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SUSTAINABILITY DISCLOSURE AND FINANCIAL PERFORMANCE OF LISTED INDUSTRIAL GOODS FIRMS IN NIGERIA

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ABSTRACT

The broad objective of this study is to ascertain the effect of sustainability disclosure on financial performance of listed industrial goods firms in Nigeria. Specifically, the study examined the extent to which environmental disclosure index, social disclosure index, and governance disclosure index affect the earnings before interest margin of listed industrial goods firms in Nigeria. Ex-post facto research design was employed in this study. Purposive sampling technique was used in selecting a sample size of ten (10) firms from the population of thirteen (13) listed industrial goods firms in Nigeria. Secondary data were extracted from the annual reports and statement of account of the sampled firms over a ten year period from 2013 to 2022. Robust Least Squares regression analysis was used to estimate the parameters for hypotheses testing. The findings showed that: Environmental disclosure index has a significant and positive effect on the earnings before interest margin of listed industrial goods firms in Nigeria (p-value = 0.0000); Social disclosure index has a non-significant and positive effect on the earnings before interest margin of listed industrial goods firms in Nigeria (p-value = 0.3026); Governance disclosure index has a non-significant and positive effect on the earnings before interest margin of listed industrial goods firms in Nigeria (p-value = 0.1432). In conclusion, companies that are actively committed towards disclosing their environmental, social, and governance practices enjoy financial benefits since such disclosure culminates into sustainable business practices that promote both reputation and the bottom line. The study recommends that industrial goods firms should strive to expand and enhance their environmental disclosures by investing in and adopt sustainable technologies and practices, in order to reinforce the commitment to sustainability and also improve operational efficiency and reduce environmental impact.

Key words: Earnings Before Interest Margin, Environmental Disclosure Index, Financial Performance, Governance Disclosure Index, Social Disclosure Index, Sustainability Disclosure

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INTRODUCTION

In recent years, sustainability has moved beyond being a mere buzzword and has gained widespread recognition as a critical factor for businesses operating in various industries and sectors (Wagenhofer, 2024). Organizations are increasingly realizing that their long-term success and resilience depend not only on financial performance but also on their ability to address environmental challenges, social responsibilities, and governance practices (Dincer et al., 2023). This shift in mindset stems from the growing understanding that businesses are interconnected with the broader ecosystem in which they operate, and their actions can have far-reaching consequences (Agarwal et al, 2023).

As a result, companies are embracing sustainability as an integral part of their corporate strategies. They are actively seeking ways to incorporate environmental considerations, such as reducing carbon emissions, conserving natural resources, and adopting renewable energy sources (Ebaid, 2023; Almashhadani & Almashhadani, 2023). Social aspects are also gaining prominence, with a focus on promoting inclusivity, diversity, and fair labor practices throughout the value chain (Aiyesan, 2023). Furthermore, governance practices that emphasize transparency, accountability, and ethical behavior are being prioritized to build trust among stakeholders.

One of the significant drivers behind this shift is the recognition that sustainability practices can have a direct effect on financial performance (Oware & Worae, 2023). Numerous studies have demonstrated a positive correlation between sustainable business practices and improved financial outcomes (Ezekwesili & Ezejiofor, 2022; Amahalu et al., 2021). For instance, companies that effectively manage environmental risks and adopt energy-efficient measures can reduce operational costs and enhance profitability. Similarly, organizations that prioritize social responsibility and foster positive relationships with their employees, communities, and customers often experience higher levels of customer loyalty and employee engagement, which can translate into increased revenues and market share (Oware & Worae, 2023).

Moreover, sustainability practices can influence a company's reputation and brand value (Kalia & Aggarwal, 2023). Consumers and investors are increasingly drawn to companies that demonstrate a commitment to sustainability and responsible business practices (Onoh et al., 2023). By publicly disclosing their sustainability efforts, companies can enhance their reputation, attract socially conscious investors, and differentiate themselves in a competitive market. This, in turn, can positively affect stock prices, access to capital, and overall market valuation (Al Hawaj & Buallay, 2022).

Given the growing recognition of sustainability's effect on financial performance, there is a clear need to understand and measure this relationship. As a result, researchers, policymakers, and business leaders are devoting increasing attention to studying the effects of sustainability disclosure on financial outcomes by examining the extent and quality of sustainability disclosure and its influence on various financial performance indicators, such as profitability, return on investment, and market value; thereby providing empirical evidence and insights into the linkages between sustainability and financial performance (Amrigan, Hamidi & Adrianto, 2023; Oware & Worae, 2023; Onoh et al., 2023).

However, Nigeria's industrial sector also confronts various sustainability challenges that demand attention (Alhassan et al., 2021). One of the major concerns is environmental pollution. Industrial activities often lead to the emission of harmful pollutants into the air, water, and soil, contributing to environmental degradation (Amahalu et al., 2021). Issues such as improper waste management, emissions from industrial processes, and the release of hazardous substances can have severe consequences for both human health and the ecosystem (Nworie et al., 2022). Also, weak governance practices pose a significant sustainability challenge within Nigeria's industrial sector. Inefficiencies, corruption, and lack of transparency in regulatory frameworks can undermine environmental protection measures and compromise the implementation and enforcement of sustainable practices. Insufficient oversight and accountability mechanisms may allow non-compliant industrial firms to operate without taking adequate steps to minimize their environmental effect or promote social responsibility.

Addressing these sustainability challenges is critical for Nigeria's industrial sector to ensure long-term viability, mitigate environmental risks, and promote sustainable development. The integration of sustainable practices can help mitigate the negative effects of industrial activities and foster a more harmonious relationship between economic growth, environmental protection, and social well-being (Aiyesan, 2023). By adopting sustainable production processes, implementing responsible waste management systems, promoting energy efficiency, and prioritizing the welfare of workers and communities, industrial firms can contribute to a more sustainable and inclusive industrial sector.

In Nigeria, forward-thinking industrial firms acknowledge the significance of sustainability and proactively embrace the practice of disclosing their environmental, social, and governance (ESG) initiatives. They recognize sustainability disclosure as a vital means to foster transparency, accountability, and stakeholder confidence. By integrating sustainability

considerations into their strategies, operations, and decision-making processes, these firms demonstrate a strong commitment to generating long-term value (Kalia & Aggarwal, 2023). The ideal scenario envisions a positive correlation between sustainability disclosure indices such as environmental disclosure index, social disclosure index, and governance disclosure index and the financial performance of these industrial firms. By making their sustainable practices known, these firms can expect to experience enhanced profitability, increased market value, and more effective risk management (Lawrence, 2022).

However, industrial goods sector of Nigeria still have very low adoption and disclosure of sustainability practices since many industrial firms fail to recognize the importance of sustainability or neglect to disclose their sustainability efforts adequately (Alhassan, Islam & Haque, 2021). This lack of transparency hampers stakeholders' ability to assess the firms' sustainability performance and their potential effect on financial outcomes. Consequently, there is limited understanding of the relationship between sustainability disclosure and the financial performance of listed industrial firms in Nigeria. This gap in knowledge hinders policymakers, regulatory authorities, investors, and managers from making informed decisions regarding sustainable business practices.

The consequence of the limited adoption and disclosure of sustainability practices in Nigeria's industrial firms has several implications. Firstly, without adequate transparency, investors may find it challenging to assess the risks and opportunities associated with these firms, potentially leading to a lack of investor confidence and reduced capital inflow (Helfaya et al., 2023). Secondly, the absence of sustainability disclosure impedes the formulation of effective policies and regulations that promote sustainable business practices. This situation may perpetuate environmental degradation, social inequality, and weak governance within the industrial sector, further exacerbating sustainability challenges. Moreover, the lack of awareness and understanding regarding the financial benefits of sustainability disclosure may hinder firms' ability to enhance their long-term financial performance, ultimately limiting their competitiveness in the market (Mbu-Ogar et al., 2023).

The limited adoption and disclosure of sustainability practices hinder stakeholder assessment, investor confidence, policy formulation, and the overall financial performance of listed industrial firms (Agbo & Ihotu, 2023). Addressing this problem is essential as previous related studies neglected the use of earnings before interest margin as a proxy for financial performance. It is in view of filling this variable gap that this study is carried out to examine

the effect of sustainability disclosure on the financial performance of listed industrial goods firms on the Nigerian Exchange Group.

This study aimed to contribute to the existing body of knowledge by utilizing a robust regression approach to examine the effect of three key indices, namely the environmental disclosure index, social disclosure index, and governance disclosure index, on the earnings before interest margin of the industrial goods sector within the Nigerian Exchange Group. By adopting a robust regression methodology, this study takes into account the outliers of the data, allowing for a more reliable analysis of the relationship between sustainability reporting and financial performance in this specific sector.

Objectives

The main objective of this study is to examine the effect of sustainability disclosure on the financial performance of listed industrial goods firms on the Nigerian Exchange Group. The following are the specific objectives of the study:

1. To examine the extent to which environmental disclosure index affects earnings before interest margin of listed industrial goods firms in Nigeria.

2. To determine the effect of social disclosure index on earnings before interest margin of listed industrial goods firms in Nigeria.

3. To ascertain the degree to which governance disclosure index affects earnings before interest margin of listed industrial goods firms in Nigeria.

Research Questions

1. To what extent does environmental disclosure index affect earnings before interest margin of listed industrial goods firms in Nigeria?

2. What is the effect of social disclosure index on earnings before interest margin of listed industrial goods firms in Nigeria?

3. How does governance disclosure index affects earings before interest margin of industrial goods firms in Nigeria?

LITERATURE REVIEW

Sustainability Disclosure

Sustainability disclosure entails the sharing of comprehensive information about an organization's environmental, social, and economic performance, policies, and goals (Gonçalves & Gaio, 2023). It encompasses the systematic collection and reporting of data that reflect the organization's sustainability commitments, risks, opportunities, and outcomes. This disclosure serves to enhance transparency, accountability, and stakeholder engagement by providing a holistic view of the organization's sustainability performance and progress (Kumar et al., 2023). Sustainability disclosure refers to the process of publicly sharing information about an organization's environmental, social, and economic practices, impacts, and performance (Park et al., 2023). It involves the collection, measurement, and reporting of data on various sustainability aspects, such as greenhouse gas emissions, resource consumption, labor practices, community engagement, and ethical governance. The disclosure of this information aims to provide transparency, enable stakeholders to assess the organization's sustainability efforts, and foster informed decision-making (Park et al., 2023). The purpose of sustainability disclosure is to enable stakeholders, including investors, customers, employees, and regulators, to evaluate an organization's commitment to sustainability, assess its impact on society and the environment, and hold it accountable for its actions (Helfaya et al., 2023).

Sustainability disclosure refers to the process of measuring, disclosing, and assuming responsibility for an organization's environmental, social, and economic performance (Umar et al., 2021). Its purpose is to enable organizations to effectively communicate their sustainability performance to stakeholders and foster transparency, accountability, and improvements in sustainability performance. Sustainability reporting, on the other hand, encompasses the collection, analysis, and communication of data pertaining to an organization's environmental, social, and economic performance (Kasbun et al., 2016). This information is commonly conveyed to stakeholders through diverse channels such as sustainability reports, corporate social responsibility reports, and integrated reports. The primary objective of sustainability reporting is to offer transparency and accountability regarding an organization's sustainability practices and performance, thus building trust and confidence with stakeholders.

The primary objective of sustainability disclosure is to ensure transparency and accountability regarding an organization's sustainability practices and performance (Hongming et al., 2020). By doing so, it builds trust and confidence among stakeholders by providing them with a clear

understanding of the organization's environmental, social, and economic impacts, risks, and opportunities (Al Hawaj & Buallay, 2022). Furthermore, sustainability disclosure enables stakeholders to compare the sustainability performance of different organizations and make well-informed decisions regarding their investments, purchases, and partnerships.

In addition to fostering transparency and accountability, sustainability disclosure, or reporting, serves as a tool for driving improvements in sustainability performance (Garg, 2015). Through the measurement and disclosure of sustainability performance data, organizations can identify areas for enhancement and establish targets to minimize their environmental footprint, enhance their social responsibility, and improve their economic performance. This process often leads to the adoption of more sustainable practices and the development of business models that prioritize sustainability, thereby creating value for both the organization and its stakeholders (Amahalu et al., 2021). Consequently, sustainability disclosure becomes a crucial practice for organizations aiming to demonstrate their commitment to sustainability and corporate social responsibility. It not only promotes transparency, accountability, and improvements in sustainability performance but also empowers stakeholders to make informed decisions and comparisons.

Environmental Disclosure Index of Sustainability Disclosure

The environmental disclosure index of sustainability reporting pertains to the reporting of an organization's environmental impact on the natural environment (Wu & Li, 2023). This practice involves the measurement and reporting of various environmental metrics, including energy consumption, greenhouse gas emissions, water usage, waste generation, and pollution levels (Ezekwesili & Ezejiofor, 2022). Its primary purpose is to enable organizations to evaluate and communicate their environmental performance, thereby demonstrating their dedication to environmental responsibility. Environmental disclosure index serves as a crucial tool for organizations to monitor and report their impact on the natural environment. It entails the measurement and reporting of diverse environmental indicators, such as energy consumption, greenhouse gas emissions, water usage, waste generation, and pollution levels (Kasbun et al., 2016). Through this reporting, organizations can assess their environmental performance, identify areas for improvement, and exhibit their commitment to environmental responsibility (Ajekwe, 2019). Environmental disclosure index is an integral component of sustainability reporting as a whole, encompassing a vital aspect of the three pillars of sustainability: social, economic, and environmental. It is imperative for organizations to consider their environmental impact and implement strategies to minimize their ecological footprint (Al Hawaj & Buallay, 2022).

Organizations typically report on several key environmental disclosure metrics, which include energy consumption encompassing electricity, heating, and transportation; greenhouse gas emissions, indicating the volume of carbon dioxide and other greenhouse gases released due to organizational activities; water usage, reflecting the amount of water utilized for production, cooling, and other operations; waste generation, indicating the quantity and type of waste produced; and pollution levels, denoting the extent of pollutants emitted into the environment (Hongming et al., 2020). To report on their environmental sustainability performance, organizations employ various methods, such as sustainability reports, annual reports, and other public disclosures (Lawrence, 2022). They may also adopt third-party sustainability reporting frameworks, such as the Global Reporting Initiative (GRI) or the Sustainability Accounting Standards Board (SASB), to guide their reporting and ensure adherence to widely accepted standards (Aifuwa, 2020).

Environmental disclosure index constitutes a vital component of an organization's sustainability strategy, as it enables them to evaluate their environmental impact, communicate their initiatives to stakeholders, and demonstrate their commitment to environmental responsibility. The environmental disclosure index focuses on an organization's influence on the natural environment, including the utilization of natural resources, energy consumption, greenhouse gas emissions, waste generation, and pollution levels. Through environmental disclosure index, organizations can identify opportunities to reduce their environmental footprint, develop strategies for risk mitigation, and underscore their dedication to environmental responsibility (Umar et al., 2021).

Social Disclosure Index of Sustainability Disclosure

The social disclosure index of sustainability disclosure refers to the reporting of an organization's social impact on its stakeholders, encompassing employees, customers, suppliers, communities, and society at large (Olorunnisola & Usman, 2023). Its purpose is to enable organizations to evaluate and communicate their social performance, demonstrating their dedication to social responsibility (Ayuba & Yunusa, 2023).

Alternatively, community development in this context may also be referred to as social sustainability reporting, which involves documenting and reporting on an organization's social practices and the effects it has on the stakeholders it interacts with (Oti & Mbu-Ogar, 2018). This entails assessing and disclosing the organization's actions and their consequences for employees, customers, suppliers, local communities, and society as a whole (Al Hawaj & Buallay, 2022).

Social disclosure index serves as a valuable tool for assessing an organization's social performance and identifying areas that require improvement. Through reporting on community development initiatives, organizations can showcase their commitment to social responsibility and ethical business practices. It allows them to emphasize their social impact and engage with stakeholders, thereby fostering trust and credibility (Hongming et al., 2020). Social disclosure index also aids organizations in identifying potential risks and opportunities associated with their social impact, informing future decision-making and strategy development (Nworie & Aniefuna, 2024). The topics covered in social sustainability reporting encompass a wide range, including diversity and inclusion, employee well-being and labor practices, community engagement, human rights, ethical sourcing, and environmental impact. While some organizations may be required to report on their social sustainability due to industry or regulatory obligations, others may voluntarily choose to do so (Kasbun et al., 2016).

Community development reporting assumes a vital role in enhancing transparency and accountability within organizations. By engaging in this practice, organizations can identify areas for enhancing their social performance, while also showcasing their dedication to social responsibility (Jalila & Komathy, 2019). The social disclosure index primarily focuses on evaluating an organization's impact on stakeholders, which include employees, customers, suppliers, communities, and society as a whole. This comprehensive approach covers a wide array of topics such as labor practices, human rights, diversity and inclusion, health and safety, customer privacy, and community engagement. Through community development reporting, organizations are able to manifest their commitment to social responsibility and cultivate stronger relationships with their stakeholders (Umar et al., 2021).

Governance Disclosure Index of Sustainability Disclosure

The Governance Disclosure Index (GDI) serves as a tool to measure and evaluate the transparency and comprehensiveness of sustainability disclosure specifically pertaining to governance practices within an organization (Ariyani & Hartomo, 2018). It focuses on the degree to which a company discloses relevant information regarding its governance structure, policies, and procedures, as well as its dedication to ethical conduct and responsible decision-making (Buallay, 2022). Governance practices are crucial for organizations as they establish the framework for effective oversight, accountability, and decision-making processes. By disclosing information about governance practices, companies provide stakeholders with insights into how they are governed and how key decisions are made, which can contribute to

building trust and enhancing the organization's reputation (Al Maeeni, Ellili & Nobanee, 2022).

The GDI assesses various dimensions of governance disclosure to gain a comprehensive understanding of an organization's commitment to sustainability and responsible governance. It considers aspects such as board composition and structure, which includes evaluating the independence, diversity, and qualifications of board members (Clément, Robinot & Trespeuch, 2023). Transparent disclosure of these factors helps stakeholders assess whether the board is adequately equipped to provide effective oversight and strategic guidance.

Additionally, the GDI examines board accountability mechanisms. This entails evaluating the presence and effectiveness of board committees responsible for specific governance areas, as well as the disclosure of key governance policies and procedures (Khan, 2022). These policies may include codes of conduct that outline expected ethical behavior, as well as whistleblower protection policies that encourage the reporting of any misconduct or unethical practices.

Financial Performance

Financial performance is the measure of how effectively an organization utilizes its financial resources to achieve its goals and objectives, demonstrating its ability to generate sustainable financial returns (Shin, Moon & Kang, 2023). It represents the organization's ability to generate positive cash flows, manage its expenses and costs efficiently (Aggreh, Abiahu & Nworie, 2023), and optimize its use of financial assets to create value for its stakeholders (Kalia & Aggarwal, 2023). Financial performance encompasses the organization's ability to meet its financial obligations, such as debt payments and financial commitments, while maintaining a favorable financial position and liquidity (Soleimani, Dana, Salamzadeh, Bouzari & Ebrahimi, 2023). Essentially, financial performance reflects the organization's ability to attract and retain investors, demonstrate its profitability and growth potential, and ensure long-term financial sustainability and success (Philip & Prasad, 2023).

Firm performance encompasses an organization's overall achievement of its strategic objectives, encompassing its financial (Nworie & Mba, 2022), operational, marketing, and human resources functions. It serves as an indicator of how effectively the organization executes its strategy, fulfills its goals, and generates value for its stakeholders (Kasbun, The & San, 2016). Various metrics can be employed to measure financial performance, including revenue, profitability, and return on investment (ROI) (Banker, Chang, Janakiraman & Konstans, 2004).

To attain robust financial performance, an organization must establish a clear strategy that aligns with its vision and values (Chen & Xie, 2022). Primarily, this enables organizations to track their progress towards strategic objectives and identify areas necessitating improvement (Feng et al., 2022; Liu, Kim, Lee & Yoo, 2022). Moreover, it allows stakeholders, including investors, customers, employees, and the broader community, to evaluate an organization's performance and make informed decisions. Therefore, financial performance represents an organization's overall achievement of its strategic monetary objectives (Kalia & Aggarwal, 2023). Effective measurement and reporting of corporate performance play a vital role in tracking progress, identifying areas for improvement, and fostering trust among stakeholders.

Earnings Before Interest Margin

Earnings Before Interest Margin (EBIT margin) is a financial metric that measures a company's operating profitability by examining its earnings before deducting interest expenses and taxes (Bentley et al. 2023). It is a profitability ratio that provides insights into a company's ability to generate profits from its core operations, independent of its capital structure or tax obligations (Sarpong, 2021). To calculate the EBIT margin, you need to divide a company's earnings before interest and taxes (EBIT) by its total revenue and express the result as a percentage. The formula is as follows:

EBIT Margin = (EBIT / Total Revenue) x 100

The EBIT margin is a useful metric for assessing the profitability and efficiency of a company's operations (Abbott & Banerji, 2003). It provides insights into how effectively a company generates profits from its core business activities before accounting for interest expenses and taxes (Ledley et al., 2020). By excluding interest expenses and taxes, the EBIT margin enables comparisons of profitability across different companies, regardless of their capital structure or tax liabilities.

A higher EBIT margin indicates that a company is generating relatively more profit from its operations compared to its revenue, which suggests efficient cost management and strong operational performance (Sarpong, 2021). On the other hand, a lower EBIT margin may indicate higher operating costs or lower pricing power. The EBIT margin is commonly used by investors, analysts, and financial professionals to evaluate a company's operating profitability and to make comparisons with competitors (Ledley et al., 2020). It provides insights into the company's ability to generate profits from its core business activities, which is essential for long-term sustainability and growth.

Effect of Sustainability Disclosure on Financial Performance

Sustainability disclosure has been shown to positively influence an organization's financial performance, as evidenced by various studies (Ezekwesili & Ezejiofor, 2022; Amahalu et al., 2021; Umar et al., 2021) which argued that organizations that prioritize sustainability tend to exhibit better financial performance compared to those that do not prioritize sustainability. This can be attributed to several factors. Firstly, sustainability practices often result in increased operational efficiency, which leads to cost reductions and improved profitability.

In addition, sustainable practices can create new revenue opportunities by tapping into emerging markets and meeting evolving consumer preferences. By disclosing their sustainability performance, organizations can effectively communicate their efforts to stakeholders and demonstrate their commitment to stakeholder engagement and responsibility (Kasbun et al., 2016). On the same hand, sustainability plays a crucial role in mitigating risks that can adversely affect financial performance. Risks such as reputational damage or regulatory non-compliance can be minimized through sustainable practices and transparent disclosure. Sustainability reporting enables organizations to proactively address these risks and demonstrate their compliance with relevant regulations and industry standards, thereby safeguarding their reputation and financial stability (Umar et al., 2021).

Sustainability disclosure has a positive effect on corporate performance, enhancing an organization's reputation, stakeholder relationships, and financial outcomes (Oti et al 2018). By engaging in sustainability reporting, organizations can showcase their commitment to sustainability and responsible business practices, thus bolstering their reputation among stakeholders. This enhanced reputation can result in increased trust from customers, investors, employees, and the wider community, potentially attracting and retaining individuals and entities who prioritize sustainability, thereby contributing to long-term success (Hongming, Ahmed, Hussain, Rehman, Ullah & Khan, 2020). Moreover, sustainability disclosure enables organizations to cultivate stronger relationships with their stakeholders. Through transparently communicating their sustainability performance and goals, organizations can actively engage stakeholders and involve them in their sustainability initiatives (Jalila & Komathy, 2019). This collaborative approach fosters productive relationships, leading to improved decision-making processes and favorable financial outcomes.

Theoretical Review

Stakeholder Theory

Stakeholder theory was introduced by R. Edward Freeman in 1984. It proposes that organizations have a responsibility to actively engage in social roles within the communities they operate in (Oti & Mbu-Ogar, 2018). This theory challenges traditional theories by highlighting the individuals and groups to whom organizations and companies are held accountable (Bolanle et al., 2012). At the heart of stakeholder theory is the recognition of the interaction between corporations and their stakeholders, acknowledging the involvement of stakeholders in decision-making processes related to both social and environmental issues. Stakeholder theory, a management theory, places significant emphasis on considering the interests of a wide range of stakeholders in organizational decision-making. It argues that organizations have responsibilities beyond their shareholders, extending to employees, customers, suppliers, communities, and society at large (Ohiokha et al., 2016).

According to this theory, the long-term success of an organization relies on satisfying these stakeholders, as their support and cooperation are essential for the organization's survival and growth (Adekoya et al., 2017). Sustainability disclosure plays a crucial role in enhancing organizations' understanding of stakeholder needs and expectations while identifying areas for sustainability improvement (Oti & Mbu-Ogar, 2018). Through active stakeholder engagement and addressing their concerns, organizations can establish trust and strengthen relationships with them. This, in turn, can generate increased stakeholder support, contributing to long-term organizational success (Bolanle et al., 2012). Stakeholder theory and sustainability reporting promote sustainable development and responsible business practices by emphasizing the consideration of diverse stakeholders' interests and adopting a long-term perspective in decision-making processes (Ohiokha et al., 2016). The relevance of the theory to the study is based on the argument that by prioritizing sustainability and engaging stakeholders, organizations can create value for their stakeholders, fostering sustainable economic, social, and environmental development. The connection between sustainability disclosure and financial performance is therefore evident, as it enables organizations to enhance financial performance, reputation, stakeholder relationships, and risk management.

Empirical Review

Kalia and Aggarwal (2023) investigated the effect of total and each individual component of environmental, social and governance score (ESG) on financial performance (FP) of healthcare companies. Data for 468 health-care firms for the business year 2020 were sourced from Thomson Reuters to obtain ESG data. Correlation and multivariate regression analysis were done to investigate the relation between ESG activities and firm performance. The results of the study suggest that relation between ESG score and FP cannot be generalized. The results show that performing ESG activities positively affect firm performance of healthcare companies in developed economies; however, this relationship would be negative or insignificant in the case of developing economies.

Agarwal et al., (2023) examine the effect of environmental, social, and governance (ESG) sustainability reporting on the financial performance (FP) of healthcare corporations using the market-to-book value (MTB) ratio as a proxy of FP. A sample of 33 pharma companies in India from 2011 to 2020 has been considered. The study relies on the panel data method to assess the association between ESG and FP. The finding of the regression analysis conducted showed that there is a significant negative association between sustainability reporting initiatives and financial performance.

Ebaid (2023) examined the effect of sustainability reporting on the corporate financial performance of firms listed in Istanbul. The effect of sustainability reporting is investigated using pooled ordinary least square (OLS) method for panel data regression through two models based on Tobin's Q and ROA. A total of 920 observations for 46 companies with 3 different impact levels based on their environmental effect and 5-year quarterly panel data between 2016–2020. The results showed that sustainability reporting has a significant positive impact on financial performance according to the ROA model, and a significant negative correlation between risk and financial performance according to both ROA and Tobin's Q models. Considering the environmental impact of companies, the results also reveal a positive relationship between high impact companies' sustainability reporting and short-term financial performance as ROA is an accounting-oriented measure that reveals the company's short-term financial performance.

Almashhadani and Almashhadani (2023) examined the relation between sustainability reporting and performance in Bahraini listed companies. The population of the study was financial sector's companies at Bahrain Stock Exchange (BSX) for the year ended 2021 in Bahrain. The sample size of the study was 20 from financial sector. The study tested its

hypotheses via structural equation modeling. The findings of showed that sustainability reporting has a significant positive impact on performance (ROA and ROE).

Aiyesan (2023) examined the effect of sustainability reporting (SR) on financial-performance of listed manufacturing firms in Nigeria from 2010 to 2020. Ex-post facto research design was employed and 24 firms from 8 sectors were sampled. Data were sourced from their annual report and analysed using Panel regression technique. The study found that Community Relation Costs has a negative insignificant effect on financial-performance.

Amrigan et al., (2023) aimed to examine the impact of compliance with sustainability reporting, specifically economic disclosure, environmental disclosure, and social disclosure, on financial performance measured by Tobin's Q ratio. The sample for this study consisted of 27 companies that received ratings ranging from bronze to platinum on ASRRAT during the period of 2018-2021 and were listed on the stock exchange. The data utilized in this study were secondary data obtained from the ASRRAT website and the websites of the respective companies. Panel data regression analysis, specifically the Fixed Effect Model using STATA 14.2, was employed for data analysis. The findings of the study revealed that economic disclosure had a negative and significant effect on financial performance. Environmental disclosure, on the other hand, had a negative effect but did not exhibit significance, while social disclosure had a positive and significant effect on financial performance.

Oware and Worae (2023) determined how sustainability reporting disclosures affect company performance in India's mandatory reporting environment. The study employed feasible generalised least square, panel-corrected standard errors and probit regression. The sample size is 80, and the study period is between 2010 and 2020. It was found that Global Reporting Initiative (GRI) sustainability reporting disclosures positively influence market performance and adversely affect Tobin's q.

Onoh, Kayadi, and Ndubuisi (2023) conducted a study to investigate the impact of sustainability reporting practices, specifically related to environmental, social, and economic aspects, on the firm value of listed oil and gas companies in Nigeria. The study relied on secondary data obtained from published annual reports of ten (10) oil and gas companies. Descriptive analysis and correlation matrix were used as analytical tools, while multiple regression was employed to test the hypotheses. The findings revealed that environmental sustainability reporting had a positive and significant effect on the value of listed oil and gas firms in Nigeria. However, economic sustainability reporting had a negative and significant effect on firm value in the same context. Additionally, the results indicated that certain firm characteristics, such as sales growth and leverage, exerted a negative and significant impact,

while firm size had a positive and significant effect on both sustainability reporting and firm value of oil and gas companies in Nigeria.

Mbu-Ogar, Kangkpang, Nkiri, and Amoke (2023) conducted a study to investigate the impact of sustainability reporting on the corporate survival of oil and gas companies in Nigeria from 2016 to 2020. The study sample consisted of 10 oil and gas companies listed on the Nigerian Stock Exchange in 2020, with complete financial statements available for the study period. Data analysis was performed using multiple regression analysis to examine the relationship between sustainability reporting and corporate survival. The findings of the study revealed that sustainability reporting had an inverse effect on corporate survival, but this effect was statistically insignificant. Consequently, the study suggests that the efforts made by oil and gas companies in terms of sustainability reporting do not guarantee corporate survival in terms of maintaining a positive financial position and a healthy liquidity and solvency status.

Agbo and Ihotu (2023) examined the effect of sustainability reporting on the corporate performance of listed environmentally-sensitive companies in Nigeria. Specifically, the study examined the effect of sustainability on ROA and ROE. Ex-post facto design was employed as data were extracted from published audited annual financial reports of 23 sampled listed companies on the Nigerian Exchange Group for a period of ten (5) years covering 2016-2020. A disclosure checklist was adapted and modified in collecting data for the independent variable (sustainability reporting). The data collected were processed and subjected to series of tests to ascertain their validity and reliability. Multiple analysis was used. Findings of the study show that sustainability reporting has insignificant positive effect on ROA and insignificant negative effect on ROE of listed environmentally-sensitive companies in Nigeria.

Al Hawaj and Buallay (2022) conducted a study to investigate the global impact of sustainability reporting on firms' performance across seven different sectors. The study utilized data from 3,000 firms in 80 countries over a ten-year period from 2008 to 2017, resulting in a total of 23,738 observations. The regression analysis revealed variations in the impact of sustainability reporting (ESG) on firms' operational performance (ROA), financial performance (ROE), and market performance (TQ) across the seven sectors. By systematically depicting cross-sectorial ESG reporting, this study contributes to the literature on sustainability accounting and establishes a benchmark to guide firms interested in adopting sustainability reporting. Additionally, by incorporating macroeconomic variables, the study provides a fresh perspective on the economic implications of sustainability disclosure.

Ezekwesili and Ezejiofor (2022) conducted a study to examine the effect of sustainability accounting practices on sustainability disclosure among Nigerian Multinational Corporations (MNCs). The study utilized a descriptive and survey research design to assess the level of sustainability accounting disclosure and gather opinions from 129 respondents. The hypotheses were tested using One-Sample Chi Square Test and Pearson Correlation coefficient. The findings indicated a high level of social accounting practice among MNCs in Nigeria, and a positive association between social accounting practice and social disclosure. Additionally, the study highlighted the presence of a high level of environmental accounting practice among MNCs in Nigeria. The study recommended the use of advanced systems for tracking social and environmental costs, as well as seeking expert consultations and advice where necessary.

Lawrence (2022) examined the impact of sustainability reporting compliance on the financial performance of listed firms in Nigeria. The study collected secondary data from the annual reports of 57 companies listed on the Nigerian Stock Exchange. The sustainability reporting compliance was assessed using a simple disclosure index based on the Economic (ECM), Environmental (EVM), Social (SOC), and Governance (GOV) disclosures in the annual reports, following the Nigeria Stock Exchange (NSE) Sustainability Reporting Guideline. The financial performance of the firms was evaluated based on net profit margin (NPM) and return on capital employed (ROCE). The results from least square panel data analysis revealed a significant level of sustainability reporting compliance among the listed companies in Nigeria, with an aggregate average sustainability reporting compliance (SRC) of 75%. The study also found a significant association between sustainability reporting compliance and net profit margin (NPM) as well as return on capital employed (ROCE).

Amahalu et al., (2021) conducted a study to investigate the impact of sustainability reporting on the financial performance of quoted industrial goods companies in Nigeria from 2008 to 2019. The study specifically examined the effects of environmental reporting, social reporting, and economic reporting on cash value added. The researchers used purposive sampling to select eleven industrial goods companies from a population of fifteen quoted firms. Panel data was collected from the annual reports and accounts of the sample firms. Descriptive statistics, Pearson correlation coefficient, panel least square regression analysis, granger causality test, and Hausman test were employed to analyze the data. The results indicated that environmental reporting, social reporting, and economic reporting had a significant positive effect on cash value added at a 5% significance level.

Umar et al., (2021) investigated the effects of sustainability reporting on the financial performance of 26 listed consumer goods firms in Nigeria. The researchers adopted a correlational research design and collected secondary data from the firms' annual reports and accounts spanning a period of 10 years (2009-2018). Multiple regression analysis, diagnostic checks, and post estimation tests were conducted on the data. The findings revealed that social performance had a significant positive effect on financial performance, while environmental performance also had a significant positive effect. However, economic performance had a significant negative effect on financial performance. The study concluded that sustainability reporting plays a crucial role in corporate financial performance.

Alhassan et al., (2021) examined the influence of sustainability reporting on the performance of listed industrial goods companies in Nigeria over a period of ten years from 2011 to 2020. The study employed time-series and cross-sectional analysis of 12 selected listed companies on the Nigerian Stock Exchange. Data were collected from secondary sources such as fact books and financial statements. Statistical software was used to analyze the data using Pearson correlation coefficient and multiple regression analysis. The findings demonstrated that sustainability reporting, as measured by economic, environmental, and social performance indices, had a positive and significant effect on return on assets, return on equity, and earnings per share at a 5% level of significance.

Hongming et al., (2020) examined the effect of sustainability disclosure on firm performance in Pakistan. Secondary data were collected from the sustainability reports as well as annual reports of 50 non-financial public limited companies listed in Pakistan Stock Exchange for the period 2013 to 2017. Two regression models were applied with a view to ascertain the individual effect of each indicator of the sustainability as well as the composite effect of sustainability reporting index on firm performance. The results confirm that social and environmental indicators of sustainability reporting has positive effects on firm performance.

Jalila and Komathy (2019) examined the effect of sustainability reporting on firm performance among public listed firms in Malaysia. The sample of the study consist of 100 firms. Tthe findings of the regression analysis suggested that sustainability reporting has a positive relationship with return on asset and earnings per share of the firms.

Oti and Mbu-Ogar (2018) examined the impact of environmental and social disclosure on the financial performance of quoted oil and gas companies in Nigeria. Time series data for five years were collected from a sample of five oil and gas firms and analyzed using the ordinary least square regression technique. The theoretical framework was hinged on stakeholder and legitimacy theories which describe the tie between organizations and the social/societal strata

need for disclosure and financial performance. Results from the statistical analysis revealed that disclosure on employee health and safety and community development do not significantly affect financial performance while disclosure on waste management had a positive and significant effect on firm's financial performance.

MATERIAL AND METHOD

The researcher utilized an ex-post facto research design to investigate the effect of sustainability disclosure on the financial performance of listed industrial goods firms in Nigeria. This particular research design allows for the examination of any statistical associations that may exist between variables of interest that have already taken place in the past (Nworie et al., 2022; Nworie & Mba, 2022; Nworie & Ofoje, 2022). According to Nigerian Exchange Group's factsheet (2022), there are thirteen (13) publicly-listed industrial goods firms in Nigeria. A purposive sampling technique was employed to select a sample size of 10 firms from a population of 13 firms. This sampling approach enables the selection of firms that possess complete data for the period spanning from 2013 to 2022, as well as firms that were listed during the 2013 accounting period. The study employed a secondary data collection method to gather information. The annual reports and financial statements of the selected firms in the sample served as the primary sources of data. The data collected span the accounting periods from 2013 to 2022, ensuring that the study captures the recent trend of enhanced sustainability disclosure.

The variable scope of the independent variable covers environmental disclosure index, social disclosure index, and governance disclosure index, while the dependent variable, financial performance, is measured using earnings before interest margin. The measurement of the variables is shown below:

Table 2 Measurement of Variables

Variables	Type of Variable	Measurement
Earnings Before Interest Margin	Dependent	Earnings Before Interest/Sales
Environmental Disclosure Index	Independent	Binary Score of "1" if the firm has ISO 14001 certification for Environmental Management System or "0" if it does not
Social disclosure index	Independent	The amount of expenditure on donations
Governance Disclosure Index	Independent	The number of the firm's board members
Firm Size	Control	Natural log of total asset

Source: Researcher's Concept (2026)

To assess the combined effect of environmental disclosure index, social disclosure index, and governance disclosure on firms' earnings before interest margin, a multiple regression model was adapted from the study by Umar, Mustapha and Yahaya (2021). Furthermore, the influence of firm size was considered as a moderator in the analysis. The original model as used by Umar, Mustapha and Yahaya (2021) is:

$ROEi,t = \beta 0 + \beta 1ECPIi,t + \beta 2EVNPIi,t + \beta 3SOPPIi,t + ei,t$ …… *(1)*

Whereas:

ROE = Return on equity

β0 = Constant

ECPI = Economic Performance

EVNPI = Environmental performance

SOPI = Social performance

i = Firm Script

t = Firm Script

β1, β2, β3 are parameters to be estimated

ε = Idiosyncratic error term

The above model was modified as follows:

$EBIM_{it} = \alpha_0 + \beta_1 EDI_{it} + \beta_2 SDI_{it} + \beta_3 GDI_{it} + \beta_4 SIZ_{it} + \varepsilon_{it}$…… *(2)*

Where:

EBIM = Earnings Before Interest Margin

EDI = Environmental Disclosure Index

SDI = Social disclosure index

GDI = Governance Disclosure Index

SIZ = Firm Size

i = Firm Script

t = Firm Script

α0 = Constant

$\beta_{1\text{-}4}$ = Coefficients of the predictors

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ε = Idiosyncratic error term

The data collected underwent descriptive analysis, which involves summarizing and understanding the variables. Subsequently, Robust Least Squares regression analysis was employed to evaluate the effect of the independent variable, sustainability disclosure, on financial performance. Robust Least Squares regression analysis is an appropriate approach for this study as it can account for the outliers in both the dependent and independent variables (Alma, 2011) that may influence the relationship between sustainability disclosure and firm performance.

RESULT AND DISCUSSION

Descriptive Analysis of Data

A number of descriptive statistical tools were used to summarise the data in order to explore their central tendencies together with dispersion. Table 3 below shows the descriptive analysis output.

Table 3 Descriptive Analysis of Data

	EBIM	*EDI*	*SDI*	*GDI*	*SIZ*
Mean	0.099738	0.210000	2.756050	7.930000	6.983115
Median	0.135681	0.000000	2.913685	7.000000	6.560392
Maximum	0.553805	1.000000	7.284769	17.00000	9.424631
Minimum	-3.489864	0.000000	0.000000	4.000000	5.239405
Std. Dev.	0.410670	0.409360	2.586504	2.815021	1.099994
Skewness	-6.767075	1.423983	0.214945	1.000200	0.923729
Kurtosis	59.77726	3.027728	1.526537	3.596896	2.627205
Jarque-Bera	14195.13	33.79866	9.816244	18.15785	14.80033
Probability	0.000000	0.000000	0.007386	0.000114	0.000611
Sum	9.973798	21.00000	275.6050	793.0000	698.3115
Sum Sq. Dev.	16.69636	16.59000	662.3102	784.5100	119.7886
Observations	100	100	100	100	100

***Source**: Eviews 10 Statistical Output (2023)*

Table 3 shows that the mean EBIM is 0.0997, with a maximum of 0.5538 and a minimum of -3.4899. The standard deviation is 0.4107, indicating a notable degree of variability. The skewness of -6.7671 suggests a highly asymmetric distribution, possibly influenced by outliers. The extreme kurtosis value of 59.7773 indicates heavy-tailed distributions and potential presence of outliers, which is further supported by the significant Jarque-Bera statistic (p-value = 0.0000).

In line with Table 3, the mean of Environmental Disclosure Index (EDI) is 0.2100, with a maximum of 1.0000 and a minimum of 0.0000. The skewness of 1.4240 indicates a right-

skewed distribution, and the positive kurtosis of 3.0277 implies a heavy-tailed distribution. The Jarque-Bera test (p-value = 0.0000) confirms non-normality.

The Social Disclosure Index (SDI) has a mean of 2.7561, with a maximum of 7.2848 and a minimum of 0.0000. The skewness (0.2149) and kurtosis (1.5265) suggest relatively symmetrical distribution. However, the Jarque-Bera statistic (p-value = 0.0074) indicates a departure from normality.

The Governance Disclosure Index (GDI) has a mean of 7.9300, with a maximum of 17.0000 and a minimum of 4.0000. The skewness (1.0002) and kurtosis (3.5969) point to a right-skewed distribution with heavy tails. The Jarque-Bera test (p-value = 0.0001) confirms non-normality.

Firm Size (SIZ) has a mean of 6.9831, with a maximum of 9.4246 and a minimum of 5.2394. The skewness (0.9237) and kurtosis (2.6272) indicate a right-skewed distribution with relatively heavy tails. The Jarque-Bera test (p-value = 0.0006) suggests non-normality in the distribution of firm sizes.

Test of Hypotheses

Robust least square regression was used in testing the hypotheses at 5% significance level.

Table 4 Robust Least Squares Regression Result

Variable	Coefficient	Std. Error	z-Statistic	Prob.
EDI	0.173471	0.021852	7.938475	0.0000
SDI	0.003780	0.003667	1.030782	0.3026
GDI	0.006753	0.004613	1.463872	0.1432
SIZ	0.056429	0.013112	4.303619	0.0000
C	-0.324641	0.061811	-5.252139	0.0000
Robust Statistics				
R-squared	0.485239	Adjusted R-squared		0.463565
Rw-squared	0.847613	Adjust Rw-squared		0.847613
Akaike info criterion	148.4821	Schwarz criterion		164.9860
Deviance	0.616191	Scale		0.065883
Rn-squared statistic	377.0447	Prob(Rn-squared stat.)		0.000000
Non-robust Statistics				
Mean dependent var	0.099738	S.D. dependent var		0.410670
S.E. of regression	0.381624	Sum squared resid		13.83551

***Source**: Eviews 10 Statistical Output (2023)*

The regression analysis conducted on the sustainability disclosure indices and control variables indicates the relationship between these factors and the financial performance proxy, Earnings Before Interest and Tax Margin (EBIM). The model's explanatory power is reflected in the R-squared value of 0.485239 and the Adjusted R-squared of 0.463565. This indicates that approximately 46.36% of the variability in financial performance can be explained by the variables included in the model. The robust statistics section further supports the model's goodness-of-fit. The Rn-squared statistic is 377.0447, and the corresponding probability (Prob(Rn-squared stat.)) is 0.000000, reinforcing the overall effectiveness of the model in capturing and explaining the observed variations in financial performance.

The findings suggest that environmental disclosure and firm size play significant roles in influencing financial performance, while social and governance disclosures, although positively related, do not reach statistical significance. Firm Size (SIZ) exhibits a positive relationship, with a coefficient of 0.056429 and a probability value of 0.0000, signifying a statistically significant positive impact on financial performance. That is, larger firms, as measured by size, tend to have higher Earnings Before Interest and Tax Margin.

Hypothesis One
H01. Environmental disclosure index does not significantly affect earnings before interest margin of listed industrial goods firms in Nigeria.

As shown in Table 4, the coefficient for the Environmental Disclosure Index is 0.173471. This means that an increase in EDI will increase the earnings before interest margin of the firms. In simpler terms, firms that disclose more environmental information are likely to experience higher Earnings Before Interest and Tax Margin. As shown in Table 4, the probability value (Prob.) is 0.0000 and so the alternate hypothesis is accepted since this p-value is less than 0.05. This suggests a statistically significant positive relationship between environmental disclosure and financial performance. It is therefore concluded that Environmental disclosure index has a significant and positive effect on the earnings before interest margin of listed industrial goods firms in Nigeria (p-value = 0.0000). This indicates that firms disclosing more information about their environmental practices tend to have higher financial performance. This is because investors and other stakeholders may perceive environmentally responsible firms as being better managed and more sustainable, leading to increased confidence and investment. Also, companies with strong environmental disclosures may be more efficient in resource utilization, waste management, and overall operational practices, positively impacting their bottom line. This finding corroborates the result by Kalia and Aggarwal (2023); Ebaid (2023); Almashhadani and Almashhadani (2023) but the finding

negated that of Mbu-Ogar, Kangkpang, Nkiri, and Amoke (2023) which realised a negative effect.

Hypothesis Two
H02. Social disclosure index has no significant effect on earnings before interest margin of listed industrial goods firms in Nigeria.

Table 4 shows that the Social Disclosure Index has a coefficient of 0.003780. This means that an increase in SDI will increase the earnings before interest margin of the firms. In simpler terms, firms that disclose more social responsibility information are likely to experience higher Earnings Before Interest and Tax Margin. As shown in Table 4, however, with a probability value of 0.3026, this effect is not significant because the *p*-value is greater than 0.05. In other words, the level of social disclosure does not have a statistically significant impact on financial performance. The null hypothesis is therefore accepted that Social disclosure index has a non-significant and positive effect on the earnings before interest margin of listed industrial goods firms in Nigeria (*p*-value = 0.3026). This suggests that firms disclosing more information about their social practices also experience higher financial performance. The reason behind this is that socially responsible practices, such as community development service, can enhance a company's brand image, fostering consumer loyalty and positive public perception. Similar findings were realised by Kalia and Aggarwal (2023); Ebaid (2023); Almashhadani and Almashhadani (2023) but contradicts the results by Aiyesan (2023) and Agarwal, Gautam, Jain, Rastogi, Bhimavarapu and Singh (2023) which found negative effect.

Hypothesis Three
H03. Governance disclosure index does not significantly affect earnings before interest margin of listed industrial goods firms in Nigeria

In line with the result in Table 4, the Governance Disclosure Index has a coefficient of 0.006753. This means that an increase in GDI will increase the earnings before interest margin of the firms. In simpler terms, firms that disclose more governance information are likely to experience higher Earnings Before Interest and Tax Margin. As shown in Table 4, however, the null hypothesis was accepted because the probability value of 0.1432 is greater than 0.05. This implies a non-significant positive association with financial performance. Hence, Governance disclosure index has a non-significant and positive effect on the earnings before interest margin of listed industrial goods firms in Nigeria (*p*-value = 0.1432), implying that firms with strong governance practices tend to have better financial performance. Of course,

transparent and accountable governance structures can instill confidence in investors, leading to increased investment and a positive impact on financial performance. Effective governance practices often involve robust risk management strategies, reducing the likelihood of financial and operational setbacks. This finding agrees with the study by Kalia and Aggarwal (2023); Ebaid (2023); and Almashhadani and Almashhadani (2023).

CONCLUSION AND RECOMMENDATION

Progressive industrial enterprises recognize the importance of sustainability and actively adopt the practice of openly sharing their environmental, social, and governance (ESG) initiatives. They understand that sustainability disclosure is a crucial avenue for promoting transparency, accountability, and stakeholder confidence. Through the incorporation of sustainability considerations into their strategies, operations, and decision-making processes, these companies exhibit a resolute dedication to creating enduring value. Having analysed the effect of sustainability disclosure on financial performance, it was found that while environmental disclosure has a significant positive effect, social, and governance disclosure indices have a non-significant but positive effect on financial performance.

These findings of the study collectively suggest that sustainability disclosure, encompassing environmental, social, and governance aspects, plays a positive role in shaping the financial performance of listed industrial goods firms in Nigeria. Even though not all the findings are significant, the positive effects observed in each dimension imply that investors and stakeholders value transparency and responsible business practices, leading to enhanced financial results for these firms. The study found that as the level of environmental disclosure increases, the earnings before interest margin of listed industrial goods firms in Nigeria also increases; an increase in the level of social disclosure is associated with an increase in the earnings before interest margin for listed industrial goods firms in Nigeria; and a higher governance disclosure index is linked to an increase in the earnings before interest margin for listed industrial goods firms in Nigeria. The positive effects observed in all three indices (environmental, social, and governance) suggest that sustainability disclosure is associated with enhanced financial performance for listed industrial goods firms in Nigeria. Companies that are actively committed towards disclosing their environmental, social, and governance practices enjoy financial benefits since such disclosure culminates into sustainable business practices that promote both reputation and the bottom line.

Based on the findings regarding the positive effects of sustainability disclosure indices on the earnings before interest margin of listed industrial goods firms in Nigeria, we made the following recommendations for each finding:

1) Firms should strive to expand and enhance their environmental disclosures by investing in and adopt sustainable technologies and practices, in order to reinforce their commitment to sustainability and also improve operational efficiency and reduce environmental impact.

2) Firms should focus on strengthening their community engagement initiatives by supporting local communities through philanthropy, education programs, or job creation initiatives.

3) Company directors should enhance governance disclosures by emphasizing the independence of the board of directors and their role in effective oversight. This can include measures to ensure board diversity, regular evaluations, and transparent decision-making processes.

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