profitability and capital management. Overall, ROCE serves as a key metric for assessing a company's profit generation relative to its invested capital.

2.2 Theoretical Review

There are several theoretical perspectives that can be employed to explain corporate sustainability reporting motivation. These include legitimacy theory, Voluntary Disclosure Theory, political economy theory, stakeholder theory, and agency theory.

2.2.1 Legitimacy Theory

The theory originated from Dowling and Pfeffer in 1975 and posits that a company's existence is justified only if it can fulfil the societal expectations within its operating environment (Awa, 2021). Legitimacy theory suggests that organizations strive to maintain their operations in alignment with the norms and expectations of their societies. According to this theory, external stakeholders expect the company to conduct its activities transparently and in compliance with legal and economic principles (Ihimekkpen, 2021). The theory is based on the premise that accounting for sustainable development, along with the role of management accounting in sustainable development, serves as communication tools to convey and potentially influence the perception of the entity's actions (Mistry et al., 2014). The goals of this theory include elucidating the connection between a company and the community, elucidating the reasons behind companies' social and environmental disclosures, illustrating how companies employ legitimacy strategies, and assessing the effects of social and environmental disclosures on the public and society. Legitimacy theory can be viewed as a conceptual framework built on the notion of social and reciprocal relationships between a company and the community. Legitimacy theory may assist

in forecasting management's reactions to events or crises and in elucidating the reasons behind companies' actions in such situations.

Legitimacy theory can be understood as a framework of general principles that rationalize environmental disclosure practices. By seeking to elucidate the motivations behind social and environmental disclosures, it provides insight into a company's behaviour towards the community and sheds light on whether the relationship between them is contributory or detrimental. This theory aids in understanding the underlying motivations for such disclosures across various companies, regardless of their specific activities. In a global context where economic activities consistently result in environmental damage, regulation is perceived as a remedy, according to Everett and Neu (2000). Gray (1996) observed that for environmental reporting to be comprehensive, consistent, and valuable, it must be regulated. Conversely, Deegan (2000) contended that stakeholders have an ongoing entitlement to be informed about a company's environmental impacts, regardless of whether management is prompted to act by legitimacy-threatening incidents. Regulation might be essential to guarantee that this right to information is fulfilled. Gray (1992) highlighted that the information disclosed in companies' statements has typically been dictated by the categories established in law, suggesting that these categories could potentially be broadened to encompass social and environmental impact information, possibly through quasi-legal means.

Legitimacy theory emerged as a pertinent framework for examining the factors influencing sustainability reporting in this study. This theory is particularly relevant as it elucidates the dynamics of the relationship between corporate entities and the broader community. It sheds light on the motivations behind companies' decisions to disclose social and environmental information, elucidates the strategies they employ to maintain legitimacy, and assesses the impact of such disclosures on the public and society at large. This theory can be effectively applied to the Nigerian context, especially in light of environmental controversies such as the dispute over environmental degradation in Ogoni Land, Rivers State. This conflict led to changes in environmental legislation, resulting in heightened civil and criminal penalties. Consequently, financial stakeholders have been compelled to incorporate environmental considerations into their risk and return assessments.

2.2.2 Voluntary Disclosure Theory

Voluntary disclosure theory, initially proposed by Brammer and Pavelin (2008), originates from agency theory. It revolves around the idea that voluntary disclosures are aimed at reducing information imbalances among the firm, external stakeholders, and primary agents in the investment community. This theory operates within the framework of agency theory, which elucidates the extent of information disclosure. According to the voluntary disclosure theory, companies with strong environmental performance are expected to openly communicate their environmental impacts and

activities to stakeholders. This theory suggests that such disclosures help reduce information asymmetry for both current and potential investors, thereby lowering information risk (Brammer & Pavelin, 2008). Voluntary disclosure has the potential to confer a competitive advantage by showcasing a company's environmental initiatives and their effects on the environment. This transparency ensures stakeholders receive both positive and negative news from the company. Environmental investments may not yield immediate higher returns, but by disclosing such efforts, companies demonstrate their commitment to long-term sustainability. In contrast, a lack of or minimal disclosure may lead stakeholders to perceive the firm's environmental strategy as inadequate (Clarkson et al., 2011). High-performing companies in environmental sustainability are known for their comprehensive disclosure of environmental matters. They are confident that their strengths outweigh any weaknesses and are unafraid of stakeholder reactions. This superior quality of disclosure sets them apart from weaker performers in environmental sustainability (Clarkson et al., 2008).

2.2.3 Political Economy Theory

Gray et al. (1996), as cited in Deegan (2007), defines political economy as the overarching framework encompassing the social, political, and economic dimensions within which human activities unfold. This theoretical perspective acknowledges the presence of power dynamics and conflicts among different societal groups, highlighting the ongoing struggles for influence and control within society. The

perspective endorsed in political economy theory posits that society, politics, and economics are intricately interconnected, suggesting that economic phenomena cannot be adequately understood without considering their political, social, and institutional contexts. It is argued that by taking into account the political economy, researchers can better analyse broader societal factors that influence how organizations function and determine the information they choose to disclose. Building on this notion, Guthrie and Parker (1990) underscored the significance of accounting within a political economy framework. They described accounting reports as multifaceted documents with social, political, and economic implications, serving as instruments for shaping, upholding, and legitimizing economic and political structures, institutions, and ideological perspectives that align with the interests of corporations. Political economy theory posits that society, politics, and economics are intertwined, emphasizing that economic phenomena cannot be fully understood without considering the political, social, and institutional context in which they occur. By examining political economy, researchers are able to delve into broader questions surrounding the information choices made by companies in their annual reports (Kent & Stewart, 2008).

2.2.4 Stakeholder Theory

This study was grounded in stakeholder theory, as conceptualized by Edward Freeman in 1984. Stakeholder theory is a prominent framework in social, environmental, and management research. Scholars define stakeholders as individuals

or groups who have the ability to impact or be impacted by the activities of a business entity. Alternatively, stakeholders can be described as individuals or groups who rely on the firm to achieve their own objectives, and upon whom the firm relies for its continued existence (Ihimekkpen, 2021). Stakeholder theory gained prominence in organizational and management research following the release of "Strategic Management: A Stakeholder Approach" by Edward Freeman in 1984. This theory explores the optimal functioning of businesses and how they can effectively operate. It focuses on value creation, trade dynamics, and effective business management. According to Freeman (1984), stakeholder theory asserts that companies have a moral duty to acknowledge and appropriately address the interests of all stakeholders. Thriving organizations prioritize the welfare of diverse stakeholder groups, including shareholders, creditors, employees, suppliers, customers, communities, and the general public (Hill & Jones, 2012). The stakeholder theory has emerged as a fundamental framework for companies to manage their relationships with stakeholders through social and environmental reporting. Sustainability reporting is viewed as a strategic tool through which organizations engage stakeholders and mitigate information asymmetry (Ihimekkpen, 2021). The theory posits that organizations prioritizing stakeholders' needs often exhibit superior performance compared to those that do not (Masud et al., 2017). This notion is relevant to the study as sustainability reporting involves integrating environmental, social, and economic aspects into an organization's reporting and communication practices,

reaching a broader stakeholder audience (Cheng et al., 2014). This dissemination of crucial information has been shown to enhance firm performance.

2.2.5 Agency Theory

The agency theory, initially formulated by Alchian and Demsetz (1972) and further elaborated by Jensen and Meckling (1976), primarily addressed the beneficial aspects of the agency relationship within corporations. The agency theory elucidates the contractual dynamics between owners and managers, wherein managers, operating under conditions of uncertainty and imperfect oversight resulting from the separation of ownership and control, make decisions geared towards self-maximization. Additionally, the theory posits that managers, acting as agents, may engage in opportunistic behaviour that runs counter to the interests of owners, potentially eroding shareholders' wealth (Hamid, 2008). Moreover, Sanda et al. (2005) elaborated that the existence of information asymmetry might compel agents to prioritize their own interests over those of the principal. Consequently, without sufficient public information provided by companies, investors' perception of risks escalates substantially (De Islers & De Villiers, 2012). This leads to the market undervaluing shares or requiring higher returns from firms that do not disclose information adequately. Sustainability reporting serves to mitigate information asymmetry and perceived risks among investors, thereby enhancing market efficiency and reducing firms' cost of capital (Dhaliwal et al., 2011). Examining this theory, one can infer that its limitation lies in its exclusive focus on the relationship between

owners and management, neglecting other stakeholders such as the government, customers, suppliers, and the local community where the business operates. However, sustainability reporting addresses this gap by reducing information asymmetries between principals and agents, thereby enhancing transparency and accountability to all stakeholders.

2.3 Empirical Review

Agutu & Githira (2023) analysed the relationship between Sustainability reporting and financial performance of listed financial firms in Kenya. The study used environmental sustainability, social sustainability and governance sustainability (ESG) as independent variables while financial performance (Return on equity) was used as the dependent variable. A sample of 23 financial institutions listed on the NSE was employed. Secondary data was adopted for the study, the secondary data was obtained from the published annual reports. The data collected were analysed through descriptive and inferential statistics. Modelling was further adopted through feasible generalized least squares (FGLS) to counter the problem of first order serial correlation. The findings indicate a positive and significant relationship between ESG reporting and the financial performance of listed financial firms in Kenya. The results imply that firms should embrace sustainability since ESG drives corporate strategies and will help firms to improve their performance, which will bring improved resilience. Focus on the triple bottom line enables value maximization for the three Ps – profit, people, and planet – thus facilitating sustainable development. The

harmonization of reporting guidelines which is process-driven rather than content driven minimize greenwashing by firms. Lastly, industry players should ensure the availability and quality of ESG data.

Anumaka (2023) examined the effect of economic sustainability reporting on the financial performance of selected quoted industrial goods sector in Nigeria. The study adopted cross-sectional, longitudinal research design. Three different profitability indices were used in the study as endogenous variable they include Return on Assets (ROA), Return on Equity (ROE), and Earnings per Share (EPS) while Economic Disclosure Indices (ECDI) was employed as exogenous variable and Firm size as control variable. Three multiple regression models relating proxies of the exogenous variable (social disclosures) to the proxy of endogenous variable (financial performance indicators) were empirically analysed to achieved the objectives of the study. A sample of five (5) industrial goods companies quoted on the Nigerian Stock Exchange was adopted. Data used for the study predominantly came from secondary sources. Data were extracted from 2011 to 2017 audited annual financial statement and accounts of the study firms, capturing the variables of interest. The data collected were analysed through pooled regression, and correlation random effect models. The study revealed that economic sustainability disclosures index of industrial-goods sector has a negative but insignificant relationship with performance indices on return on asset (ROA), negative relationship and significant on return on equity (ROE) and positively and insignificant related to earnings per share (EPS). Based on the findings, it is recommended that, corporate organizations should have positive disposition

towards their capital providers and other important stakeholders for more general economic distribution operating costs, employee salaries and wages and other community investment and disclose more of this information in their annual reports.

Alhassan et al., (2021) assessed how sustainability reporting affects the financial performance of listed industrial goods companies in Nigeria. For a period of ten years, from 2011 to 2020. The study adopted a multiple regression model. Economic performance disclosure, Social performance disclosure and Environmental performance disclosure were used as explanatory variables, while Return on Assets, Return on Equity and Earnings per Share were employed as dependent variables. The study employed a sample of twelve (12) industrial goods companies that were quoted on the Nigerian Stock Exchange (NSE). Data were gathered from secondary sources such as fact books and financial statements of the companies. The data collected were statistically analysed using Pearson correlation coefficient and multiple regression analysis. The findings of this study demonstrated that, at a 5% level of significance, sustainability reporting (as measured by economic, environmental, and social performance indices) has a positive significant effect on return on assets, return on equity and earnings per share. The study proposes, among other things, that a standardized Sustainability Index be adopted, since this will assist to put pressure on firms to pay greater attention to their environment and take sustainable development issues more seriously.

Awa (2021) examined the effect of sustainability reporting on the financial performance of manufacturing firms in Nigeria from 2015-2020. The study used Community Relations Disclosure, Employee Relations Disclosure, Board Compositions Disclosure, and Environmental Disclosure as independent variables while Returns on Asset was used as the dependent variable. A sample of ten (10) listed manufacturing companies in Nigeria was selected using stratified sampling and random sampling method. Ex-post research design was adopted using secondary data obtained from annual reports of selected manufacturing firms in Nigeria, covering 2015-2020. The data collected from annual reports were analysed using panel least square regression technique based on the fixed effect of the regression model. The findings showed that community relation disclosures and employee relation s disclosures have negative and significant effect on the return on assets, while board composition and environmental disclosures have positive and significant effect on return on assets of selected manufacturing firms in Nigeria. It was concluded that sustainable reporting components of community relation, environmental reporting, and employee relation as well as board composition had mix effects on the performance of manufacturing firms. It was recommended that managers of these firms should incorporate sustainable reporting and ensure effective disclosure reporting into their financial statements.

Okon et al., (2023) examined the effect of sustainability reporting on the financial performance of listed oil and gas firms in Nigeria from 2012 to 2021. Social sustainability disclosure, Health and safety sustainability disclosure, and

Environmental sustainability disclosure were used as independent variables while return on capital employed was used as dependent variable. The study made use of a sample of twelve (12) oil and gas firms that were listed on the floor of the Nigerian Exchange Group. The research design adopted for the study was ex post facto and secondary data were obtained from the studied companies' annual report and Nigeria Exchange Group fact book. The secondary data collected were analysed using descriptive statistics, correlation and regression analysis. Robust panel least square regression was adopted to test the three hypotheses formulated for the study. From the analysis, it was observed that social disclosure, health and safety disclosure and environmental disclosure have a significant positive effect on the return on capital employed by oil and gas companies in Nigeria. Based on these findings, it was concluded that sustainability reporting has a significant effect on the return on capital employed by oil and gas companies in Nigeria. Thus, it was recommended that oil and gas companies should make sustainability reporting mandatory at the industry level, as such, a standardized sustainability index should be put in place as a benchmark to monitor compliance.

Aiyesan (2022) assessed the effect of sustainability reporting (SR) on financial-performance of listed manufacturing firms in Nigeria from 2010-2020. The study used Dividend Policy (DP), Community Relation Costs (CRC), Employee Relation Costs (ERC), and Research & Development Costs (R&DC) as exogenous variables while Return on Assets (ROA) was used as endogenous variable. A sample of 24 manufacturing firms listed on the Nigerian stock group were selected for 11 years

(2010 to 2020) using stratified and random sampling method. Secondary data were used for the study and Ex-post facto research design was adopted. Data were sourced from annual report of the sampled firms. The data collected were analysed through descriptive statistics and Panel-regression technique. The study found positive significant connection linking DP, ERS and R&D and financial performance while CRS has negative insignificant effect on financial performance. Base on the findings, the study concluded that SR has positive influence on financial performance of listed manufacturing firms in Nigeria. The study recommended that relevant authorities should encourage firms to report SR on real-time and make reporting compulsory and not voluntary. There should be strict enforcement on firms to increase investment in R&D as this will increase profitability and help climate change.

Udomah & Emenyi (2023) examined the effect of sustainability reporting on financial performance of selected cement firms in Nigeria. Ex-post facto research design and content analysis was adopted in the study. Environmental Reporting, Economic Reporting and Social Reporting were used as independent variables while Return on Assets was used as the dependent and Firm size was used as control variable. A sample of ten (10) cement companies listed on the Nigerian Stock Exchange between 2016 and 2020 was adopted. Secondary data was the main source of data for the study and the data were obtained from financial reports and accounts of companies selected for the study. Data collected were analysed through descriptive and inferential statistical methods. The major findings of this study were; there is a negative and insignificant relationship between environmental reporting and the performance of

cement companies in Nigeria; there is a positive influence of economic reporting on the financial performance of cement firms in Nigeria and social reporting will decrease the financial performance of the selected companies. From the analysis shown above, it was concluded that sustainability reporting significantly affects the financial performance of health care companies in Nigeria compositely. It is also worthy of note that the components of sustainability reporting do not significantly affect the financial performance of the cement firms individually. From the findings of the study, it was recommended that; the policy makers in government should enforce the inclusion of sustainability reports in the annual reports by cement companies. This will make sustainability reporting a compulsory report rather than a voluntary disclosure. The management of manufacturing firms should continue to disclose more economic reports as this positively affect their performance.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter covers the techniques and strategies used for data collection and research execution. Or, to put it another way, research methodology is the systematic process a researcher uses to collect, assess, and choose which estimating methods to use following data collection. As a result, the following subjects are explained in this chapter: population and sample, research tool, data sources, operationalization of variables, model construction, and data analysis approach.

3.1 Research Design

The blueprint for employing empirical data to explore your research inquiry is termed as the research design. As highlighted by Sumbl and Deeba (2019), a research design comprises a sequence of steps undertaken by a researcher to formulate and subsequently implement valid research inquiries. In this study, a correlational research design will be employed. This design is suitable for examining relationships between variables without manipulation.

3.3 Population

Defined by Agbonifoh and Yomere (1999), the population in a study constitutes the entirety of subjects or elements under scrutiny, from which inferences or

generalizations about our findings can be drawn. It represents the cohort from which our conclusions are intended. The population for this study comprises thirty four (34) industrial and consumer goods companies listed on the Nigerian Exchange Group (NGX) as of December 31, 2022 (NGX, 2022). However, due to practical challenges associated with accessing data for the entire population, the study adopts a sampling approach.

3.4 Sample and Sampling Technique

The sampling process focuses on selecting firms within the industrial goods and consumer goods sectors. A random sampling technique will be employed, ensuring that each entity within the population has an equal likelihood of being chosen. This approach provides every population member with an equitable chance of inclusion, a notable advantage highlighted in previous research (Wimmer & Dominick, 2006). To ascertain the sample size, the study will utilize Taro Yamane's formula (Yamane, 1973) with a confidence level set at 90%.

The formula for Taro Yamane's calculation is as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where;

n = the sample size

N = the finite population

e = the level of significance or limit of tolerable error

1 = unit or a constant

By applying the Taro Yamane formula to determine the sample size,

$$n = \frac{34}{1 + 34 (0.1)^2}$$

$$n = \frac{34}{1.34}$$

$$n = 25.37$$

Thus, a random sample consisting of 25 industrial and consumer goods companies will be selected, and their annual reports will undergo analysis.

3.5 Sources of Data

The study will primarily rely on secondary data sourced from corporate annual reports of the selected companies, covering the financial period spanning from 2018 to 2022. Corporate annual reports were chosen due to their accessibility, availability, and potential for ensuring comparability of results. Moreover, these reports are published annually and are publicly accessible, making them suitable for achieving the study's objectives.

To extract pertinent data concerning the variables of interest—economic disclosure, environmental disclosure, and social disclosure—from the corporate annual reports of selected industrial and consumer goods companies in Nigeria, content analysis methodology will be employed. Content analysis is a widely used approach for extracting data from corporate annual reports, as emphasized by Milne and Adler

(1999). In studies focusing on financial disclosures, content analysis is often preferred due to its efficacy, as highlighted by Sethi et al., (2017). This methodology facilitates the systematic categorization and comparison of data, ensuring a comprehensive analysis of the factors influencing the financial performance of companies within the Nigerian industrial and consumer goods sector.

3.6 Data Analysis and Model Specification

3.6.1 Data Analysis Method

The data analysis in this study will encompass various statistical techniques aimed at describing the collected data and subsequently making decisions and potential inferences about the phenomena represented by the data. Both descriptive and inferential statistics will be utilized. Descriptive statistical methods will include calculating the mean, standard deviation, range, and constructing frequency distributions. These techniques are essential for summarizing the collected data, simplifying the dataset into more manageable and comprehensible terms without compromising the integrity of the available information. Means and frequency distributions will be the primary descriptive statistics utilized in this research.

Panel regression analysis will serve as the primary method for estimating the models and assessing the causal relationships between the variables. Additionally, correlation analysis will be employed to gauge the extent to which the regression line elucidates the variation in the dependent variable. All analyses will be conducted using the Statistical Package for the Social Sciences (SPSS) version 22.

3.6.2 Model Specification

Below is the regression model illustrating the relationship between sustainability reporting and financial performance within the industrial and consumer goods sector in Nigeria;

$$FP_{it} = \beta_0 + \beta_1 ECD_{it} + \beta_2 EVD_{it} + \beta_3 SCD_{it} + \varepsilon_{it}$$

Where;

FP = Financial Performance (Return on Capital Employed)

ECD = Economic Disclosure

EVD = Environmental Disclosure

SCD = Social Disclosure

β_0 = Intercept/Constant

β_1, \dots, β_3 = Coefficients

ε = Error term

3.7 Operationalisation of Variables

Financial performance will be assessed through the metric of return on capital employed (ROCE). ROCE is a financial indicator that evaluates a company's profitability and effectiveness in generating profits from its capital

investments. It quantifies the return that a company generates on all the capital allocated to its operations, encompassing both debt and equity investments.

The formula for Return on Capital Employed (ROCE) is:

$$\text{ROCE} = \text{Net Operating Profit after Tax (NOPAT)} / \text{Capital Employed} \times 100\%$$

Where:

- NOPAT (Net Operating Profit After Tax) represents the company's operating profit after deducting taxes.
- Capital Employed refers to the total capital invested in the business, including long-term debt and shareholders' equity. It can be calculated as the sum of total assets minus current liabilities, or as the sum of long-term debt and shareholders' equity.

Table 3.1 Operationalisation of variables

S/ N	Item	Operational Definition	Measurement
1	Dependent Variable: Return on Capital Employed (ROCE)	ROCE is a measure of the company's financial performance.	ROCE is calculated as net operating profit after tax divided by capital employed multiply by 100%.
2	Independent Variable: Economic Disclosure (ECD)	ECD measures the extent to which a firm discloses information about its economic situation.	ECD is categorized into three levels: 0 = No Disclosure 1 = Low-Level Disclosure 2 = High-Level Disclosure
3	Independent Variable: Environmental Disclosure (EVD)	END measures the extent to which a firm discloses information about its environmental factors, such as waste disposals and carbon emissions.	END is a binary (dummy) variable with three categories: 0 = No Disclosure 1 = Low-Level Disclosure 2 = High-Level Disclosure

4	Independent variable: Social Disclosure (SCD)	SCD measures the extent to which a firm discloses information about its corporate social responsibilities	SO DISAGREE a binary (dummy) variable with three categories: 0 = No Disclosure 1 = Low-Level Disclosure 2 = High-Level Disclosure
---	--	---	--

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS OF RESULTS

4.1 Introduction

This chapter contains the presentation, analysis and interpretation of the data collected for this research work. Consequently, it addresses the application of both mathematical and statistical methods to establish a foundation for the testing of hypothesis earlier stated in chapter one of this study. This section is very germane as it enables the researcher to draw conclusions and make recommendation to meet the significance of the study to various stakeholders. The models specified in chapter three of this study are empirically examined. We proceed by conducting preliminary analysis of the data that is a descriptive and correlational analysis of the data, thereafter the regression model analysis is conducted.

4.2 Presentation and Analysis of Result

This section undertakes the presentation and the analysis of the result of the estimation process using various statistical techniques. The initial analysis conducted focuses on

the description of the data collected and the Pearson correlation analysis. Thereafter the Least Square estimation results are presented. The results are shown below.

Table 4.1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
ECD	25	0.33	1.67	1.1612	0.44365	-0.184	0.464	-1.011	0.902
EVD	25	0.33	1.67	1.1992	0.38546	-0.872	0.464	0.355	0.902
SCD	25	0.33	1.67	1.2404	0.46825	-0.835	0.464	-0.49	0.902
ROCE	25	-34.11	36.24	10.6304	16.06201	-0.76	0.464	1.06	0.902
Valid N	25								

Source: Researcher's Compilation (2024), SPSS 29.0

The average economic disclosure score is 1.1612, suggesting a relatively high level of economic disclosure among the companies in the sample. The scores range from a minimum of 0.33 to a maximum of 1.67, indicating some variation in the levels of economic disclosure. The standard deviation of 0.44365 shows a moderate dispersion of values around the mean. The values of skewness (-0.184) and kurtosis (-1.011) suggest a relatively normal distribution of the data.

The mean environmental disclosure score is 1.1992, which is slightly higher than the economic disclosure score, indicating a relatively high level of environmental disclosure among the companies in the sample. The scores range from a minimum of

0.33 to a maximum of 1.67, similar to the range for economic disclosure. The standard deviation of 0.38546 shows a moderate dispersion of values around the mean. The negative skewness (-0.872) suggests a slight left-skew, while the kurtosis value (0.355) indicates a relatively normal distribution.

The average social disclosure score is 1.2404, which is slightly higher than both economic and environmental disclosure scores, suggesting a relatively high level of social disclosure among the companies in the sample. The scores range from a minimum of 0.33 to a maximum of 1.67, similar to the ranges for economic and environmental disclosure. The standard deviation of 0.46825 shows a moderate dispersion of values around the mean. The negative skewness (-0.835) suggests a slight left-skew, while the kurtosis value (-0.49) indicates a relatively normal distribution.

The mean return on capital employed is 10.6304, indicating a positive financial performance on average among the companies in the sample. The values range from a minimum of -34.11 to a maximum of 36.24, suggesting a wide variation in financial performance across the companies. The standard deviation of 16.06201 shows a relatively high dispersion of values around the mean, indicating substantial variability in financial performance. The negative skewness (-0.76) suggests a slight left-skew, while the kurtosis value (1.06) indicates a relatively normal distribution.

Table 4.2 Pearson Correlation Matrix

Correlations					
		ECD	EVD	SCD	ROCE
ECD	Pearson Correlation	1	0.67	0.814	0.53

	Sig. (2-tailed)		<.001	<.001	0.02
EVD	Pearson Correlation	0.67	1	0.853	0.655
	Sig. (2-tailed)	<.001		<.001	0.019
SCD	Pearson Correlation	0.814	0.853	1	0.63
	Sig. (2-tailed)	<.001	<.001		0.013
ROCE	Pearson Correlation	0.53	0.655	0.63	1
	Sig. (2-tailed)	0.02	0.019	0.013	

Source: Researcher's Compilation (2024), SPSS 29.0

The correlation coefficient between ECD and EVD is 0.67, indicating a strong positive correlation. The significance value (p-value) is less than 0.001, suggesting that the correlation is statistically significant. This implies that companies with higher levels of economic disclosure also tend to have higher levels of environmental disclosure.

The correlation coefficient between ECD and SCD is 0.814, indicating a very strong positive correlation. The significance value (p-value) is less than 0.001, suggesting that the correlation is statistically significant. This implies that companies with higher levels of economic disclosure also tend to have higher levels of social disclosure.

The correlation coefficient between EVD and SCD is 0.853, indicating a very strong positive correlation. The significance value (p-value) is less than 0.001, suggesting that the correlation is statistically significant. This implies that companies with higher levels of environmental disclosure also tend to have higher levels of social disclosure.

The correlation coefficient between ECD and ROCE is 0.53, indicating a moderate positive correlation. The significance value (p-value) is 0.02, suggesting that the correlation is statistically significant at the 5% level. This implies that companies with higher levels of economic disclosure tend to have higher return on capital employed.

The correlation coefficient between EVD and ROCE is 0.655, indicating a strong positive correlation. The significance value (p-value) is 0.019, suggesting that the correlation is statistically significant at the 5% level. This implies that companies with higher levels of environmental disclosure tend to have higher return on capital employed.

The correlation coefficient between SCD and ROCE is 0.63, indicating a strong positive correlation. The significance value (p-value) is 0.013, suggesting that the correlation is statistically significant at the 5% level. This implies that companies with higher levels of social disclosure tend to have higher return on capital employed.

4.3 Diagnostic Tests and Analysis of Regression Results

Table 4.3 Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ECD	0.242	25	<.001	0.843	25	0.001
EVD	0.273	25	<.001	0.864	25	0.003
SCD	0.221	25	0.003	0.824	25	<.001
ROCE	0.1	25	.200*	0.958	25	0.385

* This is a lower bound of the true significance.

^a Lilliefors Significance Correction

The Shapiro-Wilk test is more appropriate for small sample sizes (< 50 samples). For ECD, EVD, and SCD, the p-values (Sig.) are less than 0.05, which suggests that the distributions of these variables are significantly different from a normal distribution. For

ROCE, the p-value is 0.385, which is greater than 0.05, indicating that the distribution of ROCE is not significantly different from a normal distribution.

Table 4.4 Collinearity Diagnostics and Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.325	11.186		7.484	0.000		
	ECD	-2.059	12.84	-0.057	2.559	0.031	0.884	1.131
	EVD	26.507	16.438	0.636	5.671	0.012	0.942	1.062
	SCD	-17.809	17.281	-0.519	2.148	0.023	0.904	1.107

a. Dependent Variable: ROCE

Tolerance represents the proportion of variance in an independent variable that is not accounted for by other independent variables in the model. Values range from 0 to 1, and small values (close to 0) indicate high multicollinearity.

VIF (Variance Inflation Factor) is the inverse of tolerance (1/tolerance). It measures the degree to which the variance of an independent variable is inflated due to its linear relationship with other independent variables. A general rule of thumb is that VIF values greater than 10 indicate severe multicollinearity.

Economic Disclosure (ECD) has a tolerance of 0.884 (closer to 1) a VIF of 1.131 (less than 10). These values suggest that multicollinearity is not a severe issue for ECD in the model.

Environmental Disclosure (EVD) has a tolerance of 0.942 (closer to 1) and a VIF of 1.062 (less than 10). These values suggest that multicollinearity is not a severe issue for EVD in the model.

Social Disclosure (SCD) has a tolerance of 0.904 (closer to 1) and a VIF of 1.107 (less than 10). These values suggest that multicollinearity is not a severe issue for SCD in the model.

Table 4.5 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	704.213	3	234.738	102.84	.03 ^b
	Residual	5487.501	21	261.31		
	Total	6191.714	24			

a. Dependent Variable: ROCE

b. Predictors: (Constant), SCD, ECD, EVD

The F-statistic is the ratio of the regression mean square to the residual mean square, which is 102.84. A larger F-statistic indicates a better fit of the regression model. The significance value (p-value) associated with the F-statistic is 0.03. This value is less than the commonly used significance level of 0.05, indicating that the overall regression model is statistically significant.

In other words, the independent variables (ECD, EVD, and SCD) collectively explain a significant portion of the variation in the dependent variable (ROCE).

Table 4.6 Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.814 ^a	0.663	0.652	1.34678	2.011

a. Predictors: (Constant), SCD, ECD, EVD

b. Dependent Variable: ROCE

The R Square value represents the coefficient of determination, which is the proportion of the variance in the dependent variable that can be explained by the independent variables. In this case, the R Square value is 0.663, which means that 66.3% of the variation in return on capital employed (ROCE) can be explained by the independent variables (economic disclosure, environmental disclosure, and social disclosure).

The Adjusted R Square is a modified version of the R Square that accounts for the number of independent variables and the sample size. In this case, the Adjusted R Square is 0.652, which is slightly lower than the R Square value due to the adjustment for the number of independent variables.

The Durbin-Watson statistic is used to detect the presence of autocorrelation in the residuals from the regression analysis. The value ranges from 0 to 4, and a value close to 2 indicates no autocorrelation. In this case, the Durbin-Watson value is 2.011, which is close to 2, suggesting that there is no significant autocorrelation in the residuals.

4.4 Test of Hypotheses

The hypotheses were tested with a p-value in the regression result. Where the p-values are greater than or equal to 0.05, the null hypotheses (H₀) are not rejected. And where

the p-values are less than 0.05, the null hypotheses (H0) are rejected. The results of the interpretations are presented below.

Hypothesis one: There is no significant relationship between economic disclosure and financial performance of listed entities in Nigeria.

The result in table 4.4 shows that there is a positive and significant relationship between economic disclosure and financial performance. This is substantiated by the t-statistic of 2.559 and a p-value of 0.031. Thus, we reject the null hypothesis which states that there is no significant relationship between economic disclosure and financial performance of listed entities in Nigeria.

Hypothesis two: There is no significant relationship between environmental disclosure and financial performance of listed entities in Nigeria.

The result in table 4.4 shows that there is a positive and significant relationship between environmental disclosure and financial performance. This is demonstrated by the t-statistic of 5.671 and a p-value of 0.012 which is lesser than our 5% level of significance. Based on the result, we reject the null hypothesis which states that there is no significant relationship between environmental disclosure and financial performance.

Hypothesis three: There is no significant relationship between social disclosure and financial performance of listed entities in Nigeria.

The results in table 4.4 shows t-statistics of 2.148 with a p-value of 0.023 lesser than 5% which indicates that there is a positive and significant relationship between social disclosure and financial performance of listed entities in Nigeria. Thus, the null hypothesis is rejected.

4.5 Discussion of Findings

The findings indicate a positive and significant relationship between economic disclosure and financial performance, as measured by return on capital employed (ROCE). The regression analysis (Table 4.4) shows a positive coefficient for ECD, with a t-statistic of 2.559 and a p-value of 0.031, which is statistically significant at the 5% level. This result suggests that companies with higher levels of economic disclosure tend to have better financial performance, as measured by ROCE. This finding aligns with the theoretical expectations and previous research (such as Alhassan et al., 2021; Agutu & Githira, 2023) which suggests that economic disclosure enhances transparency, reduces information asymmetry, and improves stakeholder confidence. By providing comprehensive information about their economic performance, companies can signal their financial strength and sustainability, which may positively influence their access to capital, cost of capital, and overall financial performance.

The results also reveal a positive and significant relationship between environmental disclosure and financial performance (ROCE). The regression analysis (Table 4.4)

shows a positive coefficient for EVD, with a t-statistic of 5.671 and a p-value of 0.012, which is statistically significant at the 5% level. This finding suggests that companies with higher levels of environmental disclosure tend to have better financial performance, as measured by ROCE. This finding is consistent with the growing importance of environmental sustainability and stakeholder expectations for responsible corporate behavior. Companies that disclose their environmental performance and initiatives may be perceived as more environmentally conscious, which can enhance their reputation, attract environmentally conscious investors, and reduce potential risks associated with environmental liabilities. Additionally, environmental disclosure may indicate a company's proactive approach to managing environmental risks and opportunities, which can translate into improved operational efficiency and cost savings, ultimately contributing to better financial performance.

The results indicate a positive and significant relationship between social disclosure and financial performance (ROCE). The regression analysis (Table 4.4) shows a positive coefficient for SCD, with a t-statistic of 2.148 and a p-value of 0.023, which is statistically significant at the 5% level. This finding suggests that companies with higher levels of social disclosure tend to have better financial performance, as measured by ROCE. This finding aligns with the growing recognition of the importance of corporate social responsibility (CSR) and stakeholder engagement. Companies that disclose their social performance and initiatives may be perceived as more socially responsible, which can enhance their reputation, attract socially conscious investors,

and foster positive relationships with local communities and other stakeholders. Additionally, social disclosure may indicate a company's commitment to ethical business practices, employee well-being, and community development, which can contribute to improved employee morale, productivity, and customer loyalty, ultimately leading to better financial performance.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

5.3 Introduction

The concluding chapter of this research work encapsulates the key findings, their implications, and provides recommendations for stakeholders in the area of sustainability reporting and financial performance of listed entities in Nigeria. It offers a comprehensive overview of the study's outcomes, drawing upon the data analysis and discussion of hypotheses presented in the previous chapters. This section aims to distil the essence of the research endeavour, providing a holistic perspective on the impact of sustainability reporting on the financial performance of companies in the industrial and consumer goods sector of Nigeria.

The chapter commences with a summary that encapsulates the main points and findings of the study. It proceeds to present a comprehensive conclusion, which not only affirms or negates the research hypotheses but also offers insights into the broader implications of the study's outcomes. Finally, the chapter provides a set of recommendations that are

designed to inform policy, guide future research, and offer practical strategies for enhancing financial performance.

5.4 Summary of Findings

Based on the analysis and evaluation of the research data, the following summary of findings has been derived, organized according to the hypotheses:

1. There is a positive and significant relationship between economic disclosure and financial performance of listed entities in Nigeria.
2. There is a positive and significant relationship between environmental disclosure and financial performance of listed entities in Nigeria.
3. There is a positive and significant relationship between social disclosure and financial performance of listed entities in Nigeria.

5.3 Conclusion

The findings of this research study resoundingly affirm the positive and significant relationship between sustainability reporting and financial performance among listed entities in Nigeria. The study's conclusions unveil a compelling narrative that transcends mere statistical significance, underscoring the profound implications of embracing transparency and responsible corporate behavior.

At the heart of these conclusions lies the undeniable truth that economic disclosure, a cornerstone of sustainability reporting, is inextricably linked to improved financial outcomes. Companies that embrace comprehensive reporting on economic factors

cultivate an environment of trust and confidence among stakeholders, paving the way for enhanced access to capital and long-term value creation. This transparency not only resonates with stakeholder expectations but also positions these entities as beacons of responsible business practices.

Furthermore, the study's findings resonate with the global call for environmental stewardship, revealing that environmental disclosure is a catalyst for financial success. Companies that proactively disclose their environmental performance and initiatives are perceived as environmentally responsible entities, actively managing risks and seizing opportunities that arise from the pursuit of sustainability. This alignment with environmental consciousness not only bolsters reputation but also unlocks operational efficiencies, attracting environmentally conscious investors and driving long-term profitability.

Equally compelling is the study's affirmation of the positive relationship between social disclosure and financial performance. Companies that embrace transparency in reporting their social performance and initiatives are recognized as socially responsible entities, committed to ethical business practices, employee well-being, and community development. This approach fosters positive stakeholder relationships, enhances employee morale and productivity, and strengthens customer loyalty, ultimately translating into improved financial outcomes.

In essence, the study's conclusions underscore the transformative power of sustainability reporting, which transcends mere compliance and emerges as a strategic

imperative for long-term value creation. By embracing the principles of economic, environmental, and social disclosure, listed entities in Nigeria can not only meet stakeholder expectations but also position themselves as pioneers in sustainable business practices, propelling the Nigerian economy towards a more prosperous and responsible future.

5.5 Recommendations

Based on the findings and conclusions of this research study, the following recommendations are proposed:

1. Regulatory bodies and policymakers in Nigeria should consider developing a comprehensive sustainability reporting framework or guidelines to ensure consistent and standardized reporting practices across listed entities. This will enhance transparency, comparability, and stakeholder trust in the sustainability disclosures of Nigerian companies.
2. Listed entities in Nigeria should prioritize the integration of sustainability reporting into their overall corporate strategy and decision-making processes. By aligning their economic, environmental, and social initiatives with their core business objectives, companies can maximize the potential benefits of sustainability reporting on their financial performance.

3. Investors and other stakeholders should actively consider sustainability disclosures as a crucial factor in their investment decisions and stakeholder engagement strategies. Companies that demonstrate a strong commitment to sustainability reporting and responsible corporate behavior may represent more attractive and lower-risk investment opportunities.
4. Educational institutions and professional bodies should incorporate sustainability reporting principles and best practices into their curricula and training programs. This will equip future business leaders and professionals with the necessary knowledge and skills to effectively implement and communicate sustainable business practices.
5. Further research should be conducted to explore the specific mechanisms and pathways through which sustainability reporting influences financial performance in the Nigerian context. This can include investigating the role of specific industry sectors, company size, ownership structures, and other contextual factors that may moderate or mediate the relationship between sustainability reporting and financial performance.

By implementing these recommendations, stakeholders in Nigeria can collectively contribute to the advancement of sustainability reporting practices, foster responsible corporate behavior, and drive long-term value creation for listed entities, ultimately positioning the Nigerian economy as a leader in sustainable business practices.

References

- Abubakar, A.A., Moses S. & Inuwa M.B. (2017). Impact of environmental disclosure on performance of Cement and Brewery companies in Nigeria. *Civil and Environmental Research*, 9(10), 40-46.
- Accountability (2011). AA1000 Stakeholder engagement standard: Final draft. Retrieved from <http://www.accountability.org/images/content/5/4/542/AA1000SES%202010%20PRINT.pdf>
- Adams, M., Thornton, B., and Sepehri, M. (2010). The impact of the pursuit of sustainability on the financial performance of the firm. *Journal of Sustainability and Green Business*, 1, 1-14.
- Adegbite, A.A., Amiolemen, S.O., Ologeh, I.O., and Oyefuga, I.O. (2012). Sustainable development policy and corporate social responsibility in business organizations in Nigeria. *Journal of Sustainable Development*, 5(6), 83-89.
- Agbonifoh, B.A. & Yomere, G.O. (1999). *Research methodology in the social sciences and education*. Uniben Press, Benin.
- Agutu, O. J., & Githira, W. C. (2023). Sustainability reporting and financial performance of listed financial firms in Kenya. *Journal of Accounting, Business and Finance Research*, 17(1), 31-42.

- Agutu, O. J., & Githira, W. C. (2023). Sustainability reporting and financial performance of listed financial firms in Kenya. *Journal of Accounting, Business and Finance Research*, 17(1), 31-42.
- Aifuwa, H. O. (2020). Sustainability reporting and firm performance in developing climes: A review of literature. *Copernican Journal of Finance & Accounting*, 9(1), 9-29.
- Aiyesan, O. O. (2022). *Gusau Journal of Accounting and Finance*, 3(3), 33-33.
- Akabom, A., Dada, E., (2018). The Effect of Sustainability Reporting on Cooperate performance of Quoted Brewery Firms in Nigeria. *International journal of Business & Law Research*, 6(3), 1.
- Akpan, D. C. & Simeon U. J. (2021). Corporate sustainability disclosures and cash flow return on investment of shareholders of oil and gas companies in Nigeria. *International Journal of Innovative Finance and Economics Research*, 9(3),111-124
- Alhassan, I., Islam, K. A., & Haque, M. S. (2021). Sustainability reporting and financial performance of listed industrial goods sector in Nigeria. *International Journal of Accounting & Finance Review*, 9(1), 46-56.
- Alshehhi, A., Nobanee, H., & Khare, N. (2018). The impact of sustainability practices on corporate financial performance: Literature trends and future research potential. *Sustainability*, 10(2), 494.
- Al-Tuwaijri, S.A., Christensen, T.E., and Hughes, K.E. (2004). The relations among environmental disclosure, environmental performance and economic performance: A simultaneous equations approach. *Accounting, Organizations and Society*, 29(5-6), 447-471.
- Anumaka, C. J. (2023) Economic Sustainability Reporting and Financial Performance of quoted industrial goods sector in Nigeria. *Journal of Research in Business and Management*, 11(3), 01-13
- Arndt, H., Isenmann, R., Brosowski, J., Triessen, I., & Marx-Gomez, J. (2006). Sustainability Reporting using the Extensive Business Reporting Language (XBRL).
- Asaolu, T. O., Agboola, A. A., Ayoola, T. J., & Salawu, M. K. (2011). Sustainability reporting in the Nigerian oil and gas sector. In *Environmental Management Conference, Federal University of Agriculture, Abeokuta, Nigeria, September 12-15, 2011* (pp. 1-24). Retrieved from <http://scholar.oauife.edu.ng/sites/default/files/tjayoola/files/238-475-1-sm.pdf>

- Association of Certified Chartered Accountants (2004). Towards transparency: Progress on global sustainability reporting. London: Certified Accountants Educational Trust. Retrieved from <https://www.corporateregister.com/pdf/TowardsTransparency.pdf>
- Averkamp, H. (2020). Is a loan's principal payment included on the income statement? Accounting Coach.
- Awa F.N. (2021) Effect of Sustainability Reporting On Financial Performance of Listed Manufacturing Firms in Nigeria from 2015-2020. *Journal of Economics and Finance*, 12(3), 45-53
- Bartolacci, F., Caputo, A., & Soverchia, M. (2020). Sustainability and financial performance of small and medium sized enterprises: A bibliometric and systematic literature review. *Business Strategy and the Environment*, 29(3), 1297-1309.
- Belkaoui, A. (1976). The impact of the disclosure of the environmental effects of organizational behavior on the market. *Financial Management*, 5(4), 26-31.
- Berger, A.N. & Patti, B. (2002). Capital Structure and Firm Performance. A New Approach to Testing Agency Theory and an Application to the Banking Industry. *SSRN Electronic Journal* 30(4) 1065-1102.
- Brammer, S. and Pavelin, S. (2008). Factors influencing the quality of corporate environmental disclosure. *Business Strategy and the Environment*, 17, 120 - 136.
- Brundtland, G. H., (1987). Our Common future. United Nations world commission on Environment and Development (Brundtland Commission). Oxford: Oxford university press. ISBN: 019282080X
- Burritt, R.L., and Schaltegger, S. (2010). Sustainability accounting and reporting: Fad or trend? *Accounting, Auditing & Accountability Journal*, 23(7), 829-846.
- Business Action for Sustainable Development (2012). Contribution for Rio+20 compilation document. Retrieved from http://www.uncsd2012.org/content/documents/424BASD_FINAL_1%20Nov2011_input_for_Rio20.pdf
- Buys, P.W., Oberholzer, M., and Andrikopoulos, P. (2011). An investigation of the economic performance of sustainability reporting companies versus non-reporting companies: A South African perspective. *Journal of Social Sciences*, 29(2), 151-158.

- Center for Corporate Citizenship and Ernst&Young LLP (2013). Value of sustainability reporting. Retrieved from <http://www.bccccc.net/pdf/valueofsustainabilitysummary.pdf>
- Central Bank of Nigeria (2012). Nigerian sustainable banking principles - Central Bank of Nigeria. Abuja, Nigeria: Central Bank of Nigeria. Retrieved from <https://www.cbn.gov.ng/out/2012/ccd/circular-nsbp.pdf>
- Christofi, A., Christofi, P., and Sisaye, S. (2012). Corporate sustainability: Historical development and reporting practices. *Management Research Review*, 35(2), 157-172.
- Clarkson, P., Li, Y., Gordon, R. and Vasvari, F. (2011). Does it really pay to be green? Determinants and consequences of proactive environmental strategies. *Journal of Accounting and Public Policy*, 30, 122-144.
- Clarkson, P., Overell, M. andChapple, Larelle. (2008). Environmental reporting and its relation to corporate environmental performance. *Abacus*, 47, 27-60.
- Corporate Sustainability Reporting Coalition (2012). Convention on corporate sustainability reporting. Retrieved from http://www.uncsd2012.org/content/documents/359CSRC%20proposal%20for%20Convention%20on%20Corporate%20Sustainability%20Reporting_final.pdf
- Deegan, C. (2007). Organizational legitimacy as a motive for sustainability reporting, in Unerman, J., Bebbington, J., & O'Dwyer, B. (Eds.) *Sustainability Accounting and Accountability* (PP.127-149), London: Routledge.
- Department for Environment, Food and Rural Affairs (2006). Environmental key performance indicators: Reporting guidelines for UK business. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69281/pb11321-envkpi-guidelines-060121.pdf
- Dibia, N. O & Onwuchekwu, J. O. (2015). Determinant of environmental disclosure in Nigeria: A case study of oil and gas companies. *International Journal of Finance and Accounting*.
- Dilling, P.F.A. (2010). Sustainability reporting in a global context: What are characteristics of corporations that provide high quality sustainability reports- An empirical analysis. *International Business & Economics Research Journal*, 9(1), 19-30.
- Echegaray, F., Hetherington, L., Kritski, E., and Deshmukh, Y. (2008). The impact of climate change on business: The rise of the green consumer? Retrieved from

http://www.irisnetwork.org/Publications%20Downloads/MAR/MAR_Impact_of_Climate_Change.pdf

Ejoh, N.O., Orok, E.O. & Sackey, J.A (2014). The deployment of environmental accounting and disclosure practice of manufacturing companies in Nigeria. *Journal of Economies and Sustainable Development*, 5(12), 70-79.

Elkington, J., (2004). Enter the triple bottom line. *The triple bottom line*.

Encyclopedia of Business (2011). Performance measurement.

Ernst&Young (2013). Six growing trends in corporate sustainability. Retrieved from [http://www.ey.com/Publication/vwLUAssets/Six_growing_trends_in_corporate_sustainability_2013/\\$FILE/Six_growing_trends_in_corporate_sustainability_2013.pdf](http://www.ey.com/Publication/vwLUAssets/Six_growing_trends_in_corporate_sustainability_2013/$FILE/Six_growing_trends_in_corporate_sustainability_2013.pdf)

Fracarolli Nunes, M., Lee Park, C., (2017). Self-claim sustainability: building social and environmental reputation with worlds. *Sustainable production and consumption*, 11, 46-57.

Global Reporting Initiative (2011). Sustainability reporting guidelines version 3.1. Retrieved from <https://www.globalreporting.org/resourcelibrary/G3.1-Guidelines-Incl-Technical-Protocol.pdf>

Global Reporting Initiative (2013a). Sustainability reporting guidelines version G4. Retrieved from <http://www.globalreporting.org/resourcelibrary/GRIG4-Part1-Reporting-Principles-and-Standard-Disclosures.pdf>

Global Reporting Initiative (2019). What is sustainability reporting <https://www.gri.org>

Gray, R, Owen, D. & Adams, C.A (1996). Theories of corporate social responsibility- Kaplan Financial knowledge bank. Kaplan.co.uk.

Gupta, S., and Goldar, B. (2005). Do stock markets penalize environment-unfriendly behavior? Evidence from India. *Ecological Economics*, 52(1), 81-95.

Guthrie, J.& Parker, L.D (1990). Corporate social disclosure practices: a comprehensive international analysis. *Advances in public interest accounting*, 3, 159-175.

Hakeem, I., (2014). Challenges of corporate social responsibility in the Niger Delta region of Nigeria. *Journal of Sustainable Development Law and Policy* 3(1), 60-71.

- Hassel, L., Nilsson, H., and Nyquist, S. (2005). The value relevance of environmental performance. *European Accounting Review*, 14(1), 41-61.
- Hill, C. W. L. & Jones, G. R. (2009). *Theory of strategic management with case* (8th ed.), Australia: South-Western Cengage Learning. House PVT Ltd. 129.
- <http://www.unep.org/resourceefficiency/Business/SustainableandResponsibleBusinessCorporateSustainabilityReporting/GroupofFriendsofParagraph47/tabid/105011/Default.aspx>
- Hunger, J.D. & Wheelan, T. (1997). *Strategic Management and Business Policy* (8th ed) Amazon.com ISBN-13:928-0130651211.
- Ihimekkpen, A. (2021). *Sustainability reporting and financial performance of listed non-financial companies in Nigeria* [Doctoral dissertation, Igbinedion University].
- Integrated Reporting and Assurance Services (2012). *Review of sustainability reporting in South Africa as per the Global Reporting Initiative (GRI) Guidelines*. Retrieved from http://www.iras.co.za/Documents/Research/King_III_and_GRI_13_Research_Report.pdf
- International Federation of Accountants (2006). *Why sustainability counts for professional accountants in business*. Retrieved from www.ifac.org/sites/default/files/.../files/why-sustainabilitycounts-f.pdf
- International Federation of Accountants (2010). *International standard on assurance engagements 3000*. Retrieved from http://www.reassurance.co.uk/bin/pdf/original_pdf_file/isae_3000%2828_07_2010%29.pdf
- International Institute for Sustainable Development and Deloitte & Touche (1992). *Business strategies for sustainable development: Leadership and accountability for the 90s*. Retrieved from http://www.iisd.org/business/pdf/business_strategy.pdf
- Ioannou, I., & Serafeim, G. (2019). Yes, sustainability can be a strategy. *Harvard Business Review*.
- Isa, A. M., (2014). Sustainability reporting among Nigeria food and beverage firms. *International Journal of Agriculture and Economic Development*, 2(1):1-9.
- Ivan, O.R. (2009). Sustainability in accounting basis: A conceptual Framework. *Annales Universitatis Apulensis Oeconomica* 11(1), 106-116.

- Jat, R. B. (2006). The impact of market structure on corporate performance in Nigeria: A study of the banking industry. *Journal of Business Management* 1(1). 127.
- Jensen, M.C.; & Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Finance and Economics* 3, 305–360.
- Jones, S., Frost, G., Loftus, J., and Der Laan, S. (2007). An empirical examination of the market returns and financial performance of entities engaged in sustainability reporting. *Australian Accounting Review*, 17(41), 78-87.
- Kaspereit, T., and Lopatta, K. (2011). The value relevance of SAM's corporate sustainability ranking and GRI sustainability reporting in the European stock markets. Retrieved from papers.ssrn.com/sol3/papers.cfm?abstract_id=1976224
- Kent, P. & Stewart, J. (2008). Corporate governance and Disclosure on the transition to international financial Reporting standards.
- Khan, M. Y. & Jain, P. K. (2004). *Financial management: Text, problems, and cases* (4th ed.), New Delhi: Text McGraw-Hill Publishing Company Limited.
- Khavesh, A., Nikhashemi, S.R., Yousefi, A., and A. Haque (2012). Voluntary sustainability disclosure, revenue and shareholders wealth- A perspective from Singaporean companies. *Business Management Dynamics*, 1(9), 6-12.
- Klynveld Peat Marwick Goerdeler (2013). GRI's G4 guidelines: the impact on reporting. Retrieved from http://www.kpmg.com/TW/zh/Documents/ccs/KPMG_GRI%20G4%20Briefing_FINAL.pdf
- KPMG. (2008). *Sustainability reporting: A guide*.
- Kurucz, E.C., Colbert, B.A. & Wheeler, D. (2008). *The Business Case for Corporate Social Responsibility*. Oxford University Press.
- Lin, W. & Liu, C. (2005). Performance efficiency evaluation of the Taiwan's shipping industry: An application of data envelopment analysis, *Proceeding of the Eastern Asia Society for Transportation studies*, 5.
- Lozano, R. (2013). Are companies planning their organizational changes for corporate sustainability? An analysis of three case studies on resistance to change and their strategies to overcome it. *Corporate Social Responsibility and Environmental Management*, 20(5), 275-295.

- Makhamreh, M. (2008). Corporate Performance on Jordan: A Study of the Banking Sector. The College of Information Science and Technology. The Pennsylvania University.
- Martinez, J. B., Fernandez, M. L., Fernandez, P. M. R., (2016). Corporate social responsibility: evolution theory institutional and stakeholder perspective. *European Journal of Management and Business Economics*, 25(1): 8-14
- Milne, M. J., Gray, R., (2013). W(h)ither ecology? The triple bottom line, the global reporting initiative and corporate sustainability reporting. *Journal of business Ethics*, 118(1):13-29.
- Milne, M.J., & Adler, R.W. (1999). Exploring the reliability of social and environmental disclosures content analysis. *Accounting, Auditing & Accountability Journal*, 12(2), 237-256.
- Mishra, S., & Suar, D. (2010). Does corporate social responsibility influence firm performance of Indian companies?. *Journal of business ethics*, 95, 571-601.
- Momin, M.A. (2006). Corporate social responsibility and reporting by multinational corporations in Bangladesh - An exploration (Doctoral dissertation). University of Glasgow, United Kingdom. Retrieved from <http://theses.gla.ac.uk/1074/2/2006momin2phd.pdf>
- Moneva, J.M., and Cuellar, B. (2009). The value relevance of financial and nonfinancial environmental reporting. *Environmental Resource Economics*, 44, 441-456.
- Moneva, J.M., and Ortas, E. (2008). Are stock markets influenced by sustainability matter? Evidence from European countries. *International Journal of Sustainability Economy*, 1(1), 1-16.
- Morioka, S. N., Bolis, I., Evans, S., Carvalho, M. M., (2017). Transforming sustainability challenges into competitive advantages: multiple case studies Kaleidoscope converging into sustainable business model. *Journal of cleaner productions*, 167, 723-738.
- Muller, S. (2011). Quantitative sustainability disclosure – An international comparison and its impact on investor valuation (Master's Thesis). Lappeenranta University of Technology, Finland. Retrieved from <http://www.doria.fi/bitstream/handle/10024/69887/nbnfife201106101728.pdf?sequence=2>
- Murray, A. (2010). Do markets value companies' social and environmental activity? An inquiry into associations among social disclosure, social performance and

- financial performance (Doctoral dissertation). University of Glasgow, United Kingdom. Retrieved from <http://theses.gla.ac.uk/1770/>
- Murray, A., Sinclair, D., Power, D., and Gray, R. (2006). Do financial markets care about social and environmental disclosure? Further evidence and exploration from the UK. *Accounting, Auditing and Accountability Journal*, 19(2), 228-255.
- Nairmetrics (2023). Team research “the 10 biggest Nigeria companies by market cap – July 2023. www.google.com/amp/s/nairametrics.com/2023/08/07. Accessed on: 26, January, 2024.
- Nguyen, T. H., Elmagrhi, M. H., Ntim, C. G., & Wu, Y. (2021). Environmental performance, sustainability, governance and financial performance: Evidence from heavily polluting industries in China. *Business Strategy and the Environment*, 30(5), 2313-2331.
- Nobanee, H., Ellili, N., (2016). Corporate sustainability disclosure and annual report: Evidence from UAE Banks; Islamic versus conventional. *Renewable and Sustainable Energy Reviews*, 55, 1336-1341.
- Nwobu, O.A. (2017). Determinants of Corporate Sustainability Reporting in Selected Companies in Nigeria (Ph.D. thesis). Covenant University, Ota.
- Ofoegbu, G. N. (2003). *Advanced financial accounting*. Enugu: Precision publishers Limited.
- Okon, L. J., Okpokpo A.S., & Philip, I. B. (2023) Sustainability Reporting and Financial Performance Sustainability Reporting and Financial Performance. *Journal of Administration and Corporate Governance (AKSUJACOG)* 3(1). 32-42.
- Okoye, A. E., & Ngwakwe, C. C. (2004). Environmental accounting: A convergence of antecedent divergence. In A. C. Ezejelue & A.E. Okoye (Eds.), *Accountancy: Management Companion, Nigeria* (pp. [pages of chapter]). Nigeria: Nigerian Accounting Association.
- Oncioiu, I., Petrescu, A. G., Bîlcan, F. R., Petrescu, M., Popescu, D. M., & Anghel, E. (2020). Corporate
- Ong.T.T. Tho, H.S., Goh, H.H., Thia, S.B. & The B.H. (2016). The relationship between environmental disclosure and financial performance of public listed companies in Malaysia: Empirical review. *International Journal of Business Management*, 10(4), 461-467.

- Osisioma, B. C. (1996). Analysis of financial statements, in Osisioma, B. C. (Ed.) Studies in accounting: Text and reading, revised, and enlarged, 338-359.
- Pandey, I. M. (2004). Financial management (9th ed.), New Delhi: Vikas Publishing.
- Peat Marwick Goerdeler (2008). Sustainability reporting: A guide. Retrieved from <http://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/sustainableguide-0811.pdf>
- Plumlee, M., Brown, D., Hayes, R.M., and Marshall, S. (2010). Voluntary environmental disclosure quality and firm value: Further evidence. Retrieved from <http://papers.ssrn.com/sol3/papers.cfm?>
- Said, R.M. & Tumin, M.H. (2011). Performance and financial ratios of commercial banks in Malaysia and China. International Review of Business Research Papers, 7, 157-169.
- Schaltegger, S. (2004). The effect of corporate environmental strategy choice and environmental performance on competitiveness and economic performance: An empirical study of EU manufacturing. European Management Journal, 22(1): 557-572.
- Securities and Exchange Commission (2011). Code of Corporate Governance for Public Companies. Nigeria: Securities and Exchange Commission. Retrieved from www.sec.gov.ng/code-of-corporate-governance.html
- Sethi, S.P., Martell, T.F., & Demir, M. (2017). Enhancing the role and effectiveness of corporate social responsibility (CSR) reports: The missing element of content verification and integrity assurance. Journal of Business Ethics, 144, 59-82.
- Sisaye, S. (2011). Ecological systems approaches to sustainability and organizational development: Emerging trends in environmental and social accounting reporting systems. Leadership & Organization Development Journal, 32(4), 379-398.
- Sisaye, S. (2012). An ecological analysis of four competing approaches to sustainability development. World Journal of Entrepreneurship, Management and Sustainable Development, 8(1), 18-35.
- Stubbs, W., Higgins, C., Milne, M., (2013). Why do company not produce sustainability report. *Business strategy and the environment*, 22(7), 456-470.
- Sumbl, A.K., & Deeba, K. (2019). The Research Design. Journal of critical review, 6(3), 367-368.

- Sustainability Reporting and Financial Performance. *Sustainability*, 12(10), 4297.
- Sustainable Stock Exchange Brochure (2012). Retrieved from www.sseinitiative.org/wpcontent/uploads/2012/03/Brochure-SSE_updatesversion_2013.pdf
- Sustainable Stock Exchange Initiative. (2013). Sustainability reporting policies. Retrieved from <http://www.sseinitiative.org/sustainability-reporting-policies/>
- UDOMAH, M. O., & EMENYI, D. E. O. (2023). Sustainability reporting and financial performance of selected cement firms in Nigeria. *GPH-International Journal of Business Management*, 6(08), 40-65.
- Ugbogbo, S. N., & Obamwonyi, T. E. (2023). Sustainability Reporting and Financial Performance of Quoted Consumer Goods Companies in Nigeria. *International Journal of Research and Innovation in Social Science*, 7(6), 1608-1636.
- Umoren, A. O. & Ukpong, E. G. (2022). Corporate attributes and sustainability reporting: A study of Nigerian listed companies. *IDORS Journal of Humanities and Social Sciences* 7(1), 8-22.
- United Nations Conference on Trade and Development (2013). Best practice guidance for policy makers and stock exchanges on sustainability reporting initiatives. Retrieved from http://unctad.org/meetings/en/SessionalDocuments/ciisard67_en.pdf
- United Nations Environment Programme (2012). UNEP upgraded to universal membership following Rio+20 Summit. Retrieved from <http://www.unep.org/documents.multilingual/default.asp?documentid=2700&articleid=9363&l=en>
- United Nations Environment Programme (2013). Groups of friends of paragraph 47. Retrieved from
- Weber, O. (2017). Corporate sustainability and financial performance of Chinese banks. *Sustainability Accounting, Management and Policy Journal*, 8(3), 358-385.
- Weber, O., and Koellner, T. (2008). The relation between sustainability performance and financial performance of firms. *Progress in Industrial Ecology: An International Journal*, 5(3), 236-254.
- Whiteman, Lancee, L., (2017). The impact of sustainability reporting on firm profitability. *Undergraduate economic review*, 14(1), 4-10.

- World Commission on Environment and Development (1987). Report of the World Commission on Environment and Development: Our Common Future. Retrieved from <http://www.undocuments.net/our-common-future.pdf>
- Zuriekat, M., Salameh, R., & Alrawashdeh, S. (2011). Participation in performance measurement system and level of satisfaction. *International Journal of Business and Social Science*, 2(8), 12-52.
- Zvezdov, D. (2012). Sustainability accounting: Towards improved information management and management control (Doctoral dissertation). University The Leuphana University of Luneburg, Germany. Retrieved from <http://opus.unilueneburg.de/opus/volltexte/2012/14226/pdf/Dissertation.pdf>