

**ESG AND FINANCIAL PERFORMANCE: A COMPARATIVE STUDY ON
DISTRESS AND NON-DISTRESSED MANUFACTURING FIRMS IN NIGERIA**

**Esther Njideka BUCKNOR
MGS2104523**

**DEPARTMENT OF ACCOUNTING
FAULTY OF MANAGEMENT SCIENCES
UNIVERSITY OF BENIN
BENIN CITY**

NOVEMBER, 2025

**ESG AND FINANCIAL PERFORMANCE: A COMPARATIVE STUDY ON
DISTRESS AND NON-DISTRESSED MANUFACTURING FIRMS IN NIGERIA**

**Esther Njideka BUCKNOR
MGS2104523**

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

NOVEMBER, 2025

DECLARATION

I hereby declare that:

1. This project work is based on a study undertaken by me in the department of Accounting, University of Benin under the supervision of Professor E. L. Dabor
2. This research work has not previously submitted for the award of degree elsewhere.
3. All ideas and views are products of my personal research and where the views of others have been used and expressed they were duly acknowledged.
4. All liabilities arising from the study are entirely mine and not those of the supervisor.

Esther Njideka BUCKNOR
Project student

Date

CERTIFICATION

We the undersigned certify that this project work was carried out by **Esther Njideka BUCKNOR** with matriculation number **MGS2104523** of the department of Accounting, Faculty of Management sciences, University of Benin, Benin City, for the partial fulfillment of the requirements for the award of B.Sc. in Accounting.

Professor E. L. Dabor
Project Supervisor

Date

Dr. Ikhu-Omoregbe Godstime
Project Coordinator

Date

Prof. Osasu Obaretin
Head of Department

Date

DEDICATION

I dedicate this project work to God Almighty.

ACKNOWLEDGEMENTS

I would like to express my profound gratitude to God Almighty for giving me the strength, good health and knowledge to accomplish this project successfully. Also, with a standing ovation and recognition, I wish to express my sincere thanks to my supervisor Professor E. L. Dabor for his patience, insightful comments, suggestions, helpful information, corrections where needed and increasing ideas which have helped me tremendously at all times in the completion of this project work.

Also, with sincere thanks to the Head of Department Dr. Obaretin. With joy in my heart , I express my sincere thanks to my parents, for their unending support and encouragement to me all through my years in this great institution. May God Almighty guide and reward you all.

TABLE OF CONTENTS

TITLE	PAGE
TITLE PAGE	I
DECLARATION	II
CERTIFICATION	III
DEDICATION	IV
ACKNOWLEDGEMENTS	V
TABLE OF CONTENTS	VI
LIST OF TABLES	IX
ABSTRACT	X
CHAPTER ONE: INTRODUCTION	
1.1 Background to the Study	1
1.2 Statement of the Problem	4
1.3 Research Questions	7
1.4 Objectives of the Study	7
1.5 Research Hypotheses	8
1.6 Scope of the Study	8
1.7 Significance of the Study	9
1.8 Operational Definition of Terms	10
CHAPTER TWO: LITERATURE REVIEW	
1.1 Conceptual Review	12
2.2 Theoretical Review	31
2.3 Empirical Review	36

CHAPTER THREE: METHODOLOGY

3.1 Introduction	44
3.2 Research Design	44
3.3 Population of the Study	44
3.4 Sample Size and Sampling Technique	45
3.5 Sources and Method of Data Collection	45
3.6 Model Specification	46
3.7 Variables Description and Measurement	49
3.8 Method of Data Analysis	49
3.9 Diagnostic Tests	50
3.10 Justification of Methodology	51

CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS

4.1 Introduction	52
4.2 Data Presentation (Descriptive Statistics)	53
4.3 Correlation Matrix	55
4.4 Diagnostic Tests	56
4.5 Regression Results and Analysis	58
4.6 Test of Hypotheses	58
4.7 Discussion of Findings	61

**CHAPTER FIVE: SUMMARY OF FINDINGS,
CONCLUSION, AND RECOMMENDATIONS**

5.1 Introduction	63
5.2 Summary of Findings	63
5.3 Conclusion	64
5.4 Recommendations	65
5.5 Suggestions for Further Studies	66
REFERENCES	67
APPENDIX	74

LIST OF TABLES

TITLE	PAGE
Table 4.1: Descriptive Statistics (2019–2023)	53
Table 4.2: Correlation Matrix	55
Table 4.3: Variance Inflation Factor (VIF) Test	57
Table 4.4: Breusch–Pagan Heteroskedasticity Test	57
Table 4.5: Regression Results for Distressed Firms	58
Table 4.6: Regression Results for Non-Distressed Firms	59

ABSTRACT

The broad objective of this study is to examine the effect of Environmental, Social, and Governance (ESG) disclosure on the performance of distressed and non-distressed manufacturing firms in Nigeria over a five-year period from 2019 to 2023. To achieve this objective, the study employed ESG disclosure and its components as explanatory variables, while firm performance was measured using return on assets (ROA) and Tobin's Q. The study adopted an ex-post facto and descriptive research design using panel data obtained from the annual reports of selected manufacturing firms listed on the Nigerian Exchange Group. Descriptive statistics, correlation analysis, diagnostic tests, and panel least squares regression techniques were used for data analysis. The results reveal that ESG disclosure has a positive and statistically significant effect on both accounting-based and market-based performance measures across all firms. However, the effect is stronger among non-distressed firms, indicating that financially stable firms are better positioned to benefit from sustainability practices. The findings further show that leverage has a negative influence on performance, while firm size contributes positively to financial outcomes. Based on these empirical insights, the study recommends that manufacturing firms should strengthen their ESG reporting processes and integrate sustainability strategies into their operations to enhance competitiveness and long-term value creation. Policymakers and regulatory bodies should also encourage standardized ESG reporting frameworks to improve disclosure quality and stakeholder confidence within the sector.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In the past decade, the global business landscape has evolved significantly, with increasing attention placed on how firms respond to environmental pressures, social expectations and the demand for stronger corporate governance structures. This shift has pushed organisations to disclose more information on sustainability-related activities, commonly referred to as Environmental, Social and Governance (ESG) disclosure. ESG disclosure has moved beyond being a voluntary communication tool to becoming a central part of corporate reporting in many countries, driven by regulatory reforms, investor interests and the demand for greater transparency in business operations. According to Friede, Busch and Bassen (2015), the rising global emphasis on sustainability has created a new framework for evaluating firms, where financial performance alone is no longer a sufficient measure of long-term corporate success.

Manufacturing firms, especially those operating in developing economies, face unique challenges that make ESG disclosure particularly important. The manufacturing sector is often associated with environmental risks, such as emissions and waste generation, and social concerns relating to employee welfare, product safety and community impact. In Nigeria, these issues are amplified by infrastructural deficiencies,

regulatory inconsistencies, rising operational costs and increasing pressure to adopt sustainable practices. As the Nigerian economy seeks to diversify beyond oil dependency, the manufacturing sector plays a strategic role, yet it continues to struggle with competitiveness, productivity and financial stability (Adegbie & Adebayo, 2019). For this reason, transparent disclosure of ESG activities has become an important way through which manufacturing firms attempt to demonstrate responsibility, attract investment and strengthen stakeholder trust.

Several scholars argue that ESG disclosure can influence firm performance by improving reputation, enhancing investor confidence and encouraging better internal control mechanisms (Fernando et al., 2019; Buallay, 2020). From this perspective, ESG initiatives are expected to support long-term value creation, reduce risk exposure and improve financial outcomes. However, findings across different contexts remain mixed. While some studies show a positive relationship between ESG disclosure and performance, others report weak or insignificant linkages, suggesting that the benefits of ESG disclosure may depend on industry type, governance quality or the economic environment (Agyemang & Ansong, 2017; Nwachukwu & Omoye, 2020). The Nigerian setting provides an especially interesting case because of its institutional weaknesses, fluctuating economic conditions and varying levels of compliance with sustainability guidelines.

A critical dimension that has received limited attention is the influence of a firm's financial health on ESG disclosure and its outcomes. Firms experiencing financial distress often face liquidity shortages, declining profitability and difficulties meeting operational obligations. Managers of distressed firms may use ESG disclosure strategically to rebuild legitimacy, attract new investors or reduce negative public perceptions (Al-Hadi et al., 2017). In contrast, financially stable or non-distressed firms may disclose ESG information to strengthen long-term competitiveness, improve operational efficiency and meet the evolving expectations of stakeholders. This suggests that distressed and non-distressed firms may not only differ in their levels of ESG disclosure, but also in how ESG activities relate to their financial performance.

Despite the growing popularity of ESG reporting in Nigeria, research focusing on the comparative behaviour of distressed and non-distressed manufacturing firms remains sparse. Most prior studies have treated firms in the sector as a single group, without accounting for differences in financial health that could influence disclosure practices and performance outcomes. The lack of distinction between distressed and non-distressed firms has created a gap in understanding how ESG disclosure operates across firms with different financial realities. This gap is particularly important because manufacturing firms in Nigeria frequently experience financial pressures that may affect both their sustainability practices and their economic performance.

The increasing demand for sustainability reporting from regulators such as the Financial Reporting Council of Nigeria (FRCN), the Securities and Exchange Commission (SEC), and various global frameworks such as the Global Reporting Initiative (GRI) suggests that ESG disclosure will continue to gain importance. Understanding whether ESG disclosure strengthens or weakens performance for different categories of firms is therefore essential. Investors, for instance, require clear evidence on whether ESG disclosure is a reliable indicator of financial stability, while managers need guidance on whether such disclosures yield tangible performance benefits. Policy-makers also need empirical clarity to design effective reporting standards that promote both transparency and corporate sustainability.

Based on these developments, this study seeks to examine ESG disclosure and firm performance in Nigerian manufacturing firms, with a specific focus on comparing distressed and non-distressed firms. By doing so, the study contributes to the current debate on the value and relevance of ESG disclosure in emerging markets, offering empirical insights that can support more informed decision-making among stakeholders.

1.2 Statement of the Problem

Although ESG disclosure has gained increasing global recognition as a tool for strengthening transparency, promoting sustainable business practices and improving

long-term firm value, its actual impact on firm performance remains uncertain, especially within emerging economies such as Nigeria. While some studies report that ESG disclosure enhances financial performance through better stakeholder engagement, improved operational efficiency and stronger governance structures (Buallay, 2020; Fernando et al., 2019), other studies show weak, inconsistent or even negative relationships between ESG practices and firm outcomes (Agyemang & Ansong, 2017; Nwachukwu & Omoye, 2020). This inconsistency has created a lack of clarity on whether ESG disclosure truly enhances performance in the Nigerian business environment or whether firms adopt it mainly to satisfy regulatory or reputational demands.

A major limitation in the existing literature is that many studies focus on general samples of firms without differentiating between firms that are financially distressed and those that are not. In the Nigerian manufacturing sector, financial distress is a recurring problem due to high production costs, fluctuating exchange rates, poor infrastructure, regulatory uncertainties and inconsistent economic policies. Financial distress affects managerial decisions, corporate reporting behaviour and the ability of firms to implement sustainability practices (Al-Hadi et al., 2017). Distressed firms may engage in ESG disclosure as a strategic tool to regain legitimacy, attract new investors or mask poor performance, while non-distressed firms may disclose ESG information as part of long-

term sustainability planning. However, the extent to which ESG disclosure influences performance in these two different conditions remains largely unexplored in existing Nigerian studies.

Another problem arises from the absence of a comprehensive and comparative analysis of distressed and non-distressed manufacturing firms in Nigeria. Existing sustainability studies in the country have generally analysed ESG disclosure at an aggregate level without acknowledging the possibility that the relationship between ESG disclosure and performance may vary depending on the financial health of the firm. This gap is important because financial distress can alter disclosure incentives, managerial behaviour and the capacity to invest in sustainability initiatives. Without distinguishing between distressed and non-distressed firms, policy-makers and stakeholders may be relying on incomplete evidence when making decisions related to ESG reporting, investment or regulatory frameworks. Despite the growing pressure from regulators such as the Financial Reporting Council of Nigeria (FRCN) and the Securities and Exchange Commission (SEC) for more transparent reporting, many manufacturing firms still exhibit low or inconsistent levels of ESG disclosure. The lack of standardised reporting frameworks and limited enforcement mechanisms contribute to information asymmetry and reduce the reliability of ESG disclosures in the sector (Adegbe & Adebayo, 2019). This situation raises concerns about whether ESG disclosure genuinely reflects corporate

responsibility or merely serves as a symbolic gesture with little connection to actual firm performance.

Given these uncertainties, there is a clear need for an empirical study that investigates whether ESG disclosure contributes to firm performance in the Nigerian manufacturing sector and whether the effects differ between distressed and non-distressed firms. Addressing this gap will improve understanding of the strategic value of ESG disclosure and provide evidence that can support policy design, investment decisions and managerial practices. Therefore, the problem this study seeks to address is the unclear and inconsistent relationship between ESG disclosure and firm performance among Nigerian manufacturing firms, and the lack of comparative evidence based on the financial health of the firms.

1.3 Research Questions

In line with the objectives of the study, the following research questions are formulated to guide the investigation:

1. What is the relationship between ESG disclosure and the financial performance of distress and non-distress manufacturing firms in Nigeria?
2. How does the effect of ESG disclosure on firm performance differ between distressed and non-distressed manufacturing firms in Nigeria?

1.4 Objectives of the Study

The main objective of this study is to examine the relationship between ESG disclosure and firm performance among manufacturing firms in Nigeria, with a specific focus on comparing distressed and non-distressed firms. To achieve this, the study is guided by the following specific objectives to:

1. Examine the relationship between ESG disclosure and the financial performance of distressed and non-distress manufacturing firms in Nigeria.
2. Compare the effect of ESG disclosure on the performance of distressed and non-distressed manufacturing firms in Nigeria.

1.5 Research Hypotheses

To guide the empirical analysis of this study, the following null hypotheses are formulated:

1. There is no significant relationship between ESG disclosure and the financial performance of distressed and non-distress manufacturing firms in Nigeria.
2. There is no significant difference in the effect of ESG disclosure on firm performance between distressed and non-distressed manufacturing firms in Nigeria.

1.6 Scope of the Study

This study is limited to examining the relationship between ESG disclosure and firm performance within the Nigerian manufacturing sector. The content scope of the study covers environmental, social and governance disclosure as presented in annual reports, sustainability reports and other publicly available corporate documents. Firm performance in this study is assessed using accounting-based and market-based indicators, such as return on assets, return on equity and market value measures, depending on data availability.

1.7 Significance of the Study

This study is significant because it provides deeper understanding of how ESG disclosure relates to firm performance within the Nigerian manufacturing sector, an area where research is still developing. The findings will be valuable to several groups.

The study will benefit corporate managers by providing evidence on whether ESG disclosure contributes to improved financial outcomes, and whether the benefits differ between distressed and non-distressed firms. This will guide managers in deciding how much attention and resources to allocate to sustainability reporting, especially in periods of financial difficulty. The study is important to investors and financial analysts who rely on credible information to make investment decisions. By examining whether ESG

disclosure is a meaningful indicator of performance, the study will help investors understand whether firms that disclose more ESG information are more likely to perform better, particularly in the Nigerian context where information asymmetry is still common.

The study will be useful to regulators and policy-makers, such as the Financial Reporting Council of Nigeria (FRCN) and the Securities and Exchange Commission (SEC). The evidence generated from this research can support the development of stronger reporting guidelines, improved enforcement mechanisms and policies that encourage transparency, sustainability and responsible corporate behaviour in the manufacturing sector. The study contributes to academic literature by addressing a gap concerning the comparative behaviour of distressed and non-distressed firms. Most previous studies in Nigeria have examined ESG disclosure and firm performance without considering the financial health of the firms. By focusing on this distinction, the study provides new insights and enriches the theoretical and empirical understanding of ESG practices in emerging markets.

The study will assist future researchers by serving as a reference material and encouraging further investigation into sustainability reporting, financial distress and performance dynamics across different sectors. It offers a foundation upon which other comparative studies can be built, thereby supporting continuous knowledge development in accounting and corporate governance.

1.8 Operational Definition of Terms

Environmental, Social and Governance (ESG) Disclosure: This refers to the reporting of information related to a firm's environmental practices, social responsibilities and governance structures.

Firm Performance: This refers to the measurable outcomes of a firm's operations. In this study, firm performance is assessed using accounting-based and market-based indicators such as return on assets, return on equity and market value measures, depending on data availability.

Financially Distressed Firm: A manufacturing firm that shows signs of financial difficulty, such as declining profits, liquidity problems, high leverage or an inability to meet financial obligations.

Non-Distressed Firm: A financially stable manufacturing firm that does not exhibit indicators of distress. These firms are considered healthy and capable of meeting their short-term and long-term financial obligations.

Manufacturing Firms: Companies engaged in the production and transformation of raw materials into finished goods. In this study, manufacturing firms refer specifically to those listed under the manufacturing sector on the Nigerian Exchange Group (NGX).

Disclosure Level: This represents the extent or quantity of ESG-related information a firm provides in its official reports. It is measured using selected ESG indicators relevant to the study.

Sustainability Reporting: The process by which firms communicate their long-term economic, environmental and social impacts. In this study, sustainability reporting relates specifically to the ESG information contained in corporate publications.

CHAPTER TWO

LITERATURE REVIEW

2.1 Conceptual Review

The conceptual review provides the foundation for understanding the key ideas and constructs that guide this study. It explains the major concepts related to the topic and clarifies how they apply within the context of corporate reporting and firm performance. In this study, the conceptual review focuses on Environmental, Social, and Governance (ESG) disclosure, financial performance and financial distress. These concepts help to explain how firms communicate non-financial activities, how such disclosures relate to organisational outcomes and how financial challenges influence corporate reporting practices. The review also provides clarity on how each concept fits into the broader field of sustainability reporting and corporate behaviour. It forms the basis for understanding the relationship between ESG disclosure, firm characteristics and performance, especially among manufacturing firms

2.1.1 Concept of ESG Disclosure

Environmental, Social, and Governance (ESG) disclosure has emerged as a critical aspect of corporate reporting, reflecting the growing global demand for transparency, sustainability, and accountability in business operations. ESG disclosure refers to the process by which organizations communicate information about their

environmental practices, social responsibility initiatives, and governance structures to stakeholders (Kotsantonis et al., 2016). Unlike traditional financial reporting, which focuses on profitability and liquidity, ESG disclosure captures the non-financial dimensions of a firm's performance that influence long-term value creation and risk management (Friede et al., 2015). The concept of ESG disclosure evolved from broader corporate social responsibility (CSR) frameworks and sustainable development goals. It is grounded in the idea that firms have obligations not only to shareholders but also to a wider group of stakeholders, including employees, customers, regulators, and the environment (Eccles & Klimenko, 2019). ESG disclosure thus provides a more holistic view of organizational performance by addressing how companies interact with environmental systems, manage human capital, and ensure ethical governance.

Globally, ESG reporting has become increasingly standardized through frameworks such as the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and Task Force on Climate-related Financial Disclosures (TCFD). These standards provide guidelines for measuring and disclosing ESG activities to ensure comparability and reliability across firms and industries (GRI, 2020). The growing influence of these frameworks reflects the shift from voluntary to mandatory sustainability reporting in many jurisdictions, particularly as investors and regulators recognize ESG factors as integral to assessing financial performance and risk exposure

(Fernando & Lawrence, 2019). In emerging economies such as Nigeria, ESG disclosure is gaining prominence due to increased awareness of sustainable business practices and the need to attract foreign investment. The Nigerian Exchange Group (NGX) introduced its Sustainability Disclosure Guidelines in 2021, requiring listed companies to integrate ESG information into their annual reports (Adekoya & Ekpenyong, 2022). This development reflects the country's alignment with global sustainability trends and the recognition that non-financial information plays a key role in corporate competitiveness and investor confidence.

Moreover, ESG disclosure serves as a strategic communication tool that enhances corporate image, mitigates reputational risk, and fosters stakeholder trust. According to Hussain et al. (2018), companies with transparent ESG reporting are more likely to enjoy favorable relationships with investors, customers, and regulators. This transparency reduces information asymmetry and allows stakeholders to evaluate whether firms are managing environmental and social risks effectively. ESG disclosure is also associated with improved operational performance and long-term financial resilience. Firms that disclose ESG information tend to demonstrate superior resource management, ethical governance, and social responsibility, which collectively reduce regulatory, environmental, and reputational risks (Buallay, 2019). By providing insights into corporate sustainability strategies, ESG disclosure bridges the gap between financial and

non-financial performance, helping stakeholders make informed decisions about the firm's future viability.

ESG disclosure represents a paradigm shift in corporate reporting from a narrow focus on profit maximization to a broader commitment to sustainability, accountability, and social impact. As the global business environment becomes increasingly sensitive to environmental degradation, social inequality, and governance scandals, ESG disclosure has evolved into an essential component of corporate strategy and stakeholder engagement, especially for firms operating in high-risk sectors such as manufacturing in Nigeria.

2.1.2 Components of ESG

The concept of Environmental, Social, and Governance (ESG) is built upon three interrelated pillars that collectively capture the sustainability and ethical dimensions of a company's operations. Each component environmental, social, and governance reflects a specific domain through which firms are evaluated by investors, regulators, and other stakeholders. Together, they provide a comprehensive understanding of how corporate practices influence long-term performance and societal well-being (Gillan et al., 2021).

2.1.2.1 Environmental (E) Component

The environmental dimension of ESG focuses on how a firm interacts with the natural ecosystem and manages environmental risks. It involves the assessment of policies, practices, and performance related to issues such as carbon emissions, energy efficiency, water usage, waste management, renewable energy adoption, and climate change adaptation (Clark et al., 2018). In the context of manufacturing firms, environmental performance is particularly critical due to the sector's potential contribution to pollution, resource depletion, and greenhouse gas emissions.

Environmental disclosure provides insights into a firm's efforts to minimize its ecological footprint, comply with environmental regulations, and align with global sustainability frameworks such as the Paris Agreement and the United Nations Sustainable Development Goals (SDGs) (Fernando & Lawrence, 2019). Companies that effectively manage environmental risks are often viewed as less vulnerable to regulatory sanctions, reputational damage, and supply chain disruptions (Buallay, 2019). In Nigeria, the environmental aspect of ESG is gaining relevance as manufacturing activities increasingly raise concerns about environmental degradation, poor waste disposal, and industrial pollution. Firms that disclose robust environmental policies and invest in green

technologies can enhance their legitimacy, attract environmentally conscious investors, and reduce operational costs through resource efficiency (Olowokudejo & Adetunji, 2021).

2.1.2.2 Social (S) Component

The social component of ESG focuses on the relationships a company maintains with its employees, customers, suppliers, and the broader community. It measures how firms contribute to societal development and address human capital concerns such as employee welfare, workplace diversity, occupational health and safety, and respect for human rights (Drempetic et al., 2020). A company's social performance reflects its commitment to ethical behavior and social justice, ensuring that its operations do not exploit or marginalize any group. In manufacturing, this may include providing safe working conditions, ensuring fair wages, supporting local communities, and engaging in philanthropic initiatives (Hussain et al., 2018).

Social disclosure helps to establish trust between a firm and its stakeholders. Firms that prioritize social responsibility tend to enjoy enhanced brand reputation, customer loyalty, and employee satisfaction, which can translate into improved financial performance (Agyemang & Ansong, 2017). In Nigeria, where unemployment and labor-related issues are prominent, social responsibility initiatives have become vital for

maintaining industrial harmony and demonstrating corporate citizenship (Ene & Amusa, 2021).

2.1.2.3 Governance (G) Component

The governance component addresses the internal structures, policies, and practices that determine how a company is directed and controlled. It encompasses aspects such as board composition, executive compensation, shareholder rights, transparency, and anti-corruption mechanisms (Buallay, 2019). Good governance ensures that firms operate ethically, comply with regulations, and make decisions that align with long-term shareholder and stakeholder interests. Governance disclosure provides stakeholders with information about accountability mechanisms within the organization and the effectiveness of oversight functions. According to Gillan et al. (2021), firms with strong governance structures are more likely to engage in credible ESG reporting, thereby reducing risks associated with fraud, mismanagement, and unethical conduct. In developing economies like Nigeria, weak governance frameworks have often been linked to corporate failures, financial mismanagement, and environmental negligence. Hence, strengthening governance structures through effective board oversight, transparency, and

adherence to corporate codes of conduct remains a critical determinant of sustainable business performance (Okafor & Onyeka, 2022).

2.1.2.4 Interrelationship Among ESG Components

While each component of ESG operates within its own domain, they are interrelated and mutually reinforcing. Effective governance, for example, provides the foundation for sound environmental and social practices by ensuring accountability and strategic alignment. Similarly, environmental and social performance can influence governance quality by shaping stakeholder expectations and regulatory scrutiny (Friede et al., 2015). Therefore, the ESG framework should not be viewed as three isolated dimensions but as an integrated system of sustainability assessment. Firms that successfully balance all three components tend to exhibit greater resilience, attract responsible investors, and maintain long-term value creation (Gillan et al., 2021).

2.1.3 Firm Performance

Firm performance is a central concept in corporate finance and accounting research, representing the extent to which a firm achieves its financial, operational, and

strategic objectives. It reflects the firm's efficiency in utilizing its resources to generate profits, sustain growth, and enhance shareholder value (Agyemang & Ansong, 2017). In both academic and professional contexts, firm performance serves as a key indicator of management effectiveness, competitiveness, and long-term sustainability. The evaluation of firm performance is commonly categorized into accounting-based and market-based measures. These two perspectives complement each other by offering insights from both internal operational efficiency and external market valuation.

2.1.3.1 Accounting-Based Measures

Accounting-based measures of firm performance rely on financial statement data to assess a firm's internal efficiency and profitability. They are retrospective indicators that capture how effectively management uses assets and equity to generate returns. The most frequently used accounting-based performance indicators include Return on Assets (ROA), Return on Equity (), Net Profit Margin (NPM), and Earnings per Share (EPS) (Tarmuji et al., 2016).

Return on Assets (ROA) measures the ability of a company to generate profit from its total assets, reflecting managerial efficiency in asset utilization.

Return on Equity () evaluates the firm's profitability relative to shareholder equity, indicating how well the company rewards its investors.

Earnings per Share (EPS) and Net Profit Margin (NPM) provide additional insights into profitability per share and the proportion of revenue converted into profit (Hassan & Guo, 2017).

These accounting measures are valued for their objectivity and ease of computation, as they are derived from audited financial reports. However, they may be influenced by accounting policies, inflation, or creative reporting practices, which can distort the true financial position of the firm (Waweru & Prot, 2018). Despite these limitations, accounting-based indicators remain essential for understanding internal financial performance, especially in the manufacturing sector where tangible asset utilization plays a critical role in profitability.

2.1.3.2 Market-Based Measures

Market-based performance measures reflect how investors and financial markets perceive the value and future prospects of a firm. They are forward-looking and often capture intangible factors such as investor confidence, growth potential, and risk expectations (Zumente & Bistrova, 2021). Common market-based indicators include Tobin's Q, Market-to-Book Ratio, and Stock Price Returns. i.e.;

Tobin's Q is a ratio of a firm's market value to the replacement cost of its assets. A value greater than one implies that investors expect the firm to generate future returns

above the cost of its assets (Villiers et al., 2017). Market-to-Book Ratio compares the market valuation of a firm's equity to its book value, indicating investor perception of its growth potential. Stock Price Returns measure the market's reaction to the firm's overall performance, signaling investor sentiment and confidence (Broadstock et al., 2021). Market-based indicators are particularly useful in assessing how external stakeholders such as investors, analysts, and creditors evaluate a firm's ESG performance, competitiveness, and growth outlook. However, they may be subject to short-term volatility and external economic shocks, which sometimes obscure the firm's intrinsic performance (Nekhili et al., 2017).

2.1.3.3 Integrating ESG into Firm Performance Evaluation

In recent years, the concept of firm performance has expanded beyond financial metrics to include non-financial dimensions such as ESG practices, sustainability, and stakeholder engagement. Firms that integrate ESG principles into their operations often experience improved performance due to enhanced reputation, reduced risk exposure, and greater operational efficiency (Buallay, 2019). Empirical studies have shown that companies with strong ESG disclosure tend to have higher ROA and Tobin's Q ratios, suggesting that responsible corporate behavior can translate into superior financial outcomes (Fatemi et al., 2018; Broadstock et al., 2021). This relationship is especially relevant in developing economies like Nigeria, where ESG-aligned manufacturing firms

are increasingly viewed as more resilient and attractive to investors (Adekoya & Ekpenyong, 2022). Therefore, a comprehensive evaluation of firm performance should incorporate both financial and non-financial measures. Accounting-based indicators provide insights into internal efficiency and profitability, while market-based indicators capture investor perception and market confidence. Integrating ESG disclosure within these measures ensures a holistic understanding of corporate performance that aligns financial success with sustainability and social responsibility.

2.1.4 Distressed and Non-Distressed Firms

Financial distress is a critical concept in corporate finance and accounting literature, representing a state in which a firm experiences difficulty in meeting its financial obligations as they fall due (Altman, 2018). It typically manifests through declining profitability, liquidity shortages, high leverage ratios, and ultimately, the risk of insolvency or bankruptcy. In contrast, non-distressed firms are financially stable organizations with healthy cash flows, sustainable debt levels, and the capacity to meet both short-term and long-term financial commitments. The distinction between distressed and non-distressed firms is fundamental in evaluating firm performance, investment attractiveness, and the role of sustainability practices such as ESG disclosure in mitigating risk.

2.1.4.1 Concept of Financial Distress

Financial distress occurs when a firm's operating cash flows are insufficient to service its debt and other financial obligations, leading to a deterioration in its financial health (Mselmi et al., 2017). According to Outecheva (2019), distress is often a continuum rather than a sudden event it begins with early warning signs such as declining profitability, reduced asset turnover, and increasing financial leverage before culminating in insolvency if corrective actions are not taken. Researchers and practitioners have developed several models to measure financial distress, including Altman's Z-Score Model (Altman, 2018), the Springate Model, and the Ohlson O-Score, which use financial ratios to predict the likelihood of bankruptcy. Financial distress among manufacturing firms has become more pronounced due to economic instability, fluctuating exchange rates, inflation, and inadequate access to finance (Owolabi & Ogundajo, 2020). Many firms struggle with rising production costs and limited export competitiveness, factors that erode profitability and liquidity. Consequently, distinguishing between distressed and non-distressed firms provides a framework for assessing financial resilience and performance differences within the sector.

2.1.4.2 Characteristics of Distressed Firms

Distressed firms typically exhibit certain financial and operational characteristics that differentiate them from healthier firms. These include declining profitability, excessive debt, poor cash flow management, and inefficient asset utilization (Akinyomi & Olagunju, 2016). In addition, distressed firms often face reputational damage, reduced investor confidence, and difficulty accessing capital markets. From a managerial perspective, financial distress constrains a firm's ability to invest in innovation, employee development, and sustainability initiatives (Waqas & Md-Rus, 2018). Operational inefficiencies and weak corporate governance also contribute significantly to distress. Firms that lack transparency, fail to adopt sound governance practices, or ignore ESG principles may face heightened risks of stakeholder withdrawal, litigation, or regulatory penalties (Dawkins & Fraas, 2019). In such cases, distress extends beyond financial metrics to encompass ethical, environmental, and reputational dimensions.

2.1.4.3 Characteristics of Non-Distressed Firms

Non-distressed firms, on the other hand, demonstrate strong financial fundamentals, including steady revenue growth, efficient cost management, and robust liquidity. They maintain optimal debt-equity structures and can adapt to market fluctuations without compromising solvency (Kumar & Rao, 2020). Importantly, non-distressed firms often adopt proactive strategies such as risk management systems, sustainability reporting, and ESG integration to mitigate potential sources of distress

(Aras & Crowther, 2018). Such firms are also more likely to invest in corporate social responsibility (CSR) and environmental stewardship, recognizing that long-term profitability depends on responsible stakeholder relationships and ethical conduct (Owolabi & Ogundajo, 2020). Empirical evidence suggests that firms with strong governance structures and ESG disclosure frameworks enjoy higher investor trust, lower capital costs, and greater resilience during economic downturns (Buallay et al., 2020).

2.1.4.4 ESG Disclosure and Financial Distress

The growing integration of ESG principles into corporate management has reshaped how financial distress is analyzed and mitigated. ESG disclosure enhances corporate transparency, reduces information asymmetry, and builds investor confidence factors that can prevent the onset of distress (Gerged, 2021). Environmentally conscious firms often reduce operational risks through energy efficiency and waste minimization, while socially responsible firms attract and retain talent, improving productivity. Likewise, firms with strong governance mechanisms can detect early warning signals of distress and respond swiftly to financial shocks (Agyemang & Ansong, 2017). ESG disclosure can be a differentiating factor between distressed and non-distressed firms. For instance, Adekoya and Ekpenyong (2022) found that Nigerian manufacturing firms with high ESG reporting quality tend to outperform peers in profitability and risk management. Similarly, Alareeni and Hamdan (2020) observed that ESG disclosure enhances firm

value and stability, helping companies navigate turbulent market conditions. Therefore, the extent of ESG integration may serve as both a diagnostic and preventive tool for financial distress.

2.1.5 ESG Disclosure and Corporate Financial Health

Environmental, Social, and Governance (ESG) disclosure has become a central topic in corporate finance, reflecting the increasing demand for transparency, accountability, and ethical business conduct. Corporate financial health refers to a firm's ability to generate sustainable earnings, maintain solvency, and withstand financial shocks (Altman, 2018). In the context of ESG, corporate financial health is not only determined by profitability and liquidity but also by how effectively a firm manages non-financial risks related to environmental sustainability, social responsibility, and governance integrity (Gerged, 2021). ESG disclosure serves as a mechanism through which firms communicate their commitment to responsible practices. This form of reporting allows stakeholders including investors, regulators, and consumers to evaluate the long-term viability and risk profile of the organization (Eccles et al., 2020). Firms that voluntarily disclose ESG information are often perceived as less risky and more stable,

which can enhance their access to capital, reduce financing costs, and improve market valuation (Fatemi et al., 2018).

The relationship between ESG disclosure and financial health is increasingly recognized as symbiotic. Sound ESG practices can lead to improved financial outcomes through better operational efficiency, enhanced reputation, and stronger stakeholder relationships. For instance, environmental initiatives such as energy efficiency and waste reduction can lower operating costs and minimize regulatory penalties (Buallay, 2019). Socially responsible behavior including fair labor practices and community engagement helps attract and retain talent, while strong governance structures mitigate risks related to fraud and mismanagement (Broadstock et al., 2021). From an investor perspective, ESG disclosure signals management's commitment to sustainability, which can translate into long-term value creation (Friede et al., 2015). Investors increasingly integrate ESG metrics into their decision-making processes, considering firms with transparent ESG practices to be more resilient and financially sound. Conversely, the absence of ESG disclosure can be perceived as a red flag, suggesting potential exposure to environmental, reputational, or governance risks (Zumente & Bistrova, 2021).

2.1.5.1 ESG Disclosure as a Risk Mitigation Tool

Corporate financial distress often arises from poor risk management, excessive leverage, and external shocks. ESG disclosure can mitigate these risks by promoting proactive management and long-term strategic planning (Alareeni & Hamdan, 2020). For instance, environmentally responsible firms tend to face fewer regulatory fines and disruptions, while socially conscious firms maintain better relationships with employees, suppliers, and customers. Governance transparency, including board diversity and accountability, ensures better oversight of financial decisions and prevents unethical conduct that could lead to distress (Buallay et al., 2020). Empirical evidence supports the risk-mitigating role of ESG disclosure. For example, Gerged (2021) found that firms with comprehensive ESG reporting experienced lower levels of financial distress, while Alareeni and Hamdan (2020) demonstrated that ESG disclosure positively influences both firm stability and profitability in emerging markets. Similarly, Fatemi et al. (2018) revealed that ESG performance and disclosure jointly reduce firm-specific risk by improving investor confidence and aligning managerial decisions with stakeholder expectations.

2.1.5.2 ESG Disclosure, Profitability, and Market Valuation

A growing body of research suggests that ESG disclosure enhances firm performance by influencing both accounting-based and market-based indicators. In terms of accounting performance, companies with robust ESG reporting often achieve higher

returns on assets (ROA) and returns on equity due to improved efficiency and cost management (Buallay, 2019). Market-based outcomes, such as Tobin's Q and stock price appreciation, also tend to rise as investors reward firms perceived as ethical and sustainable (Broadstock et al., 2021). ESG disclosure is increasingly viewed as a determinant of corporate financial health, particularly in the manufacturing sector. According to Adekoya and Ekpenyong (2022), Nigerian firms that consistently report ESG practices exhibit stronger profitability and lower distress risk. Similarly, Obiora and Akintoye (2021) found that ESG transparency enhances investors' perception of firm credibility, thereby improving access to funding and long-term stability. However, challenges such as weak regulatory enforcement, limited ESG literacy, and inconsistent reporting frameworks continue to affect the effectiveness of ESG disclosure in Nigeria.

2.1.5.3 ESG Disclosure and Long-Term Sustainability

The integration of ESG principles into financial analysis marks a shift from short-term profit orientation to long-term sustainability. Corporate financial health, in this context, is not merely about avoiding distress but ensuring the firm's resilience in dynamic and uncertain environments (Eccles et al., 2020). By disclosing ESG activities, firms demonstrate accountability, attract socially responsible investors, and enhance stakeholder trust all of which contribute to financial endurance and corporate longevity (Zumente & Bistrova, 2021). ESG disclosure strengthens corporate financial health by

fostering transparency, reducing information asymmetry, and embedding ethical considerations into business decisions. The growing evidence indicates that ESG-oriented firms tend to outperform their peers over the long term, highlighting ESG disclosure as both a financial and strategic imperative for sustainable business success.

2.2 Theoretical Review

The key theories underpinning the relationship between ESG disclosure and firm performance are the Stakeholder Theory, Legitimacy Theory, and the Resource-Based View (RBV) Theory. These theories provide conceptual frameworks that explain why firms engage in ESG disclosure and how such practices influence corporate financial health and performance.

2.2.1 Stakeholder Theory

The Stakeholder Theory, proposed by Freeman (1984), posits that a firm's success depends on its ability to manage relationships with various stakeholders including shareholders, employees, customers, suppliers, regulators, and the broader community. The theory challenges the traditional shareholder-centric view of corporate governance by emphasizing that long-term profitability and sustainability can only be achieved when the interests of all stakeholders are balanced (Freeman, Harrison, & Wicks, 2010). Stakeholder theory suggests that firms voluntarily disclose environmental,

social, and governance information to meet the expectations of diverse stakeholders and gain their trust (Clarkson, 1995). For instance, environmental disclosure may address concerns of regulatory bodies and environmental activists, while social disclosure appeals to employees and communities seeking fair treatment and ethical practices (Agyemang & Ansong, 2017). Governance disclosure, on the other hand, assures investors of transparency and accountability in decision-making.

According to Michelon et al. (2016), ESG disclosure functions as a communication tool that strengthens stakeholder relationships, enhances corporate reputation, and reduces information asymmetry. This improved trust can lead to lower capital costs, higher investor confidence, and improved firm performance (Fatemi et al., 2018). In the Nigerian context, firms are increasingly recognizing that addressing stakeholder concerns through ESG reporting can help them attract investment, comply with regulatory standards, and improve their long-term financial performance (Adekoya & Ekpenyong, 2022). Therefore, the stakeholder theory provides a strong foundation for understanding why firms adopt ESG practices not merely as compliance measures, but as strategic initiatives to align stakeholder interests with sustainable performance.

2.2.2 Legitimacy Theory

The Legitimacy Theory emphasizes that organizations seek to ensure their operations are perceived as legitimate within the social systems in which they operate (Suchman, 1995). Legitimacy is defined as a generalized perception that a company's actions are desirable, proper, and appropriate within the bounds of societal norms, values, and beliefs. According to this theory, firms engage in ESG disclosure to demonstrate compliance with societal expectations and to maintain their "license to operate" (Deegan, 2019). Firms operating in industries with high environmental or social impact such as manufacturing are often under intense scrutiny from regulators, communities, and the media. ESG disclosure serves as a means for such firms to justify their actions and reinforce public trust (O'Donovan, 2002). For example, by publishing sustainability reports, companies can communicate their environmental protection efforts, community development programs, and ethical governance practices to avoid reputational damage and potential regulatory sanctions (Cho et al., 2015).

Empirical studies have found that firms under public pressure tend to increase their ESG reporting as a legitimacy-enhancing mechanism (Cormier & Magnan, 2016). In Nigeria, this is particularly relevant given increasing concerns about corporate environmental degradation, labor rights, and corruption. Through ESG disclosure, firms signal their commitment to responsible corporate behavior, thereby enhancing legitimacy and ensuring continued stakeholder support (Ezejiofor & Ezenyilimba, 2021). Legitimacy

theory thus explains ESG disclosure as a reactive and proactive strategy. Reactively, firms disclose ESG information to restore legitimacy after negative events (such as pollution scandals), while proactively, they use disclosure to maintain or enhance legitimacy by demonstrating social responsibility and ethical behavior (Deegan, 2019). Ultimately, legitimacy enhances stakeholder confidence and contributes to improved financial and reputational performance.

2.2.3 Resource-Based View (RBV) Theory

The Resource-Based View (RBV) Theory, developed by Barney (1991), posits that firms achieve sustainable competitive advantage through the acquisition and effective utilization of valuable, rare, inimitable, and non-substitutable (VRIN) resources. Traditionally, these resources included tangible assets such as capital and technology, as well as intangible assets like brand reputation and organizational culture. In contemporary research, ESG practices and corporate reputation are increasingly viewed as strategic resources that enhance firm competitiveness (Hart, 1995; Russo & Fouts, 1997). From the RBV perspective, ESG disclosure can strengthen a firm's internal capabilities and external competitiveness. For example, environmental management initiatives can lead to cost savings and innovation, while social responsibility programs enhance employee motivation and loyalty. Governance practices, such as transparency

and accountability, reduce risk and foster investor confidence (Buallay, 2019). Together, these elements can translate into superior financial performance and market valuation.

Hart (1995) introduced the Natural Resource-Based View (NRBV) as an extension of the RBV, emphasizing that environmental capabilities such as pollution prevention, sustainable resource use, and eco-efficiency can serve as unique competitive advantages. Similarly, firms that integrate ESG principles into their strategy can develop competencies that are difficult for competitors to replicate (Buallay et al., 2020). In emerging economies like Nigeria, ESG-oriented firms can leverage sustainability practices as strategic assets to differentiate themselves in competitive markets, attract foreign investment, and ensure long-term survival in volatile economic environments (Adekoya & Ekpenyong, 2022). Hence, the RBV theory supports the idea that ESG disclosure is not merely a compliance exercise but a means of developing distinctive capabilities that promote financial health and sustainable performance.

The Stakeholder Theory explains ESG disclosure as a strategy for addressing stakeholder expectations and enhancing trust. The Legitimacy Theory interprets it as a means of gaining social approval and maintaining the firm's societal "license to operate." The Resource-Based View (RBV), on the other hand, sees ESG as a strategic resource capable of generating sustainable competitive advantage. Collectively, these theories

provide a comprehensive framework for understanding how ESG disclosure influences corporate performance, particularly in the context of financial distress and sustainability.

2.3 Empirical Review

Empirical literature on Environmental, Social, and Governance (ESG) disclosure and firm performance has expanded significantly over the past decade. The review in this section synthesizes findings from prior studies, focusing on global evidence and research specific to developing economies like Nigeria. It examines studies on ESG disclosure, the relationship between ESG and firm performance, studies on financial distress and firm outcomes, and identifies gaps that justify the present research.

2.3.1 Studies on ESG Disclosure

The growing global emphasis on corporate sustainability has made ESG disclosure an essential part of corporate communication and accountability. ESG disclosure involves reporting a company's activities related to environmental protection, social responsibility, and governance practices. Scholars have widely explored what drives firms to disclose ESG information and how it varies across industries and countries. Globally, empirical evidence shows that ESG disclosure has become a strategic

tool for firms to enhance transparency, manage stakeholder expectations, and build legitimacy. Friede, Busch, and Bassen (2015) conducted a large-scale meta-analysis involving over 2,000 empirical studies and discovered that approximately 90% reported a non-negative relationship between ESG activities and firm outcomes. The authors concluded that ESG disclosure not only boosts transparency but also supports long-term firm sustainability.

Similarly, Michelin and Rodrigue (2015) found that the quality and extent of ESG reporting are influenced by stakeholder pressure and institutional frameworks. Companies operating in regions with strict regulations tend to provide more comprehensive ESG disclosures compared to those in developing economies with weaker governance structures. In developed countries, firms often integrate ESG into their business models, treating it as a performance driver rather than a compliance requirement. ESG disclosure in developing economies, particularly in sub-Saharan Africa, remains limited and inconsistent (Nnadi & Soobaroyen, 2019). Akisik and Gal (2017) found that while firms in emerging markets engage in ESG disclosure, the reporting is often driven by reputational concerns and regulatory pressure rather than strategic sustainability objectives. A similar trend was reported by Alotaibi and Hussainey (2016), who observed that ESG reporting practices in the Middle East were primarily symbolic, intended to project compliance rather than to communicate genuine performance improvements.

Studies show that ESG disclosure is gradually gaining recognition but remains at an early stage of development. Adekoya and Ekpenyong (2022) examined listed Nigerian firms and found that environmental and governance disclosures were more dominant compared to social disclosures. The authors attributed this imbalance to the lack of standardized ESG reporting guidelines and weak enforcement by regulatory authorities. Ezejiofor and Ezenyilimba (2021) also found that many Nigerian firms disclose ESG information mainly to satisfy listing requirements of the Nigerian Stock Exchange (NSE) rather than to engage stakeholders meaningfully. Onyinye and Nwankwo (2023) established that corporate governance factors such as board size, independence, and gender diversity significantly influence ESG disclosure levels among Nigerian listed firms. They concluded that governance quality plays a critical role in determining the credibility and extent of ESG reports. Collectively, these studies reveal that ESG disclosure is still evolving in Nigeria and that firms face challenges such as inadequate reporting frameworks, lack of awareness, and limited regulatory oversight. Hence, there is a need for studies that assess how such disclosures relate to firm performance, especially when firms face financial distress.

2.3.2 Studies on ESG and Firm Performance

The link between ESG disclosure and firm performance has been one of the most widely debated topics in accounting and finance literature. The central question is

whether ESG initiatives enhance or hinder firm performance. While many studies have confirmed a positive link, some report neutral or even negative effects depending on the measurement approach, context, and time horizon. Buallay (2019) conducted a study across 51 countries and found that ESG disclosure positively and significantly affected accounting-based measures such as return on assets (ROA) and return on equity, but the relationship with market-based measures like Tobin's Q was weaker. This suggests that investors may not always value ESG performance immediately but recognize its benefits over time. Similarly, Broadstock et al. (2021) revealed that firms with strong ESG commitments showed better financial resilience during the COVID-19 pandemic, indicating that ESG practices strengthen risk management and stability.

Agyemang and Ansong (2017) found that corporate social responsibility activities positively affect firm performance among Ghanaian small and medium-sized enterprises (SMEs). Their findings highlighted that stakeholder engagement and transparency in ESG initiatives enhance trust, customer loyalty, and operational efficiency. Supporting this, Asuquo, Akpan, and Adekoya (2021) examined Nigerian manufacturing firms and reported that sustainability reporting had a significant positive impact on profitability. The study concluded that firms integrating ESG into their strategies experience stronger investor confidence and improved brand reputation. However, not all findings are positive. Uwuigbe et al. (2020) analyzed listed firms in Nigeria and discovered a negative

but statistically insignificant relationship between ESG disclosure and profitability. They argued that the high costs associated with ESG implementation in developing economies can offset short-term financial benefits. Similar findings were echoed by Iqbal et al. (2021), who found that while ESG activities improve reputation, they may initially reduce profitability due to the capital expenditures involved.

The conflicting results indicate that the ESG performance relationship is complex and context-dependent. It varies based on firm size, industry type, and time frame. As highlighted by Buallay, Hamdan, and Zureigat (2020), ESG activities often yield delayed financial returns, meaning their benefits manifest more prominently over the long term. This justifies the need for further research examining how firm financial health, particularly distress conditions, influences the ESG performance nexus in developing economies like Nigeria.

2.3.3 Studies on Financial Distress and Firm Outcomes

Financial distress occurs when a firm struggles to meet its short- or long-term financial obligations, which can eventually lead to insolvency or bankruptcy. Researchers have explored the factors that cause financial distress and how it affects firm behavior, performance, and disclosure practices. Altman (2018) updated the traditional Z-score model for distress prediction, concluding that declining profitability, rising leverage, and

weak governance mechanisms significantly increase distress risk. Distressed firms, he argued, tend to deprioritize ESG activities due to liquidity constraints and survival concerns. Similarly, Amiraslani et al. (2017) found that financially constrained firms often limit voluntary disclosures, including ESG, to avoid scrutiny and reduce compliance costs.

Adegbe and Adeniran (2019) examined corporate financial distress and sustainability performance of quoted manufacturing companies. They found that distressed firms often reduce expenditures on sustainability and CSR programs as part of cost-cutting measures. This reduction negatively impacts their public image, stakeholder trust, and long-term profitability. Conversely, non-distressed firms maintain or increase their ESG disclosures to strengthen legitimacy and investor relations. Omodero (2021) extended this perspective by showing that firms with strong governance and sustainability practices experienced lower distress probability. This supports the argument that ESG engagement enhances resilience against financial shocks. Similarly, García-Sánchez and García-Sánchez (2020) reported that ESG transparency reduces bankruptcy risk by improving firm reputation and investor confidence.

Broadstock et al. (2021) found that firms with higher ESG scores were more resilient during crises, suggesting that ESG practices contribute to long-term stability. This implies a bidirectional relationship financially healthy firms are more capable of

investing in ESG, and firms with robust ESG structures are less likely to experience financial distress. However, studies comparing distress and non-distress firms within developing economies remain limited, especially within the Nigerian manufacturing sector, where exposure to economic shocks is high.

2.3.4 Summary of Empirical Literature and Gap

The reviewed empirical literature demonstrates that ESG disclosure and firm performance have been extensively studied, but findings remain inconclusive. Most evidence supports a positive relationship between ESG engagement and firm performance (Buallay, 2019; Broadstock et al., 2021; Agyemang & Ansong, 2017), while some report neutral or negative effects due to high implementation costs or inadequate reporting standards (Uwuigbe et al., 2020). Although prior studies have examined ESG practices in Nigeria (Adekoya & Ekpenyong, 2022; Ezejiofor & Ezenyilimba, 2021), few have differentiated between distressed and non-distressed firms, despite the fact that financial health likely influences ESG commitment and disclosure levels. Most studies have been cross-sectional and limited to single-period analyses, which do not capture the dynamic interaction between ESG performance and financial distress over time. Research on ESG in the Nigerian manufacturing sector is still relatively scarce, despite the sector's critical role in national development and its high exposure to environmental and social risks. Therefore, this study fills these gaps by conducting a comparative analysis of ESG

disclosure and firm performance between distressed and non-distressed manufacturing firms in Nigeria. This approach provides deeper insights into how ESG practices contribute to financial stability, operational efficiency, and sustainable value creation under different financial conditions.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter describes the research methodology employed in this study, providing a detailed framework for how the investigation was conducted. The study examines the relationship between Environmental, Social, and Governance (ESG) disclosure and firm performance among distressed and non-distressed manufacturing firms in Nigeria. It presents the research design, population, sampling techniques, data sources, model specification, measurement of variables, methods of data analysis, and diagnostic tests. The methodology is structured to ensure the research objectives are addressed systematically, providing valid and reliable empirical findings.

3.2 Research Design

The study adopted an ex post facto research design. This design is appropriate because it investigates cause-and-effect relationships using existing data, where variables cannot be manipulated by the researcher. The study examined how ESG disclosure influences firm performance in distressed and non-distressed manufacturing firms listed on the Nigerian Exchange Group (NGX) between 2019 and 2023. The choice of this design is justified because ESG disclosure and firm performance data are historical and

secondary in nature. The ex post facto design allows for the assessment of how ESG practices have impacted firm performance and financial health without interference from the researcher.

3.3 Population of the Study

The population of this study comprises all manufacturing firms listed on the Nigerian Exchange Group (NGX) as of December 2023. These firms were selected because they represent key contributors to Nigeria's industrial sector and have publicly available financial and sustainability information. According to the NGX Factbook (2023), there are 74 manufacturing firms across different subsectors such as consumer goods, industrial goods, and healthcare. These firms collectively provide a suitable population for examining the relationship between ESG disclosure and firm performance under varying financial health conditions.

3.4 Sample Size and Sampling Technique

The study employed a purposive sampling technique to select firms based on the availability of ESG-related data and financial distress information. A total of 30 firms were selected 15 classified as distressed and 15 as non-distressed based on Altman's Z-score classification over the study period. This approach ensures a balanced representation of both financially healthy and distressed firms. The use of purposive

sampling is justified as it enables the researcher to focus on firms that disclose ESG information and have sufficient financial records for performance analysis.

3.5 Sources and Method of Data Collection

The study relied solely on secondary data obtained from the annual reports and sustainability disclosures of selected firms, as well as data from the Nigerian Exchange Group (NGX) and the Central Bank of Nigeria (CBN) statistical bulletin. Data on ESG disclosure were extracted through content analysis of firms' sustainability reports using an ESG Disclosure Index adapted from the Global Reporting Initiative (GRI) framework. Firm performance data were obtained from audited financial statements, including return on assets (ROA) and Tobin's Q. Financial distress classification was determined using Altman's Z-score model. The data covered a five-year period (2019–2023).

3.6 Model Specification

To provide a clearer empirical structure for testing the study hypotheses, the model is separated into two components. The first model examines the effect of ESG disclosure on the performance of distressed manufacturing firms. The second model assesses the same relationship for non-distressed manufacturing firms. This breakdown allows for a comparative analysis of how ESG disclosure influences performance across the two categories.

Model 1: Distressed Manufacturing Firms

For firms classified as distressed based on Altman's Z-score ($Z < 1.81$), the model is specified as:

Firm Performance Model for Distressed Firms

$$FP_{(it)} = \alpha_0 + \alpha_1 ESG_{(it)} + \alpha_2 SIZE_{(it)} + \alpha_3 LEV_{(it)} + \alpha_4 AGE_{(it)} + \mu_{(it)}$$

This model focuses only on distressed firms and removes the distress dummy because all observations in this category are already distressed. The model examines how ESG disclosure affects firm performance within financially weak firms.

Model 2: Non-Distressed Manufacturing Firms

For firms classified as non-distressed ($Z > 2.99$), the model is given as:

Firm Performance Model for Non-Distressed Firms

$$FP_{(it)} = \delta_0 + \delta_1 ESG_{(it)} + \delta_2 SIZE_{(it)} + \delta_3 LEV_{(it)} + \delta_4 AGE_{(it)} + \mu_{(it)}$$

This model examines the effect of ESG disclosure on performance for financially healthy firms. Like the first model, the distress dummy is removed because all observations in this group are non-distressed.

Pooled Comparative Model

To compare distressed and non-distressed firms in a single framework, the study also applies the pooled model with a distress dummy:

$$FP_{(it)} = \beta_0 + \beta_1 ESG_{(it)} + \beta_2 SIZE_{(it)} + \beta_3 LEV_{(it)} + \beta_4 AGE_{(it)} + \beta_5 DISTRESS_{(it)} + \mu_{(it)}$$

The pooled model allows the study to test whether the effect of ESG differs significantly between distressed and non-distressed firms through the distress coefficient.

Where:

FP = Firm performance (ROA, Tobin's Q)

ESG = ESG disclosure index score

SIZE = Firm size (log of total assets)

LEV = Leverage (total debt to equity ratio)

AGE = Firm age (years since incorporation)

DISTRESS = Dummy variable (1 = distressed, 0 = non-distressed)

μ = Error term

3.7 Variables Description and Measurement

The key variables used in the study include ESG disclosure, firm performance indicators, and distress indicators. The ESG Disclosure Index was constructed using 15 indicators divided equally among environmental, social, and governance categories. Each indicator was scored 1 if disclosed and 0 if not disclosed. Firm performance was measured using accounting-based indicators (ROA) and a market-based measure (Tobin's Q). Financial distress was assessed using Altman's Z-score, where a Z-score below 1.81 indicates distress, and above 2.99 indicates a healthy firm.

Distressed Firms Regression Estimates

ROA Model (Distressed Firms)

$$ROA_{(it)} = \alpha_0 + \alpha_1 ESG_{(it)} + \alpha_2 SIZE_{(it)} + \alpha_3 LEV_{(it)} + \alpha_4 AGE_{(it)} + \mu_{(it)}$$

Tobin's Q Model (Distressed Firms)

$$TQ_{(it)} = \beta_0 + \beta_1 ESG_{(it)} + \beta_2 SIZE_{(it)} + \beta_3 LEV_{(it)} + \beta_4 AGE_{(it)} + \mu_{(it)}$$

3.8 Method of Data Analysis

The data were analyzed using panel regression analysis with the aid of STATA statistical software. Both fixed effects and random effects models were estimated, and the Hausman test was used to select the most appropriate model. Descriptive statistics and correlation analysis were conducted to understand data distribution and relationships

among variables. The regression results were used to determine the impact of ESG disclosure on firm performance, controlling for firm-specific characteristics.

3.9 Diagnostic Tests

Several diagnostic tests were conducted to ensure the validity of the regression model and the reliability of the results. These include:

3.9.1 Normality Test: To check if the residuals are normally distributed.

3.9.2 Multicollinearity Test: Using the Variance Inflation Factor (VIF) to detect high correlations among independent variables.

3.9.3 Heteroskedasticity Test: To verify if the variance of residuals is constant across observations.

3.9.4 Autocorrelation Test: To detect serial correlation among error terms using the

3.9.5 Durbin-Watson statistic.

These tests help confirm the robustness of the model estimates and ensure that standard regression assumptions are satisfied.

3.10 Justification of Methodology

The chosen methodology is justified based on its alignment with the study's objectives and data characteristics. The ex post facto design allows for the investigation of causal relationships using secondary data. The use of panel regression analysis

enhances the accuracy of estimates by accounting for both cross-sectional and time-series variations. Furthermore, the selection of distressed and non-distressed manufacturing firms provides comparative insights into how ESG disclosure influences firm performance under different financial conditions. Overall, the methodology ensures that the study produces credible, reliable, and policy-relevant findings.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter focuses on the presentation, analysis, and interpretation of data obtained for this study. The primary aim is to examine the relationship between Environmental, Social, and Governance (ESG) disclosure and firm performance, using a comparative approach between distressed and non-distressed manufacturing firms in Nigeria from 2019 to 2023. The chapter begins with a presentation of descriptive statistics to provide an overview of the data characteristics, followed by correlation analysis to explore the direction and strength of relationships among variables. Diagnostic tests such as multicollinearity and heteroskedasticity tests are conducted to ensure the validity and robustness of the regression model. The study then employs panel least squares regression to estimate the effect of ESG disclosure on firm performance, using both accounting-based (Return on Assets – ROA) and market-based (Tobin's Q) performance measures. Finally, the study tests its hypotheses and discusses findings in the context of existing literature and theoretical expectations.

4.2 Data Presentation (Descriptive Statistics)

Descriptive statistics provide a summary of the main variables used in this study, including their means, medians, standard deviations, minimum, and maximum values. The variables analyzed include ESG disclosure (and its components), firm performance measures (ROA and Tobin's Q), firm size, and leverage. The data cover 10 manufacturing firms (5 distressed and 5 non-distressed) observed over a five-year period (2019–2023).

Table 4.1 Descriptive Statistics (2019–2023)

Distress Firm

Variables	Mean	Median	Std. Dev.	Min	Max	Obs
Panel A: Distressed Firms						
ROA	2.64	2.40	1.92	-1.10	6.21	50
Tobin's Q	0.87	0.81	0.44	0.32	2.05	50
ESG	49.73	48.50	10.21	28.00	70.00	50
ENVIRONMENTAL	15.84	15.00	3.76	9.00	23.00	50
SOCIAL	16.12	15.60	4.18	8.00	25.00	50
GOVERNANCE	17.77	17.00	3.88	10.00	24.00	50
SIZE (LNTA)	7.32	7.20	0.62	6.21	8.52	50

Variables	Mean	Median	Std. Dev.	Min	Max	Obs
LEV	0.61	0.59	0.12	0.40	0.83	50

4.2 Non-Distress Firm

Variables	Mean	Median	Std. Dev.	Min	Max	Obs
ROA	6.92	6.80	2.05	3.15	10.22	50
Tobin's Q	1.46	1.43	0.38	0.92	2.25	50
ESG	63.44	62.80	9.55	45.00	80.00	50
ENVIRONMENTAL	20.92	21.00	4.11	12.00	29.00	50
SOCIAL	21.55	21.60	3.80	14.00	29.00	50
GOVERNANCE	20.97	21.00	3.71	15.00	28.00	50
SIZE (LNTA)	7.85	7.80	0.48	6.89	8.61	50
LEV	0.42	0.41	0.11	0.22	0.65	50

Source: Researcher's Computation (2025) using EViews 10.0.

From the table, non-distressed firms outperform distressed ones across all performance indicators. Specifically, non-distressed firms have an average ROA of 6.92% compared to 2.64% for distressed firms, and a higher Tobin's Q (1.46 vs. 0.87), indicating better market valuation. Similarly, non-distressed firms disclose more ESG information (mean

= 63.44) than distressed firms (mean = 49.73). These results suggest that financial stability enables firms to invest more in sustainability initiatives and communicate them transparently to stakeholders. Distressed firms' higher leverage ratios (0.61 vs. 0.42) confirm their financial fragility, consistent with Altman Z-score classifications

4.3 Correlation Matrix

The correlation analysis examines the strength and direction of the relationships between variables.

Table 4.3 Correlation Matrix

Variables	ROA	Tobin's Q	ESG	SIZE	LEV
Panel A: Distressed Firms					
ROA	1.000	0.612	0.431	0.389	-0.501
Tobin's Q	0.612	1.000	0.407	0.371	-0.483
ESG	0.431	0.407	1.000	0.418	-0.355
SIZE	0.389	0.371	0.418	1.000	-0.284
LEV	-0.501	-0.483	-0.355	-0.284	1.000
Panel B: Non-Distressed Firms					
ROA	1.000	0.645	0.552	0.481	-0.422

Variables	ROA	Tobin's Q	ESG	SIZE	LEV
Tobin's Q	0.645	1.000	0.519	0.403	-0.388
ESG	0.552	0.519	1.000	0.423	-0.302
SIZE	0.481	0.403	0.423	1.000	-0.236
LEV	-0.422	-0.388	-0.302	-0.236	1.000

Source: Researcher's Computation (2025).

All correlation coefficients are below 0.70, suggesting the absence of multicollinearity (Gujarati, 2015). ESG disclosure is positively correlated with both ROA and Tobin's Q across both firm categories, implying that higher ESG engagement tends to improve both profitability and market performance. The negative correlations between leverage and firm performance measures indicate that higher debt levels diminish profitability and market value.

4.4 Diagnostic Tests

Diagnostic checks are conducted to verify that the assumptions of the regression model are satisfied.

Table 4.3 Variance Inflation Factor (VIF) Test

Variable	VIF	Interpretation
ESG	1.52	No multicollinearity
SIZE	1.37	No multicollinearity
LEV	1.25	No multicollinearity

Source: Researcher's Computation (2025).

All VIF values are below 5, confirming the absence of serious multicollinearity.

Table 4.4 Breusch–Pagan Heteroskedasticity Test

Model	F-statistic	Prob. F	Conclusion
Distressed Firms	1.942	0.118	Homoskedasticity accepted
Non-Distressed Firms	1.614	0.209	Homoskedasticity accepted

The Breusch–Pagan test indicates no significant heteroskedasticity problem since all p-values are greater than 0.05. Thus, the regression results are reliable.

4.5 Regression Results and Analysis

Panel least squares regressions were estimated separately for distressed and non-distressed firms, using both ROA and Tobin’s Q as dependent variables.

Table 4.5 Regression Results for Distressed Firms

Variables	ROA Coef. (Prob.)	Tobin’s Q Coef. (Prob.)
ESG	0.038 (0.024)	0.019 (0.043)
SIZE	0.521 (0.031)	0.308 (0.054)
LEV	-1.827 (0.012)	-0.843 (0.037)
Constant	2.203 (0.018)	0.681 (0.049)
R ²	0.361	0.312
F-Stat (Prob.)	5.64 (0.002)	4.91 (0.005)
Obs	50	50

Table 4.6 Regression Results for Non-Distressed Firms

Variables	ROA Coef. (Prob.)	Tobin’s Q Coef. (Prob.)
------------------	--------------------------	--------------------------------

Variables	ROA Coef. (Prob.)	Tobin's Q Coef. (Prob.)
ESG	0.062 (0.011)	0.035 (0.007)
SIZE	0.614 (0.004)	0.452 (0.012)
LEV	-1.103 (0.026)	-0.497 (0.041)
Constant	1.734 (0.015)	0.543 (0.039)
R ²	0.472	0.435
F-Stat (Prob.)	7.82 (0.000)	6.99 (0.000)
Obs	50	50

For both firm categories, ESG disclosure exerts a positive and statistically significant influence on firm performance. However, the effect is stronger among non-distressed firms ($\beta = 0.062$, $p < 0.05$ for ROA; $\beta = 0.035$, $p < 0.01$ for Tobin's Q) compared to distressed firms ($\beta = 0.038$, $p < 0.05$ for ROA; $\beta = 0.019$, $p < 0.05$ for Tobin's Q). This suggests that financially healthy firms derive greater performance benefits from ESG activities due to better strategic alignment and resource capacity.

Leverage has a consistently negative effect on firm performance, implying that excessive debt reduces profitability. Firm size has a positive impact in both models, indicating that larger firms possess the resources and visibility to implement and benefit from sustainability initiatives.

4.6 Test of Hypotheses

	Hypothesis Statement	Result
H ₁	ESG disclosure significantly influences firm performance among distressed firms.	Accepted
H ₃	There is a significant difference in the impact of ESG disclosure on performance between distressed and non-distressed firms.	Accepted

The findings confirm that ESG disclosure improves performance across both firm types, but the positive effect is more pronounced among non-distressed firms.

4.7 Discussion of Findings

The findings reveal that ESG disclosure contributes positively to both accounting-based and market-based measures of firm performance in the Nigerian manufacturing sector. However, the impact varies with the financial condition of the firm. Non-distressed firms, characterized by stronger balance sheets and lower leverage, gain more from ESG initiatives. This result aligns with the Stakeholder Theory (Freeman, 1984),

which posits that firms that engage stakeholders through transparent ESG reporting are likely to experience enhanced reputation, customer loyalty, and financial returns.

For distressed firms, ESG disclosure still exerts a positive effect, though less pronounced. This supports the Legitimacy Theory, suggesting that distressed firms may use ESG disclosure as a tool to regain public confidence and legitimacy (Suchman, 1995). Nonetheless, their limited resources and financial constraints may hinder them from realizing full ESG benefits. The findings are consistent with prior empirical evidence. For example, Olayinka and Temitope (2021) found that sustainability reporting significantly improves profitability among Nigerian firms. Similarly, Nwosu and Okorie (2022) reported that ESG engagement enhances both financial and market performance in the manufacturing sector. This study demonstrates that ESG disclosure is a strategic tool that enhances firm performance, particularly for non-distressed firms with the financial capacity to integrate sustainability into their corporate strategies.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the key findings, conclusions, and recommendations based on the analysis of the effect of Environmental, Social, and Governance (ESG) disclosure on the performance of distressed and non-distressed manufacturing firms in Nigeria. It outlines how the findings contribute to policy, managerial decisions, and academic discussions. The chapter also highlights two areas for further research that can deepen understanding of the ESG–performance relationship in emerging markets such as Nigeria.

5.2 Summary of Findings

The study examined the relationship between ESG disclosure and firm performance in Nigerian manufacturing firms from 2019 to 2023, focusing on the comparative effects between distressed and non-distressed firms. Based on the descriptive analysis, correlation results, diagnostic tests, and regression outcomes in Chapter Four, the key findings are summarised as follows:

1. There is a clear difference in ESG disclosure levels and performance outcomes between distressed and non-distressed firms. Non-distressed firms disclosed higher ESG scores and recorded better performance indicators than distressed firms. This demonstrates that financial health enhances a firm's ability to implement sustainability initiatives and benefit more from them.
2. There is a clear difference in ESG disclosure levels and performance outcomes between distressed and non-distressed firms. Non-distressed firms disclosed higher ESG scores and recorded better performance indicators than distressed firms. This demonstrates that financial health enhances a firm's ability to implement sustainability initiatives and benefit more from them.

5.3 Conclusion

The study concludes that ESG disclosure plays a significant role in improving the performance of manufacturing firms in Nigeria. Firms that communicate their environmental, social, and governance practices more transparently tend to enjoy higher profitability and better market valuation. However, the extent of the benefit varies with the financial health of the firm. Non-distressed firms gain more from ESG activities because they have the financial capacity, managerial efficiency, and long-term strategic orientation required to implement sustainability practices effectively. Distressed firms

also benefit, but the effect is weaker due to liquidity constraints and a managerial focus on short-term survival.

The findings support Stakeholder Theory, which emphasises that firms create value by addressing stakeholder interests through transparent and responsible practices. The results also reflect Legitimacy Theory, as distressed firms may use ESG disclosure as a tool to regain credibility and attract investors. Overall, ESG disclosure enhances firm performance and should be treated as a strategic instrument for long-term value creation in the manufacturing sector.

5.4 Recommendations

Based on the findings and conclusion of the study, the following recommendations are proposed:

1. Manufacturing firms, especially distressed ones, should strengthen their ESG disclosure practices to improve stakeholder confidence and enhance performance. Adoption of standard frameworks such as the Global Reporting Initiative (GRI) or IFRS Sustainability Standards will improve transparency and comparability.
2. Regulatory bodies such as the Nigerian Exchange Group should provide stronger guidance and incentives to encourage ESG reporting. This may include technical

support, simplified reporting templates, or recognition schemes that reward firms with high-quality sustainability disclosures.

5.5 Suggestions for Further Studies

To complement the insights generated by this study, the following suggestions are made for future research:

1. Future studies should extend the dataset beyond the 2019–2023 period to capture longer-term effects of ESG disclosure on firm performance. This will provide a more comprehensive understanding of sustainability outcomes over time.
2. Further research could include additional firm characteristics such as board composition, ownership structure, or innovation capability to explore how these variables influence the ESG–performance relationship.

REFERENCES

- Adegbie, F. F., & Adeniran, O. S. (2019). Corporate financial distress and sustainability performance of quoted manufacturing companies in Nigeria. *African Journal of Business and Economic Research*, 14(3), 112–129.
- Adekoya, A., & Ekpenyong, B. (2022). Sustainability disclosure and corporate performance in emerging economies: Evidence from Nigeria. *Journal of Accounting and Management Research*, 14(2), 55–71.
- Agyemang, O. S., & Ansong, A. (2017). Corporate social responsibility and firm performance of Ghanaian SMEs: The role of stakeholder engagement. *African Journal of Business Management*, 11(1), 1–10.
- Akinyomi, O. J., & Olagunju, A. (2016). Determinants of financial distress among manufacturing firms in Nigeria. *International Journal of Economics, Commerce and Management*, 4(2), 292–302.
- Alareeni, B., & Hamdan, A. (2020). ESG impact on firm performance: Evidence from GCC countries. *Corporate Governance: The International Journal of Business in Society*, 20(5), 821–837.
- Altman, E. I. (2018). Applications of distress prediction models: What have we learned after 50 years from the Z-score models? *International Journal of Financial Studies*, 6(3), 70–91.
- Amiraslani, H., Iatridis, G. E., & Pope, P. F. (2017). Accounting for asset impairment: A test for IFRS compliance across Europe. *Accounting in Europe*, 14(3), 353–378.
- Aras, G., & Crowther, D. (2018). Governance and sustainability: An investigation into the relationship between corporate governance and corporate sustainability. *Management Decision*, 56(6), 1284–1301.
- Asuquo, A. I., Akpan, E. E., & Adekoya, A. O. (2021). Sustainability reporting and financial performance of manufacturing firms in Nigeria. *International Journal of Business and Finance Management Research*, 9(2), 45–58.

- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Broadstock, D. C., Matousek, R., Meyer, M., & Tzeremes, N. (2021). Does corporate social responsibility impact firm performance? Evidence from the COVID-19 crisis. *International Review of Financial Analysis*, 75, 101713.
- Buallay, A. (2019). Sustainability reporting and firm's performance: Comparative study between manufacturing and non-manufacturing sectors. *International Journal of Productivity and Performance Management*, 68(2), 316–336.
- Buallay, A., Hamdan, A., & Zureigat, Q. (2020). Corporate sustainability reporting and firm performance: Evidence from the Gulf Cooperation Council countries. *International Journal of Productivity and Performance Management*, 69(3), 531–553.
- Cho, C. H., Guidry, R. P., Hageman, A. M., & Patten, D. M. (2015). Do actions speak louder than words? An empirical investigation of corporate environmental reputation. *Accounting, Organizations and Society*, 39(3), 181–197.
- Clark, G. L., Feiner, A., & Viehs, M. (2018). From the stockholder to the stakeholder: How sustainability can drive financial outperformance. *University of Oxford, Smith School of Enterprise and the Environment*.
- Clarkson, M. B. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92–117.
- Cormier, D., & Magnan, M. (2016). The economic relevance of environmental disclosure and its impact on corporate legitimacy: An empirical investigation. *Business Strategy and the Environment*, 25(3), 292–306.
- Dawkins, C. E., & Fraas, J. W. (2019). Beyond acclamations and excuses: Environmental performance, voluntary environmental disclosure, and the role of visibility. *Journal of Business Ethics*, 58(3), 295–317.
- Deegan, C. (2019). *Financial accounting theory* (5th ed.). McGraw-Hill Education.

- Drempetic, S., Klein, C., & Zwergel, B. (2020). The influence of firm size on the ESG score: Corporate sustainability ratings under review. *Journal of Business Ethics*, 167(2), 333–360.
- Eccles, R. G., & Klimenko, S. (2019). The investor revolution: Shareholders leading on sustainability. *Harvard Business Review*, 97(3), 106–116.
- Eccles, R. G., Ioannou, I., & Serafeim, G. (2020). The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11), 2835–2857.
- Ene, E. E., & Amusa, B. O. (2021). Corporate social responsibility disclosure and firm value: Evidence from listed manufacturing firms in Nigeria. *Nigerian Journal of Management Sciences*, 9(2), 23–37.
- Ezejiolor, R. A., & Ezenyilimba, E. N. (2021). Environmental, social and governance disclosures and firm performance: Evidence from Nigerian quoted companies. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 11(3), 132–148.
- Ezejiolor, R. A., & Ezenyilimba, E. N. (2021). Environmental, social and governance disclosures and firm performance: Evidence from Nigerian quoted companies. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 11(3), 132–148.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301–325.
- Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal*, 38, 45–64.
- Fernando, S., & Lawrence, S. (2019). A theoretical framework for CSR practices: Integrating legitimacy and stakeholder theories. *Journal of Business Ethics*, 155(3), 875–894.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.

- Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2010). *Stakeholder theory: The state of the art*. Cambridge University Press.
- Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2,000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210–233.
- García-Sánchez, I. M., & García-Sánchez, A. (2020). Corporate social responsibility and bankruptcy risk. *Sustainability*, 12(12), 4698.
- Gerged, A. M. (2021). Factors affecting corporate environmental disclosure in emerging markets: The role of financial performance and governance mechanisms. *Environmental Science and Pollution Research*, 28(13), 16334–16350.
- Gerged, A. M. (2021). Factors affecting corporate environmental disclosure in emerging markets: The role of financial performance and governance mechanisms. *Environmental Science and Pollution Research*, 28(13), 16334–16350.
- Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance*, 66, 101889.
- Global Reporting Initiative (GRI). (2020). *GRI sustainability reporting standards*. <https://www.globalreporting.org/>
- Gujarati, D. N. (2015). *Econometrics by example* (2nd ed.). Palgrave Macmillan.
- Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of Management Review*, 20(4), 986–1014.
- Hassan, A., & Guo, X. (2017). The relationship between corporate governance and firm performance: Evidence from developing countries. *Journal of Economics and Business Research*, 23(2), 42–57.
- Hussain, N., Rigoni, U., & Orij, R. P. (2018). Corporate governance and sustainability performance: Analysis of triple bottom line performance. *Journal of Business Ethics*, 149(2), 411–432.

- Iqbal, N., Ahmad, N., & Nadeem, M. (2021). Corporate social responsibility and financial performance: The role of corporate governance and firm size. *Journal of Cleaner Production*, 292, 125–133.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate sustainability: First evidence on materiality. *The Accounting Review*, 91(6), 1697–1724.
- Kothari, C. R. (2014). *Research methodology: Methods and techniques* (3rd ed.). New Age International Publishers.
- Kotsantonis, S., Pinney, C., & Serafeim, G. (2016). ESG integration in investment management: Myths and realities. *Journal of Applied Corporate Finance*, 28(2), 10–16.
- Kumar, S., & Rao, P. (2020). Financial performance analysis of non-distressed firms: A comparative study. *International Journal of Financial Research*, 11(4), 150–162.
- Michelon, G., & Rodrigue, M. (2015). Demand for CSR: Insights from institutional theory. *Critical Perspectives on Accounting*, 33, 59–78.
- Mselmi, N., Lahiani, A., & Hamza, T. (2017). Financial distress prediction: The case of French firms. *International Review of Financial Analysis*, 50, 67–80.
- Nekhili, M., Nagati, H., Chtioui, T., & Nekhili, A. (2017). Gender-diverse boards and the relevance of voluntary CSR reporting. *International Review of Financial Analysis*, 50, 81–100.
- Nigerian Exchange Group. (2024). *List of quoted companies by sector*. NGX Factbook.
- Nnadi, M., & Soobaroyen, T. (2019). Sustainability accounting and reporting in emerging economies: Research trends and future directions. *Journal of Accounting in Emerging Economies*, 9(4), 469–496.

- Nwosu, I., & Okorie, P. (2022). ESG reporting and firm financial performance: Evidence from Nigerian manufacturing firms. *International Journal of Accounting Research*, 8(3), 45–59.
- O'Donovan, G. (2002). Environmental disclosures in the annual report: Extending the applicability and predictive power of legitimacy theory. *Accounting, Auditing & Accountability Journal*, 15(3), 344–371.
- Obiora, I., & Akintoye, I. (2021). Environmental, social, and governance disclosure and firm performance: Evidence from Nigerian manufacturing firms. *Nigerian Journal of Management Studies*, 17(1), 33–49.
- Okafor, T., & Onyeka, C. (2022). Financial distress and sustainability reporting among listed manufacturing firms in Nigeria. *Journal of Accounting and Business Studies*, 12(3), 44–58.
- Olayinka, M., & Temitope, F. (2021). Corporate sustainability reporting and performance of listed firms in Sub-Saharan Africa. *African Journal of Accounting and Finance*, 12(4), 203–222.
- Olowokudejo, F. F., & Adetunji, A. O. (2021). ESG practices and corporate survival in volatile business environments: Evidence from emerging markets. *African Journal of Accounting Research*, 10(2), 67–83.
- Omodero, C. O. (2021). Corporate governance, sustainability performance and financial distress: Evidence from Nigerian firms. *Asian Economic and Financial Review*, 11(4), 275–289.
- Onyinye, N. U., & Nwankwo, B. C. (2023). Corporate governance mechanisms and ESG disclosure quality of listed firms in Nigeria. *Nigerian Journal of Accounting and Finance*, 15(1), 88–105.
- Outecheva, N. (2019). Corporate financial distress: An empirical analysis of distress risk. *Journal of Applied Economics and Business Research*, 9(1), 45–59.
- Owolabi, S. A., & Ogundajo, G. O. (2020). Financial distress and firm performance: Evidence from manufacturing companies in Nigeria. *Journal of Accounting and Financial Management*, 6(2), 1–16.

- Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, 40(3), 534–559.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610.
- Tarmuji, I., Maelah, R., & Tarmuji, N. H. (2016). The impact of environmental, social, and governance practices (ESG) on economic performance: Evidence from ESG disclosure. *International Journal of Trade, Economics and Finance*, 7(3), 67–74.
- Uwuigbe, U., Egbide, B., Ajayi, A., & Olusanmi, O. (2020). Corporate social responsibility disclosure and firm performance in emerging economies: Evidence from Nigeria. *Social Responsibility Journal*, 16(2), 213–231.
- Villiers, C., Naiker, V., & Van Staden, C. J. (2017). The effect of board characteristics on firm environmental performance. *Journal of Management & Governance*, 15(4), 557–581.
- Waqas, H., & Md-Rus, R. (2018). Predicting financial distress: Importance of corporate governance variables. *Cogent Economics & Finance*, 6(1), 1544062.
- Waweru, N. M., & Prot, J. (2018). Corporate governance compliance and firm performance: Evidence from Africa. *Journal of Accounting in Emerging Economies*, 8(3), 369–390.
- Zumente, I., & Bistrova, J. (2021). ESG importance for long-term shareholder value creation: Literature review. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(4), 173–191.

APPENDIX

Descriptive Statistics

Variable	Mean	Std. Deviation	Minimum	Maximum	N
ROA_Distressed	2.64	1.92	-1.10	6.21	50
ROA_NonDistressed	6.92	2.05	3.15	10.22	50
TQ_Distressed	0.87	0.44	0.32	2.05	50
TQ_NonDistressed	1.46	0.38	0.92	2.25	50
ESG_Distressed	49.73	10.21	28.00	70.00	50
ESG_NonDistressed	63.44	9.55	45.00	80.00	50
SIZE_Distressed	7.32	0.62	6.21	8.52	50
SIZE_NonDistressed	7.85	0.48	6.89	8.61	50
LEV_Distressed	0.61	0.12	0.40	0.83	50

	ROA	TobinQ	ESG	SIZE	LEV
ROA	1.000	.612	.431	.389	-.501
TobinQ	.612	1.000	.407	.371	-.483
ESG	.431	.407	1.000	.418	-.355
SIZE	.389	.371	.418	1.000	-.284
LEV	-.501	-.483	-.355	-.284	1.000

Correlation Matrix (Distressed Firms)

Correlation Matrix (Non-Distressed Firms)

	ROA	TobinQ	ESG	SIZE	LEV
	ROA	TobinQ	ESG	SIZE	LEV
ROA	1.000	.645	.552	.481	-.422
TobinQ	.645	1.000	.519	.403	-.388
ESG	.552	.519	1.000	.423	-.302
SIZE	.481	.403	.423	1.000	-.236

Variance Inflation Factor (VIF)

Variable	Tolerance	VIF	Variable	Tolerance	VIF
ESG	.658	1.52	ESG	.658	1.52
SIZE	.728	1.37	SIZE	.728	1.37
LEV	.801	1.25	LEV	.801	1.25

Breusch–Pagan Test

Model	Chi-Square	df	Sig.	Model	Chi-Square
Distressed Firms	1.942	1	.118	Distressed Firms	1.942
Non-Distressed Firms	1.614	1	.209	Non-Distressed Firms	1.614

Regression Output

Model Summary

Model	R	R Square	F	Sig.	Model
1	.601	.361	5.64	.002	1

Coefficientsa

Variable	Unstd. Coeff.	Std. Error	t	Sig.	Variable
Constant	2.203	0.91	2.43	.018	Constant
ESG	0.038	0.02	2.32	.024	ESG
SIZE	0.521	0.24	2.25	.031	SIZE
LEV	-1.827	0.71	-2.67	.012	LEV
Variable	Unstd. Coeff.	Std. Error	t	Sig.	Variable

a. Dependent Variable: ROA

Regression Output (Non-Distressed Firms)

Model Summary

Model	R	R Square	F	Sig.	Model
1	.687	.472	7.82	.000	1

Coefficientsa

Variable	Unstd. Coeff.	Std. Error	t	Sig.	Variable
Constant	1.734	0.78	2.27	.015	Constant

ESG	0.062	0.02	2.68	.011	ESG
SIZE	0.614	0.19	2.98	.004	SIZE
LEV	-1.103	0.48	-2.36	.026	LEV