

FIRM CHARACTERISTICS AND SUSTAINABILITY REPORTING

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Abstract: This study examines the impact of firm characteristics on sustainability reporting of manufacturing firms in Nigeria using regression analysis to investigate the effect of board size, firm profitability, and firm size on sustainability disclosure practices. The findings reveal that board size has a significant positive effect on the quality of sustainability reporting, with a coefficient of 4.106078 and a t-statistic of 0.0000, supporting the theoretical expectation that larger boards enhance oversight and accountability. Conversely, firm profitability exhibits an insignificant negative effect on sustainability reporting, with a coefficient of -0.207832 and a t-statistic of 0.8356, suggesting that highly profitable firms may deprioritize sustainability reporting in favor of short-term financial performance. Firm size, however, demonstrates a significant positive relationship with sustainability reporting, with a coefficient of 5.884901 and a t-statistic of 0.0000, implying that larger firms, due to regulatory scrutiny and stakeholder expectations, disclose more comprehensive sustainability information. These findings contribute to the existing literature on corporate governance and sustainability reporting, offering insights for policymakers, regulators, and corporate managers in Nigeria.

Key words: sustainability reporting, firm characteristics, Stakeholder Theory.

JEL Classification: M10.

1. Introduction

Sustainability reporting has become increasingly significant worldwide as regulators, investors, and stakeholders demand greater disclosure of firms' environmental, social, and governance (ESG) performance. Global initiatives such as the Global Reporting Initiative (GRI), the International Sustainability Standards Board (ISSB), and the United Nations Sustainable Development Goals (SDGs) have set standards to harmonize sustainability reporting (Luo & Tang, 2023). Developed economies in North America, Europe, and parts of Asia have made ESG disclosures mandatory for listed firms though reporting practices remain uneven across regions due to differing regulatory and governance structures (Ng et al., 2023). Europe leads in institutionalizing sustainability reporting, with the Corporate Sustainability Reporting Directive (CSRD) requiring extensive ESG disclosures. In North America, investor demand has driven the adoption of frameworks such as the Sustainability Accounting Standards Board (SASB) Standards (SASB), while several Asian countries—including China, Japan, and India—are tightening their disclosure policies with varied levels of industry compliance (Ibrahim et al., 2024). Latin America shows gradual progress, largely influenced by multinational corporations, whereas developing economies face enforcement challenges (Cardoso & Faletto, 2024).

In Africa, ESG reporting is gaining traction, particularly in South Africa, Kenya, and Egypt, where regulators have begun encouraging sustainability disclosures (Adegbite et al., 2020). South Africa stands out as a pioneer, with the Johannesburg Stock Exchange (JSE) mandating integrated reporting under the King IV framework. However, across much of the continent, adoption is slowed by weak enforcement, low corporate commitment, and competing socio-economic priorities (Maroun & Cerbone, 2024). In Nigeria, sustainability reporting is still emerging, promoted by bodies such as the Financial Reporting Council of Nigeria (FRCN), the Securities and Exchange Commission (SEC), and the Nigerian Exchange Group (NGX), which have introduced voluntary disclosure guideline (Shaba, 2024). Despite

these efforts, challenges such as limited expertise, financial constraints, and weak enforcement hinder widespread adoption (Durrani et al., 2024; Olaleye & Igbekoyi, 2020; Osifo & Fasua, 2017).

Nevertheless, global reporting trends and growing stakeholder demand for transparency are pressuring Nigerian firms to strengthen their ESG disclosures. Improved compliance not only enhances governance and stakeholder confidence but also aligns local practices with international standards (Okoye et al., 2025). This study, therefore, seeks to explore how firm characteristics—such as board size, profitability, firm size, and the presence of audit committees—affect the quality and comprehensiveness of sustainability reporting in Nigeria

2. Sustainability Reporting

Sustainability reporting refers to the practice of companies disclosing information on their environmental, social, and governance (ESG) performance. This type of reporting encompasses how firms manage their economic, environmental, and social impacts and their contributions to sustainable development. Sustainability reports often include data on greenhouse gas emissions, energy usage, waste management, labour practices, community engagement, and corporate governance structures (Bosi et al, 2022).

Environmental Dimension

The environmental dimension of sustainability reporting focuses on a company's impact on the natural environment. This includes aspects such as energy consumption and efficiency, greenhouse gas emissions, water usage and management, waste management, and biodiversity and land use (Abeysekera, 2022). Energy consumption and efficiency reporting involves disclosing the total energy used, sources of energy (renewable vs. non-renewable), and measures taken to improve energy efficiency. Greenhouse gas emissions disclosure includes information on direct (Scope 1), indirect (Scope 2), and other indirect (Scope 3) emissions, along with strategies for reducing emissions and mitigating climate change impacts (Fasua & Osifo, 2020).

Social Dimension

The social dimension addresses the impact of a company on its employees, customers, communities, and other stakeholders. Key aspects include labour practices and decent work, human rights, community engagement, product responsibility, and health and safety (Govindan et al., 2025). Labor practices and decent work reporting includes information on employment policies, labour rights, workplace safety, diversity and inclusion, employee training and development, and fair compensation (Katselidis, 2023).

Governance Dimension

The governance dimension focuses on the structures and processes by which a company is directed and controlled. Important aspects include corporate governance, risk management, ethics and integrity, and stakeholder engagement. Corporate governance reporting includes information on the composition and structure of the board of directors, roles and responsibilities, board diversity, and mechanisms for ensuring accountability and transparency (Salehi, 2023).

Economic Dimension

Economic performance reporting includes data on financial health, profitability, and long-term economic sustainability of the company. This includes revenue, profits, dividends, and economic value generated and distributed; indirect economic impacts reporting covers the

broader economic impacts of the company's operations, such as job creation, infrastructure development, and contributions to local and national economies (Oncioiu et al., 2020). Recent trends in sustainability reporting emphasize the integration of these dimensions to provide a holistic view of a company's performance (Zik-Rullahi & Jide, 2023).

3. Firm Characteristics

Firm characteristics refer to the attributes or features of a company that can influence its operations, strategic decisions, and reporting practices, including sustainability reporting. Understanding these characteristics is crucial for analysing how different companies approach sustainability and the factors that drive their disclosure practices (Douye & Gospel, 2023).

Firm Size

Firm size is one of the most significant characteristics affecting sustainability reporting. Larger firms are more likely to engage in sustainability reporting due to their greater resources, visibility, and stakeholder pressure (Friske, 2023). Large firms often have more complex operations and broader environmental and social impacts, prompting them to disclose more detailed sustainability information. Additionally, larger firms are more likely to face scrutiny from regulators, investors, and the public, driving them to adopt comprehensive sustainability reporting practices to maintain their reputation and manage risks (Di Tullio et al., 2025).

Profitability

Profitability is another critical characteristic influencing a company's approach to sustainability reporting. More profitable firms typically have more resources to invest in sustainability initiatives and reporting processes (Dissanayake et al., 2025). High profitability can enable companies to adopt advanced technologies, implement best practices in sustainability, and produce detailed reports. Furthermore, profitable firms may view sustainability reporting as a means to enhance their reputation, attract investors, and differentiate themselves in the market (Ogunbukola, 2024).

Industry Type

The industry type significantly impacts a company's sustainability reporting practices, as different industries face varying levels of environmental and social risks. Industries with high environmental impacts, such as oil and gas, mining, and manufacturing, are often subject to stricter regulations and higher stakeholder expectations for transparency in their sustainability practices (Suhatmi et al., 2024). Consequently, firms in these industries tend to provide more extensive sustainability disclosures to address regulatory requirements and stakeholder concerns.

Board Size

Board size is an important characteristic that can influence a firm's sustainability reporting. Larger boards often have a greater diversity of skills, perspectives, and expertise, which can enhance the board's ability to oversee and support comprehensive sustainability reporting (Githaiga & Kosgei, 2023). A larger board may also be better equipped to handle the complexity of sustainability issues and ensure that these matters are adequately integrated into the company's strategic planning and reporting processes (Valcozzena et al., 2025).

Audit Committee Presence

The presence and effectiveness of an audit committee play a pivotal role in ensuring the accuracy, reliability, and transparency of sustainability reporting. An audit committee's oversight extends beyond financial reporting to include non-financial disclosures, particularly those related to environmental, social, and governance (ESG) practices (Komal et al., 2022).

Research has shown that firms with active and well-composed audit committees, especially those with a higher proportion of members holding recognized financial certifications such as CPA, ACCA, or CFA, are more likely to produce comprehensive and credible sustainability reports (Zaman et al., 2021).

Ownership Structure

Ownership structure, including the distinction between publicly traded and privately held firms, influences sustainability reporting practices. Publicly traded companies are generally subject to more stringent reporting requirements and greater scrutiny from investors, regulators, and the public (Ligorio et al., 2025). This increased scrutiny drives publicly traded firms to adopt more comprehensive sustainability reporting practices to meet regulatory requirements and manage stakeholder expectations. In contrast, privately held firms may face less external pressure to disclose sustainability information and may adopt less formalized reporting practices (Amoako et al., 2022).

Legitimacy Theory

Legitimacy Theory, first advanced by Dowling and Pfeffer in 1975 and rooted in Weber's notion of social legitimacy, posits that organizations operate under a "social contract" whereby they must align their actions with societal values to gain approval and ensure survival. Since legitimacy is dynamic and can shift with changing expectations, firms often use sustainability and corporate social responsibility disclosures to demonstrate conformity and manage legitimacy gaps. This explains why companies adopt sustainability practices such as ESG reporting and alignment with frameworks like GRI, IASSB, and the SDGs. The extent of such disclosures is shaped by firm characteristics—large, profitable, highly leveraged, or high-impact industry firms are more likely to engage in legitimacy-driven reporting due to higher public scrutiny and regulatory pressures. Overall, the theory highlights how sustainability practices and reporting serve as strategic tools for organizations to maintain societal acceptance and protect long-term viability.

Stakeholder Theory

Stakeholder Theory, developed by R. Edward Freeman in 1984 through his work *Strategic Management: A Stakeholder Approach*, emphasizes that businesses should not only focus on maximizing shareholder value but also consider the interests of all parties that can affect or are affected by their operations, such as employees, customers, suppliers, communities, governments, and investors. The theory rests on the premise that long-term business success depends on creating and sharing value among stakeholders, guided by both strategic and ethical responsibilities. It highlights that firms operate within dynamic networks of relationships, making effective stakeholder management a necessity for sustainable growth. In relation to sustainability, Stakeholder Theory provides a strong foundation as it requires organizations to balance economic, social, and environmental goals by addressing the concerns of diverse stakeholders. This is evident in sustainability reporting frameworks like the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB), which stress stakeholder engagement. Furthermore, the application of the theory varies across firm characteristics such as size, industry, ownership structure, culture, leadership, and financial capacity. For example, large firms in environmentally sensitive industries often face greater stakeholder pressure to adopt sustainable practices, while ownership structures and leadership commitment influence how stakeholder-oriented strategies are prioritized. Thus, Stakeholder Theory not only shapes the understanding of

corporate responsibility but also establishes a direct link between sustainability practices and firm-specific attributes.

Institutional Theory

Institutional Theory, first introduced by Meyer and Rowan (1977) and later expanded by DiMaggio and Powell (1983), explains how organizations are influenced not only by efficiency concerns but also by social, cultural, and institutional pressures. The theory emphasizes that firms often adopt practices to gain legitimacy rather than to improve performance, with institutional isomorphism—coercive, mimetic, and normative pressures—driving organizations toward similar behaviors. In the context of sustainability, companies adopt environmental, social, and governance (ESG) practices to comply with regulatory requirements, respond to stakeholder expectations, and emulate industry leaders, thereby enhancing their legitimacy and reputation. Firm characteristics further shape the degree of adoption, as larger firms, companies in environmentally sensitive industries, and publicly listed organizations face stronger pressures than smaller or privately owned firms. Geographic location, age, and reputation also play significant roles, with firms in highly regulated regions or with established market presence more likely to adopt sustainability as a means of maintaining legitimacy or differentiating themselves. Thus, Institutional Theory highlights that sustainability practices are not solely driven by profit motives but by institutional demands and firm-specific attributes that influence how organizations align with societal expectations.

3. Empirical Review

Board Size and Sustainability Reporting

Diwe-Tochukwu and Okafor (2024) investigated this relationship among listed oil and gas firms in Nigeria, focusing on indicators such as return on assets, earnings per share, and return on equity. Employing an ex post facto design and panel regression analysis using data from 2009 to 2022, their study revealed that sustainability reporting positively and significantly affects return on assets and earnings per share, though it showed no significant influence on net profit margin and return on equity. Similarly, Whetman (2018) demonstrated a positive impact of sustainability reporting on financial performance, particularly return on equity, return on assets, and profit margin, though this relationship was more pronounced in firms with lower institutional ownership. Broader empirical evidence reinforces these findings, with Girón et al. (2021) and Chowdhury et al. (2020) establishing a strong correlation between profitability and sustainability disclosures, especially when measured through return on assets and net profit margin. Nigerian studies, such as those by Asuquo et al. (2018) and Kumo et al. (2023), confirmed that more profitable firms are inclined to disclose comprehensive sustainability information. Similar trends are noted globally, as Buallay (2020) and Islam et al. (2020) found that firms in banking and manufacturing sectors often leverage sustainability reporting to enhance legitimacy and reputation.

Firm Profitability and Sustainability Reporting

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Firm Size and Sustainability Reporting

Firm size has also been widely recognized as a determinant of sustainability reporting. Fadilah et al. (2022) examined the impact of firm size and age on sustainability disclosure and earnings management among Indonesian mining companies and found that both variables positively influenced sustainability reporting. Their results further showed that while the economic dimension of sustainability reporting was positively linked to earnings management, the environmental dimension had a negative association, and the social dimension had no significant effect. Supporting these results, Antara et al. (2020) established that firm size and environmental performance positively and significantly affect sustainability reporting among LQ45 index-listed companies in Indonesia. More recent evidence from Nigeria by Ayuba et al. (2024) revealed that firm attributes such as size, leverage, liquidity, and board size significantly enhance the quality of sustainability reporting in oil and gas companies, while firm age exerted a negative influence. These findings collectively suggest that larger firms, as well as those with stronger governance and financial attributes, are more likely to engage in extensive and higher-quality sustainability disclosures.

Audit Committee Presence and Sustainability Reporting

The role of audit committee presence and attributes in shaping sustainability reporting has also attracted scholarly attention. Lewa et al. (2025), using data from non-financial companies across ten sub-Saharan African countries, found that audit committee independence positively influences sustainability reporting, while director compensation ratio exerts a negative effect. This highlights the importance of committee independence in enhancing disclosure credibility. In a related study, Meutia et al. (2023) investigated audit committee attributes among Indonesian commercial banks and observed that while financial expertise had a negative relationship with sustainability disclosure, attributes such as independence, committee size, meeting frequency, and auditor type were positively associated with the extent of reporting. Similarly, Wahome et al. (2025), focusing on East African listed firms, established that audit committee attributes such as gender diversity, financial expertise, meeting frequency, and optimal size significantly strengthen sustainability disclosure by ensuring diversity of perspectives, accuracy, and enhanced oversight. Collectively, these studies underscore that strong and well-structured audit committees play a crucial role in improving the credibility, quality, and transparency of sustainability reporting.

4. Descriptive Statistics

Table 4.1 Descriptive Statistics of Variables

	SR	BS	FP	FS	ACP
Mean	4.558376	10.41624	0.094281	17.71866	61.55717
Median	5.000000	10.00000	0.047719	18.09898	60.00000
Maximum	8.000000	18.00000	6.174312	22.41941	90.00000
Minimum	1.000000	4.000000	-2.359536	10.95599	33.33333
Std. Dev.	1.585294	2.967398	0.541881	2.529488	10.99324
Skewness	0.039250	0.213896	7.437980	-0.690301	-0.098442
Kurtosis	2.534094	2.569112	87.99808	3.344243	3.076443
Jarque-Bera	1.832353	3.026162	61118.99	16.61831	0.366147
Probability	0.400046	0.220230	0.000000	0.000246	0.832707
Sum	898.0000	2052.000	18.57337	3490.575	12126.76
Sum Sq. Dev.	492.5787	1725.868	57.55254	1254.069	23686.87
Observations	197	197	197	197	197

Source: Author's computation with E-Views 10 (2025)

Table 4.1 presents the descriptive statistics for the five variables: Sustainability Reporting (SR), Board Size (BS), Firm Profitability (FP), Firm Size (FS), and Audit Committee Presence (ACP). The mean values were 4.56, 10.42, 0.09, 17.72, and 61.56 respectively, with corresponding medians of 5.00, 10.00, 0.05, 18.10, and 60.00. Maximum values were 8.00, 18.00, 6.17, 22.42, and 90.00, while minimum values stood at 1.00, 4.00, -2.36, 10.96, and 33.33. Standard deviations, reflecting variability, were 1.59 (SR), 2.97 (BS), 0.54 (FP), 2.53 (FS), and 10.99 (ACP).

The skewness results show SR, BS, and FP were positively skewed, while FS and ACP were negatively skewed. Kurtosis values ranged from 2.53 to 3.34, except for FP which was extremely high (87.99), indicating non-normality. The Jarque-Bera test confirmed normal distribution for SR, BS, and ACP ($p > 0.05$), while FP and FS showed deviations from normality. Overall, most variables exhibited normality, with 197 valid observations out of 200.

Pearson Correlation Matrix Analysis

Table 4.2

	SR	BS	FP	FS	ACP
SR	1.000000				
BS	0.110858	1.000000			
FP	-0.055847	-0.034766	1.000000		
FS	0.041523	0.312917	-0.129082	1.000000	
ACP	0.113743	-0.029434	0.027679	0.083670	1.000000

Source: Author's computation with E-Views 10 (2025)

Table 4.2 shows Pearson correlation matrix for the variables as contained in the analysis. The correlation coefficients show a relationship between firm characteristics on the nature and extent of sustainability reporting as contained in the analysis. The correlation coefficients showed a positive relationship between SR and (BS (0.110858), FS (0.041523)

and ACP (0.11374) while FP (-0.055847) has negative correlation. Hence, most of these results are in conformity with the hypotheses with regard to the relationship between the firm characteristics and extent of sustainability reporting as contained in the analysis. This implies a co-movement in same direction among the variables.

Unit Root Tests

The study employed the Augmented Dickey-Fuller (ADF) test to check for unit roots in the variables SR, BS, FP, FS, and ACP, given its effectiveness in addressing correlated errors. Table 4.3 presents the unit root test results at both levels and first differences for the variables.

Table 4.3: Summary of ADF Unit Root Test

Author's	Variable	(ADF) Statistics	At Level 5% critical value	Prob.	Stationarity Order
	SR	-5.653781	-2.875898	0.0000	I(0)
	BS	-5.040869	-2.876200	0.0000	I(0)
	FP	-6.860342	-2.877363	0.0000	I(0)
	FS	-3.398743	-2.876047	0.0121	I(0)
	ACP	-6.701477	-2.875972	0.0000	I(0)

Source:

computation with E-Views 10 (2025)

The Augmented Dickey-Fuller (ADF) test results in Table 4.3 show that all variables—sustainability reporting (SR), board size (BS), firm profitability (FP), firm size (FS), and audit committee presence (ACP)—are stationary at level, with respective statistics of -5.653781 (0.0000), -5.040869 (0.0000), -6.860342 (0.0000), -3.398743 (0.0121), and -6.701477 (0.0000). Since all probabilities are below 0.05, the variables are integrated of order zero, I(0). This validates the use of panel least squares regression for analysis and hypothesis testing. Accordingly, regression with 197 observations was employed to examine the relationships among the variables.

Estimation of Panel Least Square Results

Table 4.4: Estimation of Panel Least Square Results

Dependent Variable: SR

Method: Panel Least Squares

Date: 02/17/25 Time: 21:41

Sample: 2014 2023

Periods included: 10

Cross-sections included: 20

Total panel (unbalanced) observations: 197

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BS	0.054477	0.040112	1.358145	0.1760
FP	-0.139263	0.210180	-0.662590	0.5084
FS	0.007968	0.047589	0.167432	0.8672

ACP	-0.015933	0.010327	-1.542794	0.1245
C	4.843666	1.002973	4.829310	0.0000
R-squared	0.027058	Mean dependent var	4.558376	
Adjusted R-squared	0.006788	S.D. dependent var	1.585294	
S.E. of regression	1.579904	Akaike info criterion	3.777658	
Sum squared resid	479.2505	Schwarz criterion	3.860988	
Log likelihood	-367.0993	Hannan-Quinn criter.	3.811391	
F-statistic	1.334903	Durbin-Watson stat	0.484855	
Prob(F-statistic)	0.258438			

Source: Author's Computation, 2025.

The pooled OLS technique, though widely used, is restrictive because it assumes uniform regression coefficients across all cross-sectional observations and time periods. This approach ignores potential heterogeneity among firms and across time. Table 4.4 presents the panel least squares regression results examining the relationship between firm characteristics and sustainability reporting. The coefficient for board size (BS) was 0.05477 with a t-statistic of 1.3582 and a p-value of 0.1760, suggesting a positive but statistically insignificant effect on sustainability reporting. Similarly, firm profitability (FP), firm size (FS), and audit committee presence (ACP) showed coefficients of 0.05477, 0.007968, and -0.015933, with p-values of 0.5084, 0.8672, and 0.1245 respectively—indicating no significant effects. The model's R-squared value was 0.0271, meaning it explained only about 3% of the variation in sustainability reporting. A key limitation of the pooled OLS model is its failure to account for firm-level differences, as it treats all 20 firms in the study as identical. This lack of recognition of heterogeneity reduces the robustness of the findings. Therefore, to address these shortcomings, it was necessary to employ alternative models such as the fixed effects (LSDV) and random effects analyses, which better capture individual firm variations.

Fixed Effects Model

Table 4.5: Summary of Fixed and Random Effects Models Results

Fixed Effects Model					Random Effects Model				
Dependent Variable = EPS					Dependent Variable = DACC				
Variable	Coefficient	Std. Error	t-Statistic	Prob.	Variable	Coefficient	Std. Error	t-Statistic	Prob.
BS	0.0739	0.0180	4.1060	0.0000	BS	-0.0555	0.0447	-1.2422	0.2157
FP	-0.0269	0.1297	-0.2078	0.8356	FP	-0.0308	0.1295	-0.2383	0.8119
FS	0.2742	0.0466	5.8849	0.0000	FS	0.1325	0.0942	1.4067	0.1611
ACP	0.0015	0.0007	2.2855	0.0084	ACP	-0.0002	0.0075	-0.0269	0.9785
C	0.3765	2.7173	0.1386	0.8900	C	2.8019	1.7822	1.5721	0.1176
<i>R-Squared</i>					<i>R-Squared</i>				
15.56824					0.674242				
<i>F-Statistic</i>					0.000000				
<i>Prob(F-statistic)</i>					1.736687				
<i>Durbin-Watson stat</i>					0.0161				
					0.7890				
					0.5335				
					1.1877				

Source: Authors' computation (2025).

To ascertain the actual model from which conclusion is to be drawn, this study used the Hausman test which is meant to test the hypotheses that:

Table 4.6. Extract from the Hausman Test Result
Correlated Random Effects - Hausman Test
Test cross-section random effects

Test Summary	Chi-Sq.			
	Statistic	Chi-Sq.	d.f.	Prob.
Cross-section random	58.52161		4	0.0205

Source: Author's Computation, 2025.

Examining the Chi-square values of the cross- section random in Table 4.5.1, the probability values of the Chi-square statistics is 0.205. This probability is greater than 5%, this implies that, we accept the null hypothesis (H_0) and reject the alternative hypothesis (H_1). Consequently, we conclude that fixed effect model is appropriate to accept for analytical reason.

From results of Table 4.5.1, it is shown that (BS) exerts a positive effect on SR. Effect is statistically significant as revealed by probability of the t-Statistic of 4.106078 (0.0000) which is less than the 5% level of significance. FS and ACP also exert positive effects on SR. Effects are statistically significant as depicted by probability of the t-Statistic of 5.884901(0.0000), and 2.285501 (0.0084) respectively ($> 5\%$). FP exerts statistically insignificant negative effect on SR at probability of the t-Statistic of -0.207832 (0.8356) respectively ($> 5\%$). In its overall, the models are statistically significant as shown by the statistical significance of its F-statistic (0.00000).

5. Discussions of Findings

The study investigated the impact of firm characteristics on the nature and extent of sustainability reporting among Nigerian manufacturing firms. The results demonstrate that certain firm attributes significantly influence sustainability disclosure practices.

The first hypothesis tested whether board size affects sustainability reporting. Findings revealed a significant positive relationship, indicating that an increase in board size enhances the quality of sustainability reporting. This outcome aligns with prior studies (Krasodomska et al., 2024; Triwacanasingrum et al., 2024; Saha & Khan, 2024). However, the effect may also be shaped more by regulatory requirements such as SEC codes, NSE rules, or international frameworks like GRI, which compel firms to disclose regardless of board size. The second hypothesis examined the effect of firm profitability. Results showed an insignificant negative relationship, suggesting that higher profitability does not necessarily translate into better sustainability reporting. This finding contrasts with earlier research (Girón et al., 2020; Bully, 2019; Benjamin et al., 2017). The outcome may reflect the tendency of Nigerian firms to prioritize short-term profitability over long-term sustainability, viewing disclosure as an added cost with no immediate financial benefits. Weak enforcement of reporting standards may also explain this behavior. The third hypothesis assessed the influence of firm size, and the results showed a significant positive effect on sustainability reporting. Larger firms tend to

disclose more, consistent with prior studies (Zaman et al., 2023; Dutta & Basu, 2022; Lee & Lim, 2022). This may be attributed to greater visibility, stakeholder expectations, and regulatory scrutiny faced by bigger firms.

6. Conclusion and Recommendations

This study concludes that board size and firm size positively influence sustainability reporting among Nigerian manufacturing firms, while profitability has an insignificant negative effect. The findings emphasize that external regulatory frameworks and stakeholder pressures play a critical role in shaping disclosure practices, especially in contexts where enforcement is weak. It recommends that management should strengthen sustainability reporting in Nigeria, regulators must enhance compliance mechanisms.

References

1. Abeysekera, I., 2022. A framework for sustainability reporting. *Sustainability Accounting, Management and Policy Journal*, 13(6), pp.1386-1409.
2. Abu Khalaf, B., 2024. Impact of board characteristics on the adoption of sustainable reporting practices. *Cogent Business & Management*, 11(1), 2391563.
3. Adegbite, E., Amaeshi, K., Nakpodia, F., Ferry, L. and Yekini, K.C., 2020. Corporate social responsibility strategies in Nigeria: a tinged shareholder model. *Corporate Governance: the international journal of business in society*, 20(5), pp.797-820.
4. Amoako, K.O., Amoako, I.O., Tuffour, J. and Marfo, E.O., 2022. Formal and informal sustainability reporting: An insight from a mining company's subsidiary in Ghana. *Journal of Financial Reporting and Accounting*, 20(5), pp.897-925.
5. Antara, D.M.D.J., Putri, I.G.A.M.A.D., Ratnadi, N.M.D. and Wirawati, N.G.P., 2020. Effect of firm size, leverage, and environmental performance on sustainability reporting. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(1), pp.40-46.
6. Anyigbah, E., Kong, Y., Edziah, B.K., Ahoto, A.T. and Ahiaku, W.S., 2023. Board characteristics and corporate sustainability reporting: Evidence from Chinese listed companies. *Sustainability*, 15(4), 3553.
7. Asuquo, A.I., Dada, E.T. and Onyeogaziri, U.R., 2018. The effect of sustainability reporting on corporate performance of selected quoted brewery firms in Nigeria. *International Journal of Business & Law Research*, 6(3), pp.1-10.
8. Ayuba, S., Ndirmbitah, B.K. and Bashiru, M., 2024. Moderating effect of firm attributes on sustainability reporting quality of listed oil and gas companies in Nigeria. *International Journal of Intellectual Discourse*, 7(2), pp.256-272.
9. Bosi, M.K., Lajuni, N., Wellfren, A.C. and Lim, T.S., 2022. Sustainability reporting through environmental, social, and governance: A bibliometric review. *Sustainability*, 14(19), 12071.
10. Buallay, A., 2020. Sustainability reporting and firm's performance: Comparative study between manufacturing and banking sectors. *International Journal of Productivity and Performance Management*, 69(3), pp.431-445.
11. Cardoso, F.H. and Faletto, E., 2024. *Dependency and development in Latin America*. Univ of California Press.
12. Chowdhury, M.A.A., Dey, M. and Abedin, M.T., 2020. Firms' attributes and environmental disclosure: Evidence from listed firms in Bangladesh. *Asian Journal of Accounting Perspectives*, 13(2), pp.57-77.

13. DiMaggio, P.J. and Powell, W.W., 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 48(2), pp.147-160.
14. Dissanayake, D., Tilt, C. and Qian, W., 2019. Factors influencing sustainability reporting by Sri Lankan companies. *Pacific Accounting Review*, 31(1), pp.84-109.
15. Di Tullio, P., La Torre, M. and Rea, M., 2025. Sustainability reporting regulation: hypes, myths and reflections. *Management Decision*.
16. Diwe-Tochukwu, N.G. and Okafor, R.G., 2024. Sustainability reporting and profitability of listed oil and gas firms in Nigeria. *Journal of Global Accounting*, 10(2), pp.141-170.
17. Douye, O. and Gospel, J.C., 2023. Firm characteristics and social sustainability performance disclosures in Nigeria. *FUOYE Journal of Accounting and Management*, 6(1), pp.1-12.
18. Dowling, J. and Pfeffer, J., 1975. Organizational legitimacy: Social values and organizational behavior. *Pacific Sociological Review*, 18(1), pp.122-136.
19. Durrani, N., Raziq, A., Mahmood, T. and Khan, M.R., 2024. Barriers to adaptation of environmental sustainability in SMEs: A qualitative study. *Plos one*, 19(5), e0298580.
20. Fadilah, F., Uzliawati, L. and Mulyasari, W., 2022. The effect of firm size and firm age on sustainability reporting and the impact on earnings management. *Jurnal Riset Akuntansi Terpadu*, 15(1), pp.84-99.
21. Fasua, H.K. and Osifo, O.I.U., 2020. Environmental accounting and corporate performance. *International Journal of Academic Research in Business and Social Sciences*, 10(9), pp.142-154.
22. Friske, W., Hoelscher, S.A. and Nikolov, A.N., 2023. The impact of voluntary sustainability reporting on firm value: Insights from signaling theory. *Journal of the Academy of Marketing Science*, 51(2), pp.372-392.
23. Girón, A., Kazemikhasragh, A., Cicchiello, A.F. and Panetti, E., 2021. Sustainability reporting and firms' economic performance: Evidence from Asia and Africa. *Journal of the Knowledge Economy*, 12(4), pp.1741-1759.
24. Githaiga, P.N. and Kosgei, J.K., 2023. Board characteristics and sustainability reporting: a case of listed firms in East Africa. *Corporate Governance: The international journal of business in society*, 23(1), pp.3-17.
25. Govindan, K., Kaliyan, M., Kannan, D. and Haq, A.N., 2025. Social sustainability. *Sustainable Supply Chain Management*, 17(8), pp.455-466.
26. Ibrahim, M., Auwal, B.M., Balarabe, A.S. and Isa, I.A., 2024. Sustainability reporting frameworks a comparative analysis of reporting standards and their Implications for accounting and reporting. *International Journal of Accounting, Finance and Administrative Research*, 1(2), pp.32-47.
27. Islam, M.J., 2020. Sustainability reporting of banking companies in Bangladesh: a study on environmental aspect. *Canadian Journal of Business and Information Studies*, 2(2), pp.35-44.
28. Katselidis, I., 2023. Strategies fostering equity and social justice in the labor market: A brief review. *Encyclopedia of Diversity, Equity, Inclusion and Spirituality*, pp.1-4.
29. Komal, B., Bilal, Ye, C. and Salem, R., 2022. The impact of audit committee effectiveness on firms' outcomes in China: A systematic review. *International Journal of Accounting & Information Management*, 30(5), pp.583-599.

30. Kumo, U.A., Hamid, F.Z.A. and Sahdan, M.H., 2023. The role of environmental policy in influencing governance and sustainability practices among Nigerian quoted companies: A proposed framework. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 8(7), 79.
31. Krasodomska, J., Zarzycka, E., Street, D.L. and Grabowski, W., 2025. The impact of companies' trust-building efforts on sustainability reporting assurance quality: insights from Europe. *Meditari Accountancy Research*, 33(7), pp.246-279.
32. Lewa, E.M., Gatimbu, K.K. and Kariuki, P.W.O., 2025. Sustainability reporting in sub-Saharan Africa: Does audit committee diversity and executive compensation matter?. *Social Sciences & Humanities Open*, 11, 101262.
33. Lewa, E.M., Gatimbu, K.K. and Kariuki, P.W.O., 2024. Board attributes and sustainability reporting of selected listed nonfinancial firms in anglophone Sub-Saharan African countries: A multinomial logistic regression. *Helijon*, 10(9), pp.1-12.
34. Ligorio, L., Caputo, F. and Venturelli, A., 2025. Sustainability reporting in public-private hybrid organisations: a structured literature review. *Journal of Applied Accounting Research*, 26(2), pp.362-389.
35. Luo, L. and Tang, Q., 2023. The real effects of ESG reporting and GRI standards on carbon mitigation: International evidence. *Business Strategy and the Environment*, 32(6), pp.2985-3000.
36. Maroun, W. and Cerbone, D., 2024. *Corporate Governance in South Africa* (Vol. 2). Walter de Gruyter GmbH & Co KG.
37. Meyer, J.W. and Rowan, B., 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American journal of sociology*, 83(2), pp.340-363.
38. Mohammed, I., Gugong, B.K., Adedokun, R., Olorunloga, A.A. and Tagwai, M.G., 2024. Board attributes and sustainability reporting of listed firms in Nigeria. *Gusau Journal of Accounting and Finance*, 5(1), pp.312-331.
39. Meutia, I., Yaacob, Z. and Kartasari, S.F., 2023. Sustainability reporting and audit committee attributes: evidence from banks in Indonesia. *Asian Academy of Management Journal*, 28(2), pp.1-15.
40. Ng, A.W., Leung, T.C.H., Yu, T.W., Cho, C.H. and Wut, T.M., 2023. Disparities in ESG reporting by emerging Chinese enterprises: evidence from a global financial center. *Sustainability Accounting, Management and Policy Journal*, 14(2), pp.343-368.
41. Ogunbukola, M., 2024. Sustainable business practices and profitability: balancing environmental responsibility with financial performance. *ResearchGate*.
42. Okoye, A., Idowu, A., Ogundare, T., Sowunmi, O., Ezenwa, C. and Edem, G., 2025. Examining environmental, social, and governance practices in Nigeria. *Amicus Curiae*, 6(3), pp.805-830.
43. Olaleye, A.G. and Igbekoyi, O.E., 2020. Stakeholders 'expectations and environmental accounting practices of listed manufacturing firms in Nigeria. *African Journal of Science Policy and Innovation Management*, 1(1), pp.131-144.
44. Oncioiu, I., Petrescu, A.G., Bîlcă, F.R., Petrescu, M., Popescu, D.M. and Anghel, E., 2020. Corporate sustainability reporting and financial performance. *Sustainability*, 12(10), 4297.

45. Osifo, U.I.O. and Fasua, H.K., 2017. Social and environmental disclosure and holistic growth in the Positive Accounting Theory (PAT) View. *IOSR Journal of Business and Management*, 19(6), pp.1-8.
46. Saha, A.K. and Khan, I., 2024. Sustainable prosperity: Unraveling the Nordic nexus of ESG, financial performance, and corporate governance. *European business review*, 36(6), pp.793-815.
47. Salehi, M., Ammar Ajel, R. and Zimon, G., 2023. The relationship between corporate governance and financial reporting transparency. *Journal of Financial Reporting and Accounting*, 21(5), pp.1049-1072.
48. Shaba, Y., 2024. Corporate governance in Nigeria: evolution, regulatory frameworks and challenges. *Asian Journal of Economics, Business and Accounting*, 24(10), pp.10-9734.
49. Suhatmi, E.C., Dasman, S., Badarisman, D., Nahar, A. and Jaya, A.A.N.A., 2024. Sustainability reporting and its influence on corporate financial performance: a global analysis. *The Journal of Academic Science*, 1(6), pp.715-724.
50. Valcozzena, S., Riso, V. and Cantele, S., 2025. Managing firm sustainability planning process: insights on strategic integration complexity. *Management Decision*.
51. Velte, P., 2025. Female chief financial officers (CFOs) and environmental decoupling. The moderating impact of sustainability board committees. *Corporate Social Responsibility and Environmental Management*, 32(1), pp.1147-1160.
52. Wahome, E.C.M., Rono, L. and Yego, J., 2025. Audit committee characteristics and corporate sustainability disclosure among listed firms in east Africa community member states. *European Journal of Business and Management*, 17(3), pp.111- 120.
53. Whetman, L.L., 2018. The impact of sustainability reporting on firm profitability. *Undergraduate Economic Review*, 14(1), 4.
54. Xu, H., Fu, Y., Li, Y., Zhang, G. and Bi, S., 2024. Environmental information disclosure and green transformation: Evidence from Chinese manufacturing enterprises. *Heliyon*, 10(19), pp.1-15.
55. Zaman, R., Farooq, M.B., Khalid, F. and Mahmood, Z., 2021. Examining the extent of and determinants for sustainability assurance quality: The role of audit committees. *Business Strategy and the Environment*, 30(7), pp.2887-2906.
56. Zik-Rullahi, A.A. and Jide, I., 2023. Green accounting: A fundamental pillar of corporate sustainability reporting. *Journal of Accounting and Financial Management*, 9(8), pp.59-72.