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NON-FINANCIAL DISCLOSURE AND FIRM PERFORMANCE: INSIGHTS FROM LISTED CONSUMER GOODS MANUFACTURING FIRMS IN NIGERIA

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Abstract

In the dynamic landscape of corporate reporting and stakeholder engagement, the significance of non-financial disclosure has gained considerable prominence. As businesses strive for sustainable growth and investors increasingly recognize the value of environmental, social, and governance (ESG) factors, understanding the nexus between non-financial disclosure and firm performance becomes pivotal. This study endeavors to explore this relationship within the context of listed consumer goods manufacturing firms in Nigeria. The study encompassed a population of 21 listed consumer goods manufacturing firms in Nigeria. The sample size was 21 firms, determined through census sampling techniques. The research spanned from 2013 to 2022. FGLS regression model was used to examine the relationship between the variables studied. The results found that environmental disclosure and social disclosure had a positive and significant effect on the firm's performance. While governance disclosure had a negative and significant effect on the firm's performance. This implies that firms that engage in robust non-financial disclosure practices tend to experience better overall performance. The study concludes that non-financial disclosure, encompassing environmental, social, and governance

aspects, plays a pivotal role in influencing the performance of listed consumer goods manufacturing firms in Nigeria. Firms are encouraged to enhance their ESG reporting frameworks, aligning with stakeholder expectations and global sustainability trends.

Keywords: Non-financial disclosure, environmental disclosures, social disclosures, governance disclosures, firm performance.

JEL classification: M14

Introduction

In the dynamic landscape of corporate reporting and stakeholder engagement, the significance of non-financial disclosure has gained considerable prominence. As businesses strive for sustainable growth and investors increasingly recognize the value of environmental, social, and governance (ESG) factors, understanding the nexus between non-financial disclosure and firm performance becomes pivotal. This change in approach has led to the rise of non-financial disclosure as an essential element of corporate reporting, allowing stakeholders to understand a company's sustainability endeavors, social responsibility actions, and overall impact on society and the environment (Bose et al., 2017). Yet, the effective execution of non-financial disclosure relies on a profound comprehension of the factors influencing companies' disclosure practices (Chiyachantana et al., 2018). One crucial determinant is the theories of information asymmetry, which encapsulate the diverse viewpoints, beliefs, and frameworks that mold organizations' reactions to information imbalances among different stakeholders (Dilling, 2020).

Nigeria, as one of the leading economies in Africa, has witnessed a burgeoning interest in corporate sustainability practices. Consumer goods manufacturing firms, operating in a sector characterized by their direct impact on individuals and communities, play a crucial role in shaping the broader socio-economic landscape (Cloudy & Oday, 2022). Against this backdrop, our study delves into the non-financial disclosure practices adopted by these firms and seeks to unveil their potential influence on overall firm performance. The non-financial disclosure landscape encompasses a spectrum of information relating to environmental impact, social responsibility, governance structures, and ethical business practices (Jiang et al., 2022).

Through an exhaustive examination of disclosure patterns within the consumer goods manufacturing sector, our research aims to uncover the extent to which these firms embrace non-financial reporting and the impact of such disclosure on various facets of performance, including financial, operational, and market-based indicators. While several studies (Abdulateif, 2023; Alves et al., 2019; Chiyachantana et al., 2018; Cloudy & Oday, 2015; Jiang et al., 2022) have explored the impact of specific types of information disclosure (like financial, non-financial, or environmental), there remains a research gap in investigating the collective effect of various forms of information disclosure on company performance.

The broad objective of this study is to investigate the effect of non-financial disclosure on firm performance. By evaluating how non-financial disclosure influences operational efficiency and risk management, and investigating how the market perceives and responds to non-financial information disclosed by these companies. This research contributes to the existing literature by offering a nuanced understanding of the role that non-financial disclosure plays in shaping the performance dynamics of consumer goods manufacturing firms. It provides valuable insights for practitioners, policymakers, and academics alike. As businesses navigate the evolving landscape of responsible corporate citizenship, this study aims to foster informed decision-making and strategic planning by elucidating the intricate relationship between non-financial disclosure practices and firm performance in the Nigerian consumer goods manufacturing sector.

Literature Review

Conceptual Review

Firm Performance

Firm performance refers to the overall effectiveness and success of a business entity in achieving its objectives and goals (Dagunduro et al., 2023; Dagunduro et al., 2022). It is a multidimensional concept encompassing various aspects of a firm's operations, financial health, strategic management, and overall competitiveness in the market (Dada et al., 2023). The assessment of firm performance involves evaluating how well a company utilizes its resources to generate profits, achieve growth, and create value for its stakeholders (Asubiojo et al., 2023; Awotomilusi et al., 2023; Oluwagbade et al., 2023). Assessing the company's ability to generate profits over a specific period. It involves the ability of firms to increase sales and revenue over time.

Firm performance is a comprehensive concept that integrates both financial and non-financial indicators (Aluko et al., 2022). Successful firms strive to achieve a balance across these dimensions, aligning their strategies with market demands, managing resources efficiently, and fostering a positive organizational culture. Regular evaluation of firm performance is crucial for identifying areas of improvement, making informed strategic decisions, and maintaining competitiveness in the business landscape (Boluwaji et al., 2024; Kolawole et al., 2023).

Return on Assets - Return on Assets (ROA) is a financial ratio that measures a company's efficiency in utilizing its assets to generate profits. It provides insight into how well a company can convert its investments in assets—such as property, equipment, inventory, and receivables—into net income (Dada et al., 2023; Dagunduro et al., 2023). ROA is an efficiency metric that assesses how effectively a company utilizes its assets to generate earnings. A higher ROA indicates better asset utilization. It reflects the company's ability to generate profits relative to its asset base. A higher ROA suggests that the company is more efficient in turning assets into earnings. Monitoring changes in ROA over time can provide insights into a company's operational efficiency and financial health. Consistent improvement or deterioration may signal underlying trends (Awotimilusi et al., 2023; Oluwagbade et al., 2023).

Net Income in the ROA formula includes all operating and non-operating income and deducts all expenses, providing a comprehensive measure of profitability (Boluwaji et al., 2024). ROA can be decomposed into two components—net profit margin (net income divided by sales) and asset turnover (sales divided by average total assets). This decomposition helps identify whether changes in ROA are driven by profitability or asset turnover. Return on Assets is a key financial metric that allows investors, analysts, and stakeholders to evaluate how well a company is managing its assets to generate profits. It provides a comprehensive view of operational efficiency and is an important tool for financial analysis and performance benchmarking (Awotomilusi et al., 2023; Dada et al., 2023; Dagunduro et al., 2023; Oluwagbade et al., 2023).

Non-Financial Disclosure

Non-financial disclosure refers to the voluntary or mandated communication of information by companies regarding their environmental, social, and governance (ESG) performance and impacts. While financial disclosures primarily focus on the economic aspects of a company's operations, non-financial disclosures provide insights into the company's sustainability practices, social responsibility initiatives, environmental stewardship, employee welfare, and other non-financial aspects that are relevant to stakeholders. Non-financial disclosure has gained significant attention in recent years due to the increasing recognition of the broader impact of companies beyond their financial performance (Alves et al., 2019; Bose et al., 2017; Chen et al., 2015). Stakeholders, including investors, customers, employees, and regulators, are demanding more transparency and accountability from companies about their ESG practices. Non-financial disclosure serves as a mechanism for companies to demonstrate their commitment to sustainable development and responsible business practices (Igbekoyi et al., 2021).

Non-financial disclosures can take various forms, including sustainability reports, integrated reports, corporate social responsibility (CSR) reports, ESG reports, and dedicated sections within annual reports. Standardized frameworks, such as the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and Task Force on Climate-related Financial Disclosures

(TCFD), provide guidelines and indicators for companies to structure and report their non-financial information (Habbash, 2016; Odugbemi & Igbekoyi, 2021). The benefits of non-financial disclosure extend beyond stakeholder transparency and accountability. It can also lead to an enhanced reputation, improved risk management, better access to capital, increased operational efficiency, and the ability to attract and retain talent. Non-financial disclosure also enables stakeholders to make more informed decisions, align their investments or purchases with their values, and hold companies accountable for their social and environmental impact (Skouloudis et al., 2019).

However, it is important to note that non-financial disclosure faces challenges, such as the lack of standardized reporting requirements, the potential for greenwashing or misleading information, and the need for robust data collection and verification mechanisms. Efforts are underway to address these challenges and promote more consistent, comparable, and reliable non-financial disclosures (Lee, 2018). Overall, non-financial disclosure plays a critical role in promoting sustainable and responsible business practices by encouraging companies to go beyond financial metrics and consider their broader impact on society and the environment. It enables stakeholders to assess a company's performance and contribution to sustainable development, leading to more informed decision-making and a drive toward a more sustainable future (Malek-Yonan et al., 2016; Stefano & Clodia, 2022).

Environmental Disclosures - These disclosures focus on a company's environmental impacts, including its carbon footprint, energy consumption, waste management practices, water usage, and efforts to mitigate and adapt to climate change. Environmental disclosures can also address biodiversity conservation, pollution prevention, and sustainable resource management (Igbekoyi et al., 2021; Odugbemi & Igbekoyi, 2021).

Social Disclosures - Social disclosures encompass a wide range of issues, such as labour practices, human rights, diversity and inclusion, employee well-being and development, community engagement, and philanthropic activities. Companies may disclose information on their workforce composition, employee health and safety measures, supply chain practices, and community development initiatives (Habbash, 2016; Lee, 2018; Sougne & Lakhal, 2015).

Governance Disclosures - Governance disclosures provide information about a company's governance structure, board composition, executive compensation, ethical standards, and risk management practices. These disclosures help stakeholders assess the company's accountability, transparency, and commitment to ethical business conduct (Habbash, 2016; Huynh, 2020).

Non-Financial Disclosure and Firm Performance

The relationship between non-financial disclosure and firm performance has become a focal point in contemporary corporate governance and sustainability discourse. Non-financial disclosure encompasses the voluntary communication of information by businesses that goes beyond traditional financial metrics, shedding light on environmental, social, and governance (ESG) practices (Huynh, 2020). As companies increasingly recognize the significance of their societal and environmental impact, stakeholders demand greater transparency and accountability (Jiang et al., 2022). Non-financial disclosure can take various forms, including sustainability reports, corporate social responsibility (CSR) initiatives, and disclosures related to ethical business practices (Stefano & Clodia, 2022). These disclosures aim to provide stakeholders with a holistic understanding of a company's commitment to sustainable and responsible business practices. The link between such disclosures and firm performance is multifaceted and manifests in several dimensions.

Robust non-financial disclosure can enhance a company's reputation and build trust among stakeholders. Stakeholders, including customers, investors, and employees, often prefer businesses with transparent and ethical practices, influencing their perception of the company and, consequently, its performance (Sougne & Lakhal, 2015). Non-financial disclosures often include information on a company's approach to risk management, especially in areas such as environmental impact, supply chain ethics, and social responsibility. Effective risk management, as communicated through non-financial disclosures, can contribute to the resilience of the business, and protect against potential financial setbacks. Companies that actively disclose non-financial information related to innovation, research and development, and sustainable practices may gain a competitive advantage. Such

disclosures can attract socially conscious investors and consumers, fostering innovation and securing a unique market position (Stefano & Clodia, 2022).

Non-financial disclosures related to corporate culture, diversity and inclusion, and employee well-being can impact a company's ability to attract and retain talent. A positive workplace environment, as communicated through disclosures, can contribute to higher employee engagement and productivity. Non-financial disclosure often intersects with regulatory requirements and standards. Companies that proactively disclose information aligned with industry standards and regulations may mitigate legal risks and demonstrate a commitment to compliance, positively influencing firm performance. Investors increasingly consider non-financial factors when evaluating a company's long-term sustainability (Boluwaji, et al., 2024; Igbekoyi et al., 2021).

Firms that effectively communicate their commitment to ESG principles and responsible business practices may attract long-term investors who view these factors as indicators of sound management and sustainable performance (Boluwaji et al., 2024). While the relationship between non-financial disclosure and firm performance is complex and context-specific, a growing body of research suggests that transparency and accountability in non-financial dimensions can contribute positively to overall organizational success. This connection underscores the evolving landscape of corporate governance, where financial and non-financial considerations are intertwined in shaping the trajectory of businesses in the global marketplace (Bose et al., 2017; Odugbemi & Igbekoyi, 2021).

Theoretical Framework

This study is based on the Stakeholder Theory, which was proposed by Professor Edward Freeman in 1984. The theory suggests that businesses have a responsibility to a wide range of stakeholders, including employees, suppliers, customers, government, investors, and the community. It recognizes that a company's success lies in meeting the needs of all stakeholders, not just shareholders (Adewara et al., 2023; Dada et al., 2023; Dagunduro et al., 2023; Kolawole et al., 2023). However, one limitation of the theory is the challenge of pleasing all stakeholders simultaneously due to their diverse interests. The Stakeholder Theory has been widely used to study various information asymmetry and information disclosure contexts. It has been applied to analyze the value creation of information asymmetry and the impact of environmental factors on business profitability (such as Habbash, 2016; Huynh, 2020; Igbekoyi et al., 2021) among others. However, Eric and Alan (2009) argued that the interests of the stakeholders are just too broad to realistically manage.

In the domain of non-financial disclosure and firm performance, the Stakeholder Theory provides a structure for understanding how varied perspectives and beliefs shape a company's position and conduct regarding information disclosure. It acknowledges that stakeholders beyond shareholders hold a valid interest in acquiring non-financial particulars about a company, including its environmental impact, social responsibility initiatives, and governance practices (Stefano & Clodia, 2022). The disclosure of non-financial information can affect how companies operate and address the concerns and interests of these stakeholders. By considering the concerns of diverse stakeholders and integrating their perspectives into decisions regarding information disclosure, companies can navigate the complexities of non-financial disclosure. This approach enhances transparency, accountability, and relationships with stakeholders. Consequently, the examination of the connection between non-financial disclosure and firm performance can be interpreted within the framework of the Stakeholder Theory.

Empirical Review

Several research studies have been undertaken to explore the correlation between information asymmetry theory ideologies and non-financial disclosure. For instance, Abdulateif (2023) delved into understanding how board characteristics impact information asymmetry in UK-listed firms, specifically investigating if the disclosure environment moderates the association between board structure and information asymmetry. The study focused on six board composition characteristics, using the bid-ask spread as a proxy for information asymmetry. Results indicated a significant negative relationship between board size, board independence, female directors, and information asymmetry. Conversely, board busyness and CEO duality were positively linked to information asymmetry. These findings aligned with the findings of Wang (2022) aimed to analyze the connection between information report quality and corporate investment efficiency. The study categorized information into overall, financial,

and non-financial types, exploring the influence of disclosing these information types on investment efficiency. Through an exploratory research design and literature review, the study concluded that the relationship between information disclosure quality and investment efficiency is non-linear. It emphasized the need for a comprehensive analysis, considering both financial and non-financial information quality to understand the full impact on investment efficiency. The study highlighted that all types of information disclosure contribute to decreasing information asymmetry, affecting financing constraints and agency costs, thereby influencing corporate investment efficiency.

Cloudy and Oday (2022) evaluated the impact of voluntary non-financial disclosure on listed companies. The study examined 50 Swedish companies with mandatory disclosure and 76 international companies with voluntary disclosure over seven years. Findings indicated a negative but insignificant impact on profitability for energy management and corporate social responsibility, while board diversity exhibited a positive but insignificant impact. The significant variable influencing profitability was the firm's size. The conclusion drawn was that disclosures related to energy management, corporate social responsibility, and board diversity had no significant impact on the financial performance of manufacturing companies, irrespective of engaging in mandatory or voluntary non-financial disclosure. These findings negate the findings of Abdulateif (2023) and Wang (2022).

Stefano and Clodia (2022) conducted a study exploring the impact of non-financial disclosure structure on reducing information asymmetry. Adopting a stakeholder perspective, the research analyzed non-financial disclosure structure in terms of depth, breadth, and concentration. Content analysis techniques were applied to reports released by U.S. firms listed in the S&P500 index from 2010 to 2020. The study utilized content and Bid-Ask spread data to test hypotheses. Findings showed that both the level and range of stakeholder-related subjects covered in reports contributed to diminishing information asymmetry. Companies consistently distributing information across various stakeholder categories experienced reduced opacity and information asymmetry. These findings were in line with the findings of Abdulateif (2023) and Wang (2022) but contradicted the findings of Cloudy Oday (2022).

Odugbemi and Igbekoyi (2021) re-examined economic performance indices, focusing on environmental reporting for Nigerian-listed oil and gas firms. The study explored the impact of environmental practice disclosures on economic performance, encompassing 11 oil and gas organizations from 2011 to 2020. Results revealed that certain environmental practices, such as pollution control policy and research and development, had a significant positive effect on earnings per share (EPS). However, aspects like compliance with environmental laws showed insignificant or negative effects on EPS.

Igbekoyi et al. (2021) investigated environmental accounting disclosure and its impact on the financial performance of multinational companies in Nigeria. The study evaluated compliance and the effect of environmental disclosure on financial performance, focusing on multinational companies from 2011 to 2020. Findings indicated the oil and gas sector exhibited the lowest compliance. Additionally, environmental accounting disclosure had a significant positive impact on earnings per share (EPS) but a negative and insignificant effect on return on assets (ROA).

Dilling (2020) globally explored sustainability reporting, examining distinctions in size, financial performance, capital structure, and corporate governance between companies publishing G3 sustainability reports and those that do not. Findings revealed that European firms in the energy or production sector with higher profit margins tend to produce high-quality sustainability reports, while corporations with higher long-term growth rates are less inclined. The study emphasizes the importance of globally recognized sustainability reporting standards.

Skouloudis et al. (2019) focused on sustainability reporting patterns in biodiversity conservation management. Their comprehensive disclosure index showed that companies in Malaysia, Bolivia, and Brazil disclose more data on biodiversity sustainability indicators compared to those in the Philippines, which exhibit lower levels of disclosure. Alves et al. (2019) explored the link between governance rules, information asymmetry, voluntary disclosure, and organizational performance in the Iberian Peninsula. Firms with extensive disclosure practices showed reduced bid-ask spreads, but high ownership concentration led to increased bid-ask spreads. Governance rules influenced information

asymmetry proxies, and share liquidity was more associated with shareholders' concentration and companies' performance than information accessibility.

Chiyachantana et al. (2018) investigated the correlation between information disclosure, company characteristics, and information asymmetry. Enhanced corporate disclosure and transparency were found to reduce asymmetric information between informed and uninformed investors. Larger firms with significant growth opportunities and superior performance disclosed more information. Halkos and Skouloudis (2017) examined the connection between corporate social responsibility (CSR) disclosure patterns and national culture across 20 countries. Cultural perspectives positively impacted the CSR index, with long-term orientation and indulgence positively affecting CSR.

Bose et al. (2017) explored the relationship between financial inclusion disclosure and firm performance in Bangladeshi banks. Financial inclusion disclosure was positively associated with subsequent performance, moderated by market competition and government ownership. Similarly, Habbash (2016) investigated the influence of corporate governance on CSR disclosure by Saudi businesses. Factors such as state ownership, managers' ownership, firm size, and company age positively influenced the level of firm performance.

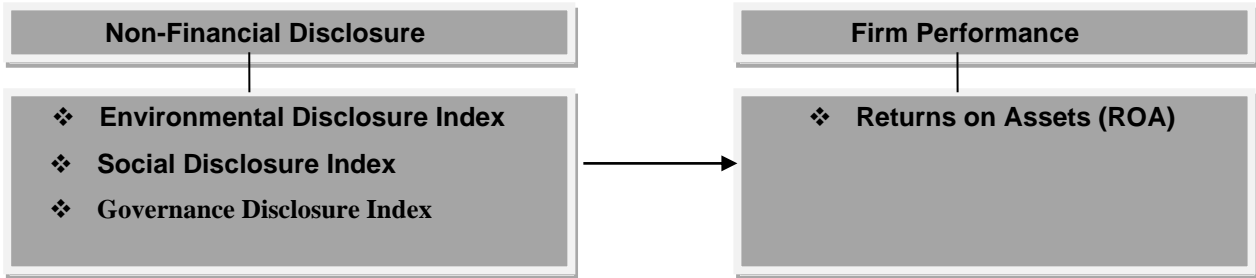
Sougne and Lakhali (2015) studied the effect of corporate disclosures on information asymmetry and stock-market liquidity in France. Corporate disclosures positively influenced the liquidity of the French market and reduced the adverse selection component of the bid-ask spread. Also, Chen et al. (2015) examined the relationship between social performance and sustainability reporting in manufacturing companies, finding a positive correlation between various social performance aspects and firm sustainability reporting.

Considering the existing literature, while some studies have focused on specific types of information disclosure (financial, non-financial, or environmental), there remains a research gap in exploring the collective impact of multiple information disclosures on firm performance. Addressing these research gaps could significantly contribute to a more comprehensive understanding of the relationship between information disclosure and firm performance, offering valuable insights for both academic researchers and industry practitioners involved in corporate reporting and governance. Hence, the following hypothesis is formulated:

H₀: *Non-financial disclosure does not have a significant effect on the firm performance of listed public consumer goods manufacturing companies in Nigeria.*

Conceptual Framework

Figure 2.1 presents a Conceptual Framework illustrating the interplay between Non-Financial Disclosure and the Firm Performance of listed consumer goods manufacturing companies on the Nigerian Exchange Group.



Source: Authors' Concepts (2023)

Data and Methods

The investigation adopted an ex-post facto research methodology as the utilized data was pre-existing and not intended for alteration. The study encompassed a population of 21 listed consumer goods

manufacturing firms in Nigeria. The sample size was 21 firms, determined through census sampling techniques. The research spanned from 2013 to 2022. Panel regression analysis was conducted and the FGLS regression model was used to examine the relationship between the variables studied.

Model Specification

The study delved into the connections between variables by incorporating insights from previous studies (Habbash, 2016; Igbekoyi et al., 2021; Sougne & Lakhal, 2015). The objective was to examine how the concepts of non-financial disclosure, firm performance, and stakeholder theory could be synergistically applied to evaluate the outcomes that businesses can achieve by integrating these principles into their operational framework. The model was outlined as follows:

$$FP = f(NFD)$$

$$FP = \beta_0 + \beta_1 EDI + \beta_2 SDI + \beta_3 BGD I + \epsilon_{it}$$

Where:

FP = Firm Performance

NFD = Non-Financial Disclosure

EDI = Environmental Disclosure Index

SDI = Social Disclosure Index

GDI = Governance Disclosure Index

β = Intercept

e = stochastic error term β_1 , β_2 , β_3 , and β_4 represent the coefficients of the unknown variables.

The *a-priori* expectation is that β_1 , β_2 , $\beta_3 > 0$, which implies that a positive relationship is anticipated between the explanatory variables and the explained variable.

Table 1: Operationalization and Measurement of Variables

Variables	Description	Measurement	Source
Return on Assets (ROA)	Return on Assets (ROA) is a financial ratio that measures a company's efficiency in utilizing its assets to generate profits.	Measured by dividing net income by average total assets and multiplying by 100 to express the result as a percentage. $ROA = (\text{Net Income} / \text{Average Total Assets}) \times 100$	Dada et al. (2023); Dagunduro et al. (2023)
Environmental Disclosure Index	It consists of information that relates to the environmental activities in the disclosure index.	The aggregate of these disclosures as stated in the index: Environmental; Material; Energy; Water; Biodiversity; Emission; Effluents and waste disposal; Product service environmental impact; Compliance to environmental laws and regulations.	Igbekoyi et al. (2021); Odugbemi & Igbekoyi, (2021).
Social Disclosure Index	It consists of information that relates to the social activities in the disclosure index	The aggregate of these disclosures as stated in the index: Labour practices; Human rights; Diversity inclusion; Employees well-being and development; Community engagement; Employees health and safety; and Philanthropic activities.	Habbash, (2016); Lee, (2018); Sougne & Lakhal, (2015).
Governance Disclosure Index	It consists of information that relates to the governance activities in the disclosure index	The aggregate of these disclosures as stated in the index: Board composition; Executives' compensation; Ethical Standards; Board members' financial knowledge; and Risk management practices.	Habbash, (2016); Huynh, (2020).

Authors' Compilation from Nigerian Exchange Group (2023)

Data Analysis and Discussion of Findings

Descriptive Statistics

Table 2 below shows information on cogent and qualitative features of data points used in the regression analysis. The independent variables include the environmental disclosure index, social disclosure index, and governance disclosure index as represented by EDI, SDI, and GDI respectively

while the dependent variable includes return on asset (ROA). The mean value of EDI is 0.1417. This implies that 14.17% of environmental information was disclosed on average. These values range from 0 to 0.8214. However, this might be subjected to an average variation of 0.1985. This represents 19.85% closeness to the mean value in the aggregate. The shape of the EDI distribution is 1.4777, indicating positively skewed data points. In terms of kurtosis, the data distribution is 4.3716. This implies data are heavy-tailed distribution and more than normal distribution.

Again, the mean value of SDI is 0.4024 representing a relatively high value of disclosure. While these data points range from 0 to 1, the dispersion of this distribution is low at 0.3437. This means 34.37% spread from the mean value. The data distribution is positively skewed at 0.1505, while at 1.7739, it is a platykurtic distribution. The average value of GDI is 0.4038. Its standard deviation is 0.2491, representing a relatively low dispersion from the mean. The highest and lowest values in the distribution are 0 and 0.7355 respectively. About the nature of the data, GDI is negatively skewed at -0.6721 and with a kurtosis of 1.8952. This shows the data is not normally distributed. The mean value of ROA is 0.0583. The standard deviation is 0.5258 indicating a high spread from the mean value. The minimum and maximum values in this distribution are -2.3599 and 6.1743 respectively. The shape of the distribution as represented by skewness and kurtosis of 8.0333 and 96.807 respectively shows that the data point is not normally distributed.

Table 2: Descriptive Statistics

Variables	EDI	SDI	GDI	ROA
Obs	210	210	210	210
Mean	0.1417	0.4024	0.4038	0.0583
Std. Dev	0.1985	0.3437	0.2491	0.5258
Minimum	0	0	0	-2.3599
Maximum	0.8214	1	0.7355	6.1743
Skewness	1.4777	0.1505	-0.6721	8.0333
Kurtosis	4.3716	1.7739	1.8952	96.807

Source: Author's Computation (2023)

Firm Performance and Non-Financial Disclosure

This section assessed the magnitude and significance of the relationship between firm performance and non-financial disclosure. The firm's performance portrays the efficiency of operations and revenue over expenses. Non-financial disclosure, in this study, entails information on firms' environmental impact, social activities, and governance.

Return on Assets and Non-Financial Disclosure - the result of the regression analysis conducted to examine the relationship between non-financial disclosure and return on assets is shown in Table 3 below. To make the data distribution to be normally distributed, variables were transformed. The Wooldridge test for autocorrelation shows a chi-square of 8.468 and a p-value of 0.0087, indicating the presence of autocorrelation. The classical least squares panel data model is therefore inadequate as it violates the condition of no serial correlation. The modified Wald test for groupwise heteroskedasticity also shows a chi-square of 1.5e+07 and a p-value of 0.0000. This implies there is the presence of heteroskedasticity in the variables examined. The variance inflation factor of 2.69 for EDI, SDI, GDI, and ROA is well below the threshold of 10, indicating the absence of multicollinearity.

However, the correlation between ROA and EDI is 0.0150 with a p-value of 0.8285. Although this is insignificant, there is a weak positive linear relationship between EDI and ROA. At a p-value of 0.9134, the correlation coefficient between ROA and SDI is -0.0075. The small negative linear association between SDI and ROA is statistically insignificant. The correlation coefficient between ROA and GDI is -0.0143, with a p-value of 0.8363. There is a statistically insignificant negative linear relationship between ROA and GDI. Also, between EDI and SDI, the correlation is high and significant at 0.6849 and a p-value of 0.0000. The relationship between EDI and GDI is weak and significant at 0.4919 and a p-value of 0.0000. Between SDI and GDI, the relationship is high and significant at 0.7764 and a p-value of 0.0000.

To choose which regression model will best predict the relationship between EDI, GDI, SDI, and ROA, the Hausman specification test and the Breusch and Pagan Lagrangian multiplier test were conducted. The result of the Breusch and Pagan Lagrangian multiplier test of 0.00 with a p-value of 1.0000 shows the random effect is efficient. Also, the result of the Hausman specification test was 0.26 with a p-value of 0.9679. This indicates that a fixed-effect model would be appropriate. However, this was not interpreted because of the presence of heteroskedasticity and autocorrelation. A panel data of the FGLS regression model was used.

While validating the significance of each independent variable included in a model, an indicator of whether a group of independent variables is significant for a model or not is shown by the Wald Chi-Squared Test. The null hypothesis is that the regression coefficient of at least one of the predictors does not equal zero. From Table 3 below, the Wald chi2 (3) is 16.32 with a p-value of 0.0010. This suggests that the independent variables contributed 16.32% to the model and an efficient model with a p-value of 0.0010 less than the threshold of 0.05. Other elements not included in the model are represented by the remaining percentage.

A positive coefficient, on the other hand, shows that as the independent variable's value rises by one unit, the dependent variable's mean tends to rise by the independent variable's coefficient. Conversely, a negative coefficient indicates a decrease in the dependent variable by the independent variable's coefficient for every unit increase in the independent variable. The coefficient of ROA is 0.0400, which is statistically significant at a p-value of 0.000. The coefficient is positive, which indicates an increase in the disclosure of firms' non-financial information disclosure will improve firm performance.

EDI being significant at a p-value of 0.010, environmental disclosure's coefficient is 0.0860. This denotes that an 8.60% increase in the value of return on asset is a result of a unit increase in environmental disclosure. SDI with an indication of a positive significant coefficient is provided by a p-value of 0.033 and a coefficient of 0.0457. It can, therefore, be inferred from this that an increase in the volume of social disclosure by a unit will have a 4.57% increase in firms' performance. Also, a GDI coefficient of -0.0810 and a p-value of 0.006 indicate a negative but significant coefficient as shown by the result of regression analysis carried out. This implies that governance disclosure is not a factor in firms' performance.

Table 3: FGLS Estimate

	FGLS		OLS		FIXED EFFECT		RANDOM EFFECT	
	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
ROA								
Constant	0.0400	0.000	0.0713	0.309	0.0835	0.422	0.0713	0.308
EDI	0.0860	0.010	0.0973	0.702	0.0665	0.861	0.0973	0.702
SDI	0.0457	0.033	-0.029	0.886	0.0417	0.876	-0.029	0.886
GDI	-0.0810	0.006	-0.0373	0.874	-0.1276	0.678	-0.0373	0.873
Wald Chi2(3)	16.32							
Probability	0.001		0.9782		0.9752		0.9783	
R-squared			0.0009					
Wooldridge test for autocorrelation	8.468(0.0087)							
Hausman fixed random (p-value)	0.26(0.9679)							

Wald test for
groupwise
heteroskedasticity 1.5e+07(0.000
0)

Breusch-Pagan
Lagrangian
Multiplier test (p-
value) 0.00(1.0000)

VIF (mean) 2.69

Source: Author's Computation (2024)

Discussion of Findings

In the dynamic landscape of corporate reporting and stakeholder engagement, the significance of non-financial disclosure has gained considerable prominence. As businesses strive for sustainable growth and investors increasingly recognize the value of environmental, social, and governance (ESG) factors, understanding the nexus between non-financial disclosure and firm performance becomes pivotal. The results found a statistically significant and positive impact of the environmental disclosure index on the performance of listed consumer goods manufacturing firms in Nigeria. The results suggest that there is a positive association between the level of environmental disclosure and the performance of listed consumer goods manufacturing firms. In other words, as the firms increase their environmental disclosure, there is a corresponding positive effect on their overall performance. This demonstrates a meaningful and positive relationship between the extent of environmental disclosure and the performance of listed consumer goods manufacturing firms in Nigeria. This implies that firms with higher levels of environmental disclosure tend to experience better overall performance.

Also, the findings revealed that the social disclosure index had a statistically significant positive effect on the performance of listed consumer goods manufacturing firms in Nigeria. The results suggest that there is a positive association between the level of social disclosure and the performance of listed consumer goods manufacturing firms. In other words, as these firms increase their social disclosure, there is a corresponding positive impact on their overall performance. The findings demonstrate a meaningful and positive relationship between the extent of social disclosure and the performance of listed consumer goods manufacturing firms in Nigeria. This implies that firms with higher levels of social disclosure tend to experience better overall performance.

Lastly, the results demonstrated that the governance disclosure index had a statistically significant but negative effect on the performance of listed consumer goods manufacturing firms in Nigeria. The results suggest that there is a negative association between the level of governance disclosure and the performance of listed consumer goods manufacturing firms. In other words, as these firms increase their governance disclosure, there is a corresponding negative impact on their overall performance. This implies that firms with higher levels of governance disclosure tend to experience poorer overall performance.

In summary, the findings showed that non-financial disclosure had a positive and significant effect on firm performance in the Nigerian consumer goods manufacturing sector. The results indicate that there is a positive association between the extent of non-financial disclosure and firm performance in the Nigerian consumer goods manufacturing sector. Based on the statistical analysis, non-financial disclosure has a meaningful, positive, and statistically significant impact on the performance of companies in the consumer goods manufacturing sector in Nigeria. This implies that firms in this sector that engage in robust non-financial disclosure practices tend to experience better overall performance. This aligns with the findings of Sougne and Lakhal (2015), Stefano and Clodia (2022), and Abdulateif (2023), while contradicting the assertions of Bose et al. (2017), Chiyachantana et al.

(2018), and Alves et al. (2019), among others. It also challenges the a priori expectations outlined in the empirical and theoretical review.

Conclusion and Recommendations

In the evolving landscape of corporate reporting and stakeholder engagement, non-financial disclosure has gained considerable importance. The study focused on the Nigerian consumer goods manufacturing sector, examining the effect of environmental, social, and governance (ESG) disclosure on firm performance. The results found that environmental disclosure and social disclosure had a positive and significant effect on the firm's performance. While governance disclosure had a negative and significant effect on the firm's performance. The study concludes that non-financial disclosure, encompassing environmental, social, and governance aspects, plays a pivotal role in influencing the performance of listed consumer goods manufacturing firms in Nigeria. The nature of this influence varies across different dimensions of disclosure, emphasizing the importance of a comprehensive understanding of ESG factors.

The study's findings hold practical implications for businesses aiming to enhance transparency and disclosure practices. Companies should strategically embrace robust ESG reporting practices to enhance overall performance and stakeholder perception. Firms should carefully navigate the balance between environmental disclosures and broader effects on operations, recognizing potential trade-offs. Social disclosure strategies may be improved. While governance disclosures may not significantly impact firm performance, a holistic governance approach remains essential for overall organizational health.

Considering the empirical analysis, the following recommendations were put forward as follows:

- i. Firms are encouraged to enhance their ESG reporting frameworks, aligning with stakeholder expectations and global sustainability trends.
- ii. Adoption of integrated reporting practices that encompass both financial and non-financial aspects can provide a holistic view of corporate performance.
- iii. Regular monitoring of ESG practices and their impact on performance is recommended, with a commitment to adapt strategies based on changing stakeholder needs.
- iv. Manufacturing firms should assess and strategize the integration of environmental disclosures to optimize outcomes.
- v. Consumer goods firms should ensure that social disclosure practices are tailored to align with the firm's aims and objectives, considering the identified positive impact.
- vi. Organizations should recognize the limited influence of governance disclosures on performance and focus on comprehensive governance strategies.

This study contributes to understanding the nexus between non-financial disclosure and firm performance, providing specific insights for the Nigerian consumer goods manufacturing sector. Sector-specific findings offer practical implications for companies operating in the Nigerian consumer goods manufacturing industry. The study enriches existing literature by presenting empirical evidence on the relationship between ESG disclosure and firm performance, contributing to the understanding of sustainable business practices globally. The findings provide valuable insights for academics, practitioners, and policymakers seeking a nuanced understanding of factors influencing a firm's performance through contemporary disclosure practices in a dynamic business environment.

References

- Abdulateif, A. A. (2023), "Effects of board characteristics on information asymmetry: Evidence from the alternative investment market", *Heliyon*, Vol. 9 No. 5, pp. 1-16.
- Adewara, Y. M, Dagunduro, M. E., Falana, G. A., and Busayo, T. O. (2023), "Effect of multiple taxation on the financial performance of small and medium enterprises (SMEs) in Ekiti State, Nigeria", *Journal of Economics, Finance and Accounting Studies*, Vol. 5 No. 3, pp. 121-129.

- Aluko, A. F., Igbekoyi, O. E., Dagunduro, M. E., Falana, G. A., and Oke, O. E. (2022), "Tax incentives and liquidity performance of quoted industrial goods firms in Nigeria", *European Journal of Business Management*, Vol. 14 No. 23, pp. 11-22.
- Alves, H. S., Canadas, N., & Rodrigues, A. M. (2019), "Voluntary disclosure, information asymmetry and the perception of governance quality: An analysis using a structural equation model", *Review of Applied Management Studies*, Vol. 13, pp. 66-79.
- Asubiojo, A. O., Dagunduro, M. E., and Falana, G. A. (2023), "Environmental conservation cost and corporate performance of quarry companies in Nigeria: An empirical analysis", *International Journal of Research and Innovation in Social Science (IJRISS)*, Vol. 7 No. 8, pp. 49-63. <https://dx.doi.org/10.47772/IJRISS.2023.7804>
- Awotomilusi, N. S., Dagunduro, M. E., Dada, S. A., and Oluwagbade, O. I. (2023), "An assessment of operational risk disclosure and financial performance of listed financial institutions in Nigeria", *Migration Letters*, Vol. 20 No. 10, pp. 299-322.
- Boluwaji, O. D., Igbekoyi, O. E., Dagunduro, M. E., Busayo, T. O., and Osatuyi, O. A. (2024), "Sustainable business practice and going concern of selected listed manufacturing companies in Nigeria", *International Journal of Emerging Trends in Social Sciences*, Vol. 16 No. 1, pp. 1-12.
- Bose, S., Saha, A., Khan, H., and Islam, S. (2017), "Non-financial disclosure and market-based firm performance: The initiation of financial inclusion", *Journal of Contemporary Accounting and Economics*, Vol. 13 No. 3, pp. 263-281. <https://doi.org/10.1016/j.jcae.2017.09.006>
- Chen, Y., Birjandi, H. and Hakemi, B. (2015), "The effects of agency theory and signaling theory on the level of voluntary disclosure of listed companies in the Tehran Stock Exchange", *Res. J. Finance Account*, Vol. 6, pp. 174–183.
- Chiyachantana, C. N., Nuengwang, N., Taechapiroontong, N., and Thanarung, P. (2018), "The effect of information disclosure on information asymmetry", *Investment Management and Financial Innovations*, Vol. 10 No. 1, pp. 1-19.
- Cloudy, M., and Oday, G. V. (2022), "The impact of voluntary non-financial disclosure on profitability of listed companies", *Journal of Accounting and Business Administration*, Vol. 6 No. 4, pp. 69-85.
- Dada, S. A., Igbekoyi, O. E., and Dagunduro, M. E. (2023), "Effects of forensic accounting techniques and corporate governance on financial performance of listed deposit money banks in Nigeria", *International Journal of Professional Business Review*, Vol. 8 No. 10, pp. 1-26. <https://doi.org/10.26668/businessreview/2023.v8i10.3547>
- Dagunduro, M. E., Dada, S. A., and Asubiojo, A. O. (2023), "Corporate governance, board attributes, and financial performance: A study of listed insurance companies in Nigeria", *Journal of Harbin Engineering University*, Vol. 44 No. 11, pp. 1160-1170.
- Dagunduro, M. E., Igbekoyi, O. E., Ogungbade, O. I., Aluko, A. F., and Osaloni, B. O. (2022), "Corporate social responsibility and financial performance of macro, small, and medium-scale enterprises (MSMEs) in Ekiti State, Nigeria", *Research Journal of Finance and Accounting*, Vol. 13 No. 22, pp. 61-75.
- Dilling, P. F. (2020). Sustainability reporting in a global context: What are the characteristics of corporations that provide high quality sustainability reports and empirical analysis. *International Business & Economics Research Journal (IBER)*, Vol. 9 No. 1, pp. 28-43.
- Eric, W. O., and Alan, S. (2009), "Putting a stake in stakeholder theory", *Journal of Business Ethics*, Vol. 88 (S4), pp. 605-615.
- Freeman, R. E. (1984), *Strategic Management: A Stakeholder Approach*, Boston: Pitman.
- Habbash, M. (2016), "Corporate governance and corporate social responsibility disclosure: evidence from Saudi Arabia", *Social Responsibility Journal*, Vol. 12 No. 4, pp. 740-754.
- Huynh, Q. L. (2020), "A triple of corporate governance, social responsibility and earnings management", *Journal of Asian Finance, Economics and Business*, Vol. 7 No. 3, pp.29-40.
- Igbekoyi, O. E., Solanke, F. T., Adeusi S. A., Alade, M. E., and Agbaje, W. H. (2021), "Environmental accounting disclosure and finance performance of listed multinational firms in Nigeria", *Global Journal of Management and Business Research*, Vol. 21 No. 2, pp. 56-78.
- Jiang, Y., Wang, Y., and Yuquan, W. (2022), "The influence of information disclosure quality on enterprise investment efficiency", *Proceedings of the 2022 22nd International Conference on Economic Development and Business Culture (ICEDBC 2022)*, 1639-1646.
- Kolawole, J. S., Igbekoyi, O. E., Ogungbade, O. I., and Dagunduro, M. E. (2023), "Environmental accounting practice and financial performance of listed aviation firms in Nigeria", *Asian Journal of Economics, Business and Accounting*, Vol. 23 No. 13, pp. 70-80.

- Lee, W. J. (2018), "Group-affiliated firms and corporate social responsibility activities", *Journal of Asian Finance, Economics and Business*, Vol. 5 No. 4, pp. 127-133.
- Malek-Yonan, R., Bakhtiar, M., and Rafsanjani, M. (2016), "Analytical study on the importance of non-financial information in company reporting", *International Journal of Management and Business Studies*, Vol. 6 No. 3, pp. 251-255.
- Odugbemi, O. M., and Igbekoyi, O. E. (2021), "Environmental disclosure practices and economic performance of quoted oil and gas firms in Nigeria", *African Journal of Accounting, Finance & Marketing*, Vol. 5 No. 1, pp. 109-128.
- Oluwagbade, O. I., Dagunduro, M. E., Awotomilusi, N. S., and Dada, S. A. (2023), "Evaluation of financial risk disclosure and financial performance of listed financial institutions in Nigeria", *Journal of Harbin Engineering University*, Vol. 44 No. 11, pp. 855-869.
- Skouloudis, A., Malesios, C., and Dimitrakopoulos, P. G. (2019), "Corporate biodiversity accounting and reporting in megadiverse countries: An examination of indicators disclosed in sustainability reports", *Ecological Indicators*, Vol. 98, pp. 888–901.
- Sougne, D., and Lakhel, F. (2015), "Corporate disclosures, information asymmetry and stock-market liquidity in France", *The Journal of Applied Business Research*, Vol. 31 No. 4, pp. 1223-1238.
- Stefano, R., and Clodia, V. (2022), "Non-financial disclosure and information asymmetry: A stakeholder view on U.S. firms", *International Journal of Economics, Management and Quantitative Methods*, Vol. 7 No. 1, pp. 1-27.