EFFECT OF FOREIGN OWNERSHIP ON THE RELATIONSHIP BETWEEN SUSTAINABILITY DISCLOSURE AND THE FIRM FINANCIAL PERFORMANCE OF QUOTED CONSUMER GOODS COMPANIES IN NIGERIA

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Abstract
The increasing emphasis on sustainability reporting has heightened the need for firms to demonstrate their environmental and social responsibilities, yet evidence on its financial consequences remains inconclusive, particularly among quoted consumer goods companies in Nigeria. This study examined the moderating effect of foreign ownership on the relationship between sustainability disclosure and financial performance of quoted consumer goods companies in Nigeria. An ex post facto design was adopted using secondary data from the audited annual reports and accounts of 18 companies listed on the Nigerian Exchange Group (NGX) over 2013-2022. Environmental and social disclosure were used as measures of sustainability disclosure, while Return on Assets (ROA) and Earnings per Share (EPS) represented complementary accounting-based measures of financial performance. Data were analysed using descriptive statistics, correlation analysis, variance inflation factor, panel diagnostic tests, and fixed- and random-effects regressions. The findings revealed that environmental and social disclosure had negative but insignificant effects on both ROA and EPS. Foreign ownership had a significant negative direct effect on ROA but an insignificant effect on EPS, while its moderating effect on the sustainability disclosure performance relationship was insignificant for both measures. The study contributes evidence on the contingent role of foreign ownership in the sustainability disclosure financial performance nexus among Nigerian consumer goods companies. It recommends improved quality and strategic relevance of sustainability disclosures and stronger regulatory enforcement to enhance their transparency, credibility and value relevance.

Keywords: Consumer goods companies, earnings per share, environmental disclosure, financial performance, foreign ownership, Nigeria, return on assets, social disclosure, sustainability disclosure.

1.0 Introduction

Sustainability reporting has become an important component of corporate reporting as concerns over climate change, environmental degradation and social inequality have intensified. The development of sustainability reporting frameworks by the International Federation of Accountants (IFAC) and the Global Reporting Initiative (GRI) has encouraged firms to communicate information on their environmental and social responsibilities to enhance

transparency, accountability and long-term value creation (Yan et al., 2022). Stakeholders increasingly expect firms to report not only financial outcomes but also the environmental and social consequences of their operations (Abd-Mutalib & Shafai, 2023; Jamil et al., 2021). Such disclosure may reduce information asymmetry, strengthen stakeholder confidence and support sustainable business performance (Du & Zhang, 2020; Joshua Rayan, 2020). However, its financial consequences remain inconclusive. While sustainability disclosure may enhance reputation, stakeholder relationships, access to capital and long-term value, the associated implementation and compliance costs may adversely affect profitability (Omaliko et al., 2020). This tension makes the sustainability disclosure financial performance relationship an important empirical issue, particularly in emerging economies.

The issue is particularly relevant in Nigeria, where sustainability reporting remains relatively limited and regulatory requirements continue to evolve. Studies report average sustainability disclosure levels of 60%, 46% and 42% in China, BRICS countries and Jordan, respectively (Agyemang et al., 2020; Garcia et al., 2017; Rabi, 2019), whereas sustainability reporting among Nigerian non-financial firms remains comparatively low (Ajepeet al., 2021). The voluntary nature of sustainability reporting and uncertainty regarding its economic benefits may partly explain this situation (Hu et al., 2020). This uncertainty is particularly important for consumer goods companies because their operations have substantial environmental and social implications through resource consumption, waste generation, employee welfare, product responsibility and relationships with communities. Nevertheless, the financial consequences of sustainability disclosure among quoted consumer goods companies in Nigeria remain insufficiently established.

Existing empirical evidence further indicates that the sustainability disclosure–financial performance relationship is not settled. Although several studies report positive effects, others find negative or insignificant relationships (Albitar et al., 2020; Hongming et al., 2020). Positive effects may arise through improved reputation, stakeholder relationships, transparency, risk management and resource efficiency, whereas negative effects may reflect the costs of sustainability initiatives or the disclosure of environmental and social risks. Insignificant effects may occur where disclosure is of low quality, largely symbolic or insufficiently valued by stakeholders. Thus, the inconsistent findings suggest that sustainability disclosure may not have a uniform financial effect and that firm-specific characteristics may condition the relationship.

The evidence is also affected by differences in industry and measurement. Much of the Nigerian literature has examined sustainability reporting in aggregate or concentrated on banking and oil and gas firms (Erhirhie & Ekwueme, 2019; Okolie & Igaga, 2020). Such concentration limits generalisation to consumer goods companies whose environmental and social exposures differ from those of financial and extractive firms. Moreover, sustainability reporting is frequently discussed as a broad ESG construct, although environmental, social and governance information may have different theoretical and financial implications. Accordingly, this study defines sustainability disclosure specifically as environmental and social disclosure, consistent with the dimensions measured in the study. Environmental disclosure captures information concerning emissions, resource use, waste, pollution and environmental risks, while social disclosure covers employee welfare, health and safety, labour practices, human rights and community relations. This specification provides conceptual consistency between the definition and measurement of sustainability disclosure and deliberately excludes governance disclosure from the construct.

Another important issue concerns the role of ownership structure, particularly foreign ownership. Foreign investors may differ from domestic investors in their information requirements, monitoring intensity and exposure to international sustainability expectations. They may encourage greater transparency and sustainability-oriented practices, particularly where they originate from environments with stronger sustainability standards (Agyemang et al., 2020; Abd-Mutalib & Shafai, 2023). Foreign ownership may also provide managerial expertise, technological knowledge, international market access and governance capabilities that can influence corporate outcomes.

However, the relevance of foreign ownership to this study is not simply whether it directly improves firm performance. A direct-effect argument would suggest that foreign ownership independently affects performance through capital, expertise, technology or governance. The present study addresses a different question: whether foreign ownership changes the extent to which sustainability disclosure is associated with financial performance. Foreign shareholders may strengthen this relationship by demanding more credible disclosure, improving monitoring and increasing the value attached to environmental and social information. Conversely, if foreign investors prioritise short-term financial returns or sustainability investments impose substantial costs, foreign ownership may weaken the relationship. Foreign ownership is therefore conceptualised as a moderating condition, rather than merely an independent determinant of performance.

This distinction is supported by the mixed empirical evidence. Abd-Mutalib and Shafai (2023) found that institutional ownership negatively moderated the sustainability disclosure firm performance relationship in Malaysia, suggesting that ownership does not necessarily strengthen the financial benefits of sustainability disclosure. Conversely, evidence from Korea and China indicates that foreign ownership can strengthen the relationship between ESG practices and firm value or ROA. Nigerian evidence also shows that foreign ownership is positively associated with environmental disclosure (Ownership Structure and Environmental Disclosure among Nigerian Listed Firms, 2024). However, evidence that foreign ownership influences disclosure does not establish that it moderates the financial consequences of disclosure. The latter requires testing whether the interaction between sustainability disclosure and foreign ownership significantly changes financial performance.

The financial performance measures employed in this study are Return on Assets (ROA) and Earnings per Share (EPS), both of which are accounting-based measures but capture complementary aspects of performance. ROA reflects the efficiency with which management uses the firm's asset base to generate earnings, while EPS captures earnings attributable to ordinary shareholders. Using both measures permit assessment of whether sustainability disclosure is associated with internal resource-use efficiency and shareholder-oriented earnings performance. This is particularly relevant because sustainability activities may affect operating efficiency and profitability differently from earnings attributable to individual shares. The use of ROA and EPS is also consistent with prior empirical research examining environmental and sustainability disclosure and financial performance (Emeka-Nwokeji & Okeke, 2019; Olatunde et al., 2021).

The foregoing issues reveal an important empirical gap. First, evidence on the sustainability disclosure–financial performance relationship remains inconsistent, indicating the need to examine factors that may explain variations in the relationship. Second, previous studies often

use sustainability disclosure as a broad ESG construct despite measuring only selected dimensions, creating conceptual inconsistency. This study addresses this problem by explicitly restricting sustainability disclosure to environmental and social disclosure. Third, Nigerian studies have largely examined foreign ownership as a determinant of disclosure or financial performance rather than as a condition that may alter the financial consequences of sustainability disclosure. Consequently, it remains unclear whether differences in foreign ownership help explain the inconsistent relationship between sustainability disclosure and financial performance among quoted consumer goods companies in Nigeria.

The need for this investigation is reinforced by Nigeria's increasing regulatory emphasis on sustainability reporting. The growing importance of sustainability disclosure standards and the Securities and Exchange Commission (SEC) sustainable finance guidelines demonstrates the increasing institutional relevance of sustainability reporting in the Nigerian capital market (Templars Law, 2023; SEC, 2021). Understanding whether foreign ownership changes the financial relevance of sustainability disclosure is therefore important to managers, investors, regulators and other stakeholders.

Against this background, this study examines the moderating effect of foreign ownership on the relationship between sustainability disclosure and financial performance of quoted consumer goods companies in Nigeria. Sustainability disclosure is measured through environmental and social disclosure, while financial performance is assessed using ROA and EPS. The study therefore moves beyond examining whether sustainability disclosure independently affects performance to determine whether foreign ownership changes the strength of that relationship.Specifically, the study addresses the following research questions:

(i) What is the moderating effect of foreign ownership on the relationship between sustainability disclosure and Return on Assets of quoted consumer goods companies in Nigeria?
(ii) What is the moderating effect of foreign ownership on the relationship between sustainability disclosure and Earnings per Share of quoted consumer goods companies in Nigeria?

Given the above, the study tests the following null hypotheses:
H_{01}: There is no significant moderating effect of foreign ownership on the relationship between sustainability disclosure and Return on Assets of quoted consumer goods companies in Nigeria.
H_{02}: There is no significant moderating effect of foreign ownership on the relationship between sustainability disclosure and Earnings per Share of quoted consumer goods companies in Nigeria.
The next section reviews the relevant literature and theoretical foundation, followed by the methodology. The subsequent section presents and discusses the empirical findings, while the final section concludes the study and provides relevant recommendations.

2.0 Literature Review

Firm performance reflects the extent to which a firm efficiently deploys its resources to achieve financial objectives and create shareholder value (Abubakar, 2018; Dioha et al., 2018; Joshua et al., 2019). Because performance is multidimensional, prior studies have used accounting- and market-based measures, including Return on Assets (ROA), Return on Equity (ROE), Earnings per Share (EPS), and Tobin's Q (Chandrakumarmangalam & Govindasamy, 2010; Osuji & Odita, 2012; Uwuigbe & Uadiale, 2012). This study uses ROA and EPS as complementary accounting-based measures. ROA captures management's efficiency in generating earnings from corporate assets (Atidhira & Yustina, 2017; Heikal et al., 2014), while EPS reflects earnings attributable to

each ordinary share and therefore provides a shareholder-oriented measure of earnings performance (Badruzaman, 2020; Bhatt & Sumangala, 2012; Umar & Musa, 2014).

Sustainability disclosure refers to information communicated by firms concerning their environmental and social impacts and responses to stakeholder expectations. Although the Triple Bottom Line framework recognises economic, environmental and social dimensions of sustainability (Elkington, 1997), this study does not conceptualise sustainability disclosure as the broader ESG construct. It is specifically restricted to environmental and social disclosure, consistent with its operationalisation; governance disclosure is therefore outside the scope of the construct. Environmental disclosure covers information on emissions, energy and water consumption, waste management, environmental compliance, pollution control, environmental risks and environmental protection (Uwuigbe et al., 2018). Social disclosure encompasses employee training and development, occupational health and safety, diversity and equal opportunity, labour practices, employee welfare, human rights and community development (Merkl-Davies & Brennan, 2017; Du, 2020).

Environmental and social disclosure may influence financial performance through greater transparency, reduced information asymmetry, stronger stakeholder relationships, enhanced reputation and improved management of environmental and social risks. However, sustainability initiatives may require substantial resources, while disclosure may reveal environmental liabilities, social weaknesses or other risks. Investors may also perceive sustainability expenditure as costly when financial benefits are uncertain or delayed. The sustainability disclosure financial performance relationship is therefore theoretically ambiguous rather than uniformly positive.

Foreign ownership may condition this relationship. It refers to the proportion of a firm's equity held by investors domiciled outside the country in which the firm operates, including foreign institutional investors, multinational corporations and individual foreign investors. Foreign shareholders may directly affect firm performance through capital, managerial expertise, technology, international market access and governance capabilities. However, this potential direct effect is conceptually distinct from the moderating role examined in this study.

The moderation argument concerns whether the financial consequences of sustainability disclosure vary with the level of foreign ownership. Foreign investors may be more exposed to international sustainability standards and responsible investment practices and may therefore demand greater transparency (Agyemang et al., 2020). Geographical distance and institutional differences may also increase their need for credible corporate information. Where foreign shareholders exercise effective monitoring, environmental and social disclosure may become more credible and informative, strengthening its potential effects on stakeholder confidence, reputation, risk management and financial performance. Conversely, foreign investors may prioritise short-term returns and regard sustainability expenditure as costly, thereby weakening the relationship. Foreign ownership may therefore strengthen, weaken or have no significant moderating effect.

This distinction is fundamental to the study. Evidence that foreign ownership independently affects firm performance establishes a direct ownership performance relationship, but does not establish moderation. Likewise, evidence that foreign ownership increases sustainability disclosure establishes an ownership–disclosure relationship, but does not demonstrate that foreign ownership changes the financial consequences of disclosure. Moderation exists only

where the relationship between sustainability disclosure and financial performance varies significantly with the level of foreign ownership. Accordingly, this study examines whether foreign ownership changes the strength or direction of the relationship between environmental and social sustainability disclosure and financial performance, measured by ROA and EPS.

Theoretical Review

The study is primarily anchored on Stakeholder Theory, while Agency Theory provides the supporting mechanism for explaining how foreign ownership may moderate the sustainability disclosure financial performance relationship.

Stakeholder Theory, developed by Freeman (1984), holds that firms have responsibilities to groups that affect or are affected by their activities. Stakeholders require information to evaluate corporate conduct and its consequences (Deegan, 2000; Guthrie et al., 2004). Environmental and social disclosure enables firms to demonstrate responsiveness to stakeholder expectations regarding environmental impacts, employee welfare, community relations and social responsibilities. Effective stakeholder engagement may strengthen corporate reputation, stakeholder relationships, access to resources and reduce stakeholder conflict, thereby improving financial performance. The theory therefore explains both the relevance of sustainability disclosure to firm performance and why foreign investors, as influential stakeholders, may place greater importance on such information.

Agency Theory, developed by Jensen and Meckling (1976), explains conflicts arising from the separation of ownership and managerial control and the resulting information asymmetry. Sustainability disclosure can reduce this asymmetry by providing external shareholders with information about environmental and social activities that may otherwise be difficult to observe. Agency Theory therefore provides the mechanism linking foreign ownership to the disclosure–performance relationship. Foreign shareholders may face greater monitoring difficulties because of geographical distance and institutional differences and may consequently demand more transparent and credible disclosure. Effective monitoring can constrain managerial opportunism and enhance the credibility and usefulness of sustainability information, potentially strengthening its financial effects. Conversely, foreign investors focused primarily on short-term returns may weaken the benefits associated with sustainability activities.

Accordingly, Stakeholder Theory provides the principal theoretical foundation, explaining why environmental and social disclosure may generate financial consequences, while Agency Theory provides the supporting mechanism through which foreign ownership may strengthen or weaken those consequences. This theoretical integration supports the study's proposition that foreign ownership is a moderator, rather than merely a direct determinant of firm performance.

Empirical Review

Empirical evidence on sustainability disclosure and firm performance is mixed. In Nigeria, Emeka-Nwokeji and Okeke (2019) found that aggregate environmental disclosure significantly improved the performance of listed non-financial firms. Olatunde et al. (2021) similarly reported positive relationships between environmental accounting and ROCE, NPM, ROE and ROA, while Bassey et al. (2021) found that environmental expenditures significantly affected profitability among selected oil and gas firms. Oti et al. (2021) also reported significant relationships involving employee welfare and safety, waste management, community development and financial outcomes. International evidence is consistent with these findings:

Makori and Jagongo (2021) found a positive relationship between environmental accounting and profitability among firms listed on the Bombay Stock Exchange, while Khan et al. (2020), using 404 Pakistani firms, found that green practices significantly enhanced corporate reputation and organisational performance.

These positive findings suggest that sustainability practices and disclosure can generate financial benefits through reputation, stakeholder relationships, transparency and risk management. However, the evidence is not consistently positive. Umoren et al. (2018) found no significant relationship between environmental reporting and ROCE, NPM, EPS and DPS among firms in Nigeria's oil industry. Indriastuti and Chariri (2021) reported that carbon performance positively affected financial performance whereas environmental performance had a negative effect. Oraka (2021) also found that environmental costs and remediation expenditures significantly affected Tobin's Q. Al-Waeli et al. (2021) reported that positive relationships between environmental disclosure and financial performance were more prevalent than negative relationships among Iraqi industrial firms, although substantial negative outcomes remained.

The conflicting evidence indicates that sustainability disclosure does not automatically translate into superior financial performance. Positive effects may arise where disclosure improves information transparency, reputation, stakeholder confidence and risk management, whereas negative effects may occur when sustainability initiatives impose substantial costs or disclosure reveals adverse environmental and social risks. Insignificant findings may reflect weak disclosure quality, limited stakeholder responsiveness or situations in which investors attach little economic value to the information disclosed. These inconsistencies suggest that the sustainability disclosure performance relationship may depend on factors that condition how disclosure is produced, monitored and interpreted.

Ownership structure provides one potential explanation for this variation. Abd-Mutalib and Shafai (2023) found that institutional ownership negatively moderated the relationship between sustainability disclosure and firm performance in Malaysia. This finding is important because it demonstrates that ownership characteristics can alter the consequences of sustainability disclosure rather than merely affect firm performance independently.

Evidence concerning foreign ownership is also mixed but increasingly supports a conditional relationship. Recent studies of Korean and Chinese firms reported that foreign ownership strengthened the relationship between ESG practices and firm value or ROA. Nigerian evidence has similarly shown that foreign ownership can enhance environmental and social disclosure. However, evidence that foreign ownership increases disclosure establishes an ownership disclosure relationship, not necessarily a moderating effect on financial performance. More recent evidence from Nigerian manufacturing firms found that the interaction between environmental reporting and foreign ownership significantly enhanced Tobin's Q, whereas the interaction involving social reporting produced less consistent results across performance measures. These findings suggest that the effect of foreign ownership may vary according to the sustainability dimension and performance indicator considered.

The literature consequently supports the need to distinguish between environmental and social disclosure rather than treating sustainability reporting as an undifferentiated ESG construct. It also indicates that foreign ownership may operate as a boundary condition through which the financial consequences of sustainability disclosure vary. Nevertheless, existing evidence does not

fully explain whether foreign ownership changes the relationship between environmental and social sustainability disclosure and accounting-based firm performance measured by ROA and EPS, particularly among listed firms in Nigeria.

Three gaps emerge from the literature. First, empirical findings on sustainability disclosure and firm performance remain inconsistent. While positive evidence highlights reputation, stakeholder relationships, transparency and risk-management benefits, negative and insignificant findings demonstrate that sustainability disclosure may also involve costs, reveal risks or have limited economic relevance. This inconsistency provides a basis for investigating factors that condition the relationship.

Second, much of the literature employs sustainability reporting or ESG disclosure as a broad construct while measuring only selected dimensions. Such treatment creates conceptual inconsistency because environmental, social and governance information may have different stakeholder and economic implications. The present study addresses this problem by explicitly defining sustainability disclosure as environmental and social disclosure, with governance disclosure excluded from the construct.

Third, although recent studies have examined foreign ownership in relation to sustainability disclosure and firm value, important empirical and theoretical questions remain regarding its moderating role in the relationship between environmental and social sustainability disclosure and accounting-based firm performance. Evidence that foreign ownership affects performance directly, or increases sustainability disclosure, does not establish that it changes the financial consequences of disclosure. The present study therefore focuses specifically on whether the interaction between foreign ownership and environmental and social sustainability disclosure significantly alters ROA and EPS.

The theoretical argument follows a clear hierarchy. Stakeholder Theory constitutes the principal theoretical foundation, explaining why environmental and social disclosure can influence stakeholder relationships and, ultimately, financial performance. Agency Theory provides the supporting mechanism, explaining how foreign ownership may strengthen monitoring, reduce information asymmetry and enhance the credibility and usefulness of sustainability disclosure. Accordingly, the study does not assume that foreign ownership necessarily improves firm performance directly. Rather, it proposes that foreign ownership may strengthen or weaken the extent to which environmental and social sustainability disclosure translates into financial performance. This distinction provides the theoretical and empirical basis for the study's hypotheses.

Conceptual Framework

The conceptual framework for this study is presented in Figure 1, illustrating the relationship between the independent variables (environmental and social sustainability disclosure), the dependent variables (ROA and EPS), and the moderating variable (foreign ownership).

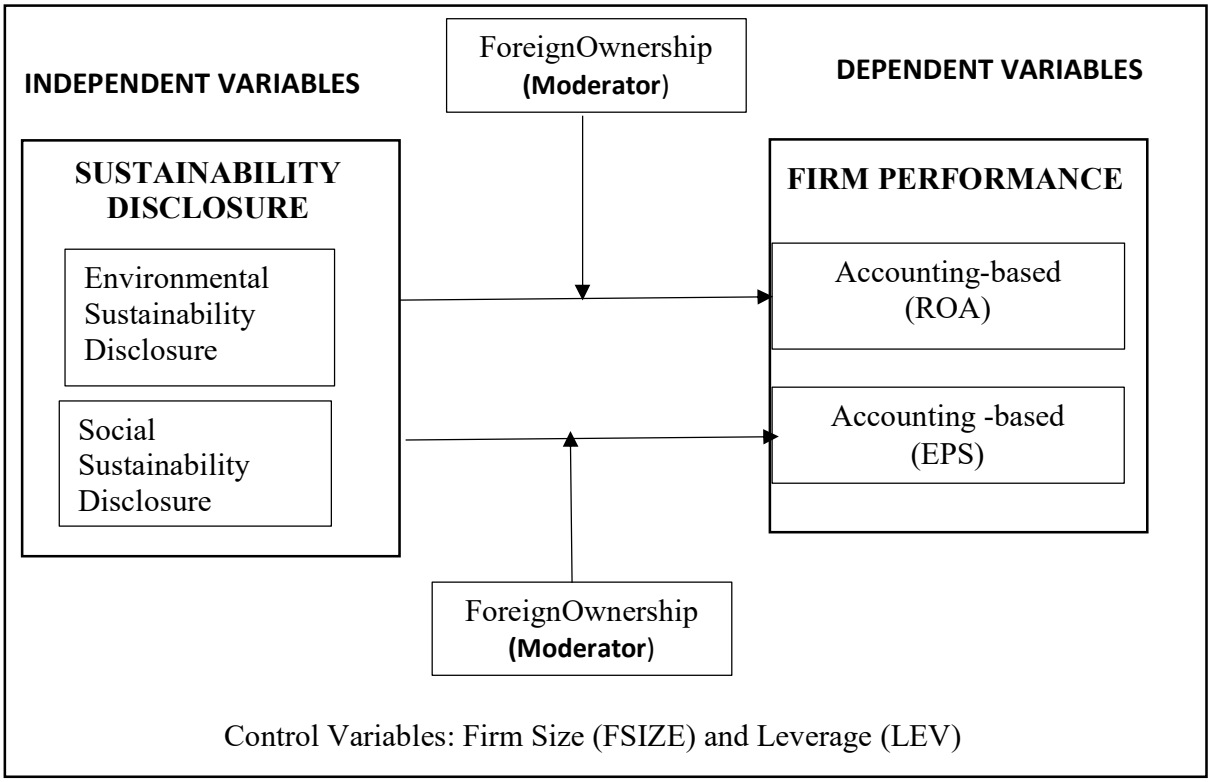


Figure 2.1: Conceptual Framework
Source*:* Author's Compilation, 2026.

The framework posits that sustainability disclosure (environmental and social) directly influences firm performance (ROA and EPS). However, this relationship is moderated by foreign ownership, which may strengthen or weaken the effect of sustainability disclosure on performance outcomes. Control variables firm size and leverage are included to isolate the net effect of the primary variables.

3.0 Methodology

The study adopts an ex post facto research design based on secondary data obtained from the audited annual reports and financial statements of quoted consumer goods companies in Nigeria. The design is appropriate because the corporate activities and characteristics examined have already occurred and cannot be manipulated by the researcher.

The population comprises twenty-one (21) consumer goods companies quoted on the Nigerian Exchange Group (NGX) as of December 31, 2022 (NGX, 2023). A census approach was initially adopted; however, firms were required to have been continuously quoted throughout the study period (2013-2022) and to have complete information necessary for measuring the study variables. Based on these criteria, three companies were excluded because of listing and data-availability limitations, resulting in a final sample of eighteen (18) consumer goods companies and 180 balanced firm-year observations.

Data were obtained from the audited annual reports and financial statements of the sampled companies for the period 2013-2022. The reports provided the information required to construct

the sustainability disclosure index, determine foreign ownership, measure firm performance and obtain the control variables.

The analysis begins with descriptive statistics and Pearson correlation analysis. Diagnostic tests are conducted for multicollinearity using the variance inflation factor (VIF), heteroskedasticity using the Breusch-Pagan/Cook-Weisberg test, and panel-model specification using the Hausman test with STATA. The appropriate panel estimation technique is selected based on the results of the specification tests.

Model Specification

The study specifies four panel regression models to examine the direct and moderating relationships between sustainability disclosure, foreign ownership and firm performance. Models 1 and 2 examine ROA, while Models 3 and 4 examine EPS. The first model for each performance measure estimates the relationship between sustainability disclosure and financial performance while controlling for foreign ownership and other firm characteristics. The corresponding moderation model introduces the interaction between sustainability disclosure and foreign ownership.

The functional relationship is stated as:

$Y_1 = f$(social and environmental disclosures) ……. (1)

Where: Y_1 represents the dependent variable of firm performance proxied using the measures of return on assets (ROA) and earnings per share (EPS). Sustainability disclosure is the independent variable and is measured using two of its aspects: environmental and social sustainability disclosures.

The equation (1) is rewritten in econometric form with the inclusion of the two control variables and the moderating variable, as shown below:

Model 1: Sustainability Disclosure and Return on Assets

The baseline model for ROA is specified as:

$$ROA_{it} = \beta_0 + \beta_1 ENVD_{it} + \beta_2 SOCD_{it} + \beta_3 FOWN_{it} + \beta_4 FSIZE_{it} + \beta_5 LEV_{it} + \epsilon_{it} \text{..(1)}$$

To test the moderating effect of foreign ownership on the relationship between sustainability disclosure and ROA, the interaction term between sustainability disclosure and foreign ownership is introduced:

$$ROA_{it} = \beta_0 + \beta_1 ENVD_{it} + \beta_2 SOCD_{it} + \beta_3 FOWN_{it} + \beta_4 (ENVD \times FOWN)_{it} + \beta_5 (SOCD \times FOWN)_{it} + \beta_6 FSIZE_{it} + \beta_7 LEV_{it} + \epsilon_{it} \text{..... (2)}$$

Model 2: Sustainability Disclosure and Earnings Per Share

The baseline model for EPS is specified as:

$$EPS_{it} = \beta_0 + \beta_1 ENVD_{it} + \beta_2 SOCD_{it} + \beta_3 FOWN_{it} + \beta_4 FSIZE_{it} + \beta_5 LEV_{it} + \epsilon_{it} \text{... (3)}$$

To test the moderating effect of foreign ownership on the relationship between sustainability disclosure and EPS, the interaction term is introduced:

$$EPS_{it} = \beta_0 + \beta_1 ENVD_{it} + \beta_2 SOCD_{it} + \beta_3 FOWN_{it} + \beta_4 (ENVD \times FOWN)_{it} + \beta_5 (SOCD \times FOWN)_{it} + \beta_6 FSIZE_{it} + \beta_7 LEV_{it} + \epsilon_{it} \text{..... (4)}$$

Where: ROA= Return on equity (Dependent variable); EPS = Earnings per share (Dependent variable); ENVD = Environmental Sustainability disclosure; SOCD = CSR Reporting; FOWN = Foreign ownership; ENVD*FOWN = Interaction term of environmental disclosures and foreign ownership; SOCD*FOWM = Interaction term of social disclosures and foreign ownership; FSIZE = firm size; LEV = Leverage; β_0 = Model intercept; β_2…... β_3= Coefficient to be

estimated, where β_1…..... $\beta_7 > 0$; *it* = Cross Section of listed companies with time variant; and μ= stochastic error term**.**

Moderation is tested by introducing the interaction term between sustainability disclosure and foreign ownership into the respective performance models. The interaction term is calculated as the product of the sustainability disclosure and foreign ownership (ENVD*FOWN, SOCD*FOWM). The main effects of sustainability disclosure and foreign ownership are retained in the models to distinguish their independent associations with financial performance from the conditional effect represented by the interaction.

The interaction coefficient represents the extent to which the relationship between sustainability disclosure and financial performance changes as foreign ownership varies. Thus, a significant interaction coefficient provides evidence that foreign ownership changes the strength or direction of the sustainability disclosure performance relationship.

For H01, moderation is assessed using the ENVD*FOWN and SOCD*FOWM as coefficient in the ROA model. For H02, the same interaction coefficient is assessed in the EPS model. A positive and significant interaction coefficient indicates strengthening moderation, whereas a negative and significant coefficient indicates weakening moderation. Where the interaction coefficient is statistically insignificant, the null hypothesis of no moderating effect is not rejected.

Table 1:
Measurement And Description Of Variables

Variable	Type	Measurement	Sources
Return on assets (ROA)	Dependent	Net income divided by total assets	Ioannou and Serafeim (2021)
Earnings per share (EPS)	Dependent	Net income divided average number of shares outstanding	Ioannou and Serafeim (2021)
Environmental Sustainability disclosure (ENVD)	Independent	Content Analysis based on the Global Reporting Initiative (GRI, 2018)	Daniel, Mogaka, Makori, Ambrose and Jagongo (2021)
Social Sustainability disclosure (SOCD)	Independent	Content Analysis based on the Global Reporting Initiative (GRI, 2018)	Lo &Sheu, (2017)
Foreign ownership (FOWN)	Moderating	The proportion of company shares held/owned by foreign (non-Nigerian) shareholders.	Daniel, Mogaka, Makori, Ambrose and Jagongo (2021)
Firm size (FSIZE)	Control	Natural logarithm of total assets	Dobbs &Standa, (2016)
Leverage (LEV)	Control	Total debt divided by total assets	Hussain (2015)

Source: Author's Compilation, 2026.

4.0 Presentation of Results and Discussion

Descriptive Statistics

The results of the descriptive statistics of the variables are presented in Table 2.

Table 2:
Summary Of The Descriptive Statistics Of The Study Variables

Variable	*Mean*	*Std.*	*median*	*Min*	*Max*	*N. obs*	*Skewness*	*Kurtosis*
ROA	.0644611	.5606733	.036	-2.36	6.174	180	7.502673	85.65995
EPS	3.114694	10.16654	.575	-5.743	61.774	180	4.319192	21.5207
ENVD	.2752389	.1007531	.292	0	.458	180	-.7012928	4.173952
SOCD	.3147944	.0514828	.306	.245	.429	180	.6729884	2.334938
FOWN	.3702071	.3401838	.53415	0	.8729	180	-.0828758	1.180027
FSIZE	17.09819	2.283608	17.587	10.956	20.318	180	-.843248	3.06039
LEV	1.349339	3.213316	.609	.194	19.557	180	4.351647	21.2395

Source: Author's Compilation, 2026.

Table 2 presents the descriptive statistics of the study variables. Return on Assets (ROA) has a mean of 0.0645, indicating that the sampled firms generated an average return of 6.45% on total assets during the study period. The wide range (-2.3600 to 6.1740) and relatively high standard deviation (0.5607) indicate considerable variation in profitability across firms. Similarly, Earnings per Share (EPS) averaged 3.1147, with values ranging from -5.7430 to 61.7740, reflecting substantial differences in market performance among the sampled firms.

Environmental sustainability disclosure (ENVD) recorded a mean score of 0.2752, suggesting that firms disclosed approximately 27.5% of the environmental disclosure items, while social sustainability disclosure (SOCD) averaged 0.3148, indicating a slightly higher level of social disclosure (31.5%). The relatively low standard deviations for both variables suggest moderate consistency in sustainability reporting practices across firms.

Foreign ownership (FOWN) averaged 0.3702, implying that foreign investors held approximately 37.0% of the equity of the sampled firms, although ownership structures varied considerably across companies. Firm size (FSIZE) recorded a mean of 17.0982, indicating moderate variation in asset size among the firms, while leverage (LEV) had an average of 1.3493, suggesting that some firms relied heavily on debt financing during the study period.

The skewness and kurtosis statistics indicate that ROA, EPS, and LEV are positively skewed and highly leptokurtic, implying the presence of extreme observations and departures from normality. In contrast, ENVD, SOCD, FOWN, and FSIZE exhibit relatively moderate distributions, suggesting fewer distributional concerns. Overall, the descriptive statistics reveal substantial heterogeneity in firms' financial performance, sustainability disclosure, ownership structure, and financial characteristics, supporting the use of panel data estimation techniques in the subsequent analysis.

Correlation Analysis

Correlation matrix analysis was conducted to examine the direction and strength of the pairwise relationships among the study variables and to provide a preliminary assessment of potential multicollinearity before estimating the regression models. Correlation coefficients below the commonly accepted threshold of 0.80 indicate that multicollinearity is unlikely to pose a serious concern (Hair et al., 2019; Baltagi, 2021).

Table 3:
Correlation Analysis Results

Variable	ROA	EPS	ENVD	SOCD	FOWN	FSIZE	LEV
ROA	1.0000						
EPS	0.0744	1.0000					
ENVD	-0.0207	0.0764	1.0000				
SOCD	-0.0391	-0.0856	0.5009	1.0000			
FOWN	-0.0660	0.1995	0.0943	-0.0094	1.0000		
FSIZE	0.0589	0.2704	0.5646	0.4593	0.4069	1.0000	
LEV	0.0535	-0.0581	-0.2448	-0.2504	-0.2428	-0.5707	1.0000

Source: Author's Compilation, 2026.

Table 3 presents the Pearson correlation matrix for the study variables. The results indicate that ROA exhibits weak correlations with all the explanatory variables, showing weak negative associations with ENVD (r = -0.0207), SOCD (r = -0.0391), FOWN (r = -0.0660), and FSIZE (r = -0.0589), and a weak positive association with LEV (r = 0.0535). ROA also has a weak positive relationship with EPS (r = 0.0744). These coefficients suggest that the linear relationships between ROA and the explanatory variables are relatively weak.

Similarly, EPS is weakly positively correlated with ENVD (r = 0.0764), FOWN (r = 0.1995), and FSIZE (r = 0.2704), but weakly negatively correlated with SOCD (r = -0.0856) and LEV (r = -0.0581). These findings indicate modest associations between market-based performance and the explanatory variables.

Among the explanatory variables, ENVD is moderately positively correlated with SOCD (r = 0.5009) and FSIZE (r = 0.5646), while SOCD also shows a moderate positive correlation with FSIZE (r = 0.4593). FOWN has a moderate positive relationship with FSIZE (r = 0.4069). Conversely, LEV is moderately negatively correlated with FSIZE (r = −0.5707), ENVD (r = -0.2448), SOCD (r = -0.2504), and FOWN (r = -0.2428).

Overall, none of the pairwise correlation coefficients exceed the commonly accepted threshold of 0.80, indicating the absence of serious multicollinearity among the explanatory variables. Consequently, the variables are considered suitable for inclusion in the regression models, although the Variance Inflation Factor (VIF) test provides a more robust assessment of multicollinearity (Hair et al., 2019; Baltagi, 2021).

Variance Inflation Factor (VIF) Test

The Variance Inflation Factor (VIF) test was conducted to assess the presence of multicollinearity among the explanatory variables before estimating the regression models. Multicollinearity inflates the variances of the estimated regression coefficients, resulting in unstable parameter estimates and unreliable statistical inferences. Generally, VIF values below the commonly accepted threshold of 5 (or, more conservatively, 10) indicate that

multicollinearity is not a serious concern, suggesting that the explanatory variables provide sufficient independent information for reliable estimation (Hair et al., 2019; Kim, 2019).

Table 4:
Results of Variance Inflation Factor (VIF) Test

Variable	*VIF*	*1/VIF*
FSIZE	2.95	0.339118
ENVD_FOWN_C	2.31	0.432781
ENVD_C	1.94	0.514787
SOCD_FOWN_C	1.82	0.550470
SOCD_C	1.60	0.624305
LEV	1.57	0.635581
FOWN_C	1.37	0.731643
Mean VIF =1.94		

Source: Author's Compilation, 2026.

Table 4 presents the results of the Variance Inflation Factor (VIF) test conducted to assess the presence of multicollinearity among the explanatory variables. The findings show that the VIF values range from 1.37 for FOWN_C to 2.95 for FSIZE, while the corresponding tolerance values (1/VIF) range from 0.339 to 0.732. The mean VIF is 1.94.

Since all VIF values are well below the conservative threshold of 5.0 and the tolerance values are substantially above the minimum acceptable level of 0.20, the results indicate the absence of serious multicollinearity among the explanatory variables. This implies that the independent variables, including the interaction terms (ENVD_FOWN_C and SOCD_FOWN_C), are sufficiently independent and do not inflate the standard errors of the estimated coefficients. Consequently, the regression estimates are expected to be stable and reliable for hypothesis testing.

The Breusch–Pagan/Cook–Weisberg test was conducted to determine whether the variance of the regression residuals is constant across observations. The null hypothesis assumes that the error terms are homoskedastic (constant variance), while rejection of the null indicates the presence of heteroskedasticity (Wooldridge, 2020; Baltagi, 2021).

The results presented in Table X show a Chi-square statistic of 544.49 with a corresponding p-value of 0.0000. Since the p-value is less than the 5% level of significance ($p < 0.05$), the null hypothesis of constant variance is rejected. This indicates that the regression model suffers from heteroskedasticity, implying that the variance of the error terms is not constant across observations.

The presence of heteroskedasticity suggests that although the estimated coefficients remain unbiased, the standard errors may be inefficient, thereby affecting the validity of statistical inference. Consequently, the study employs heteroskedasticity-robust standard errors to ensure efficient parameter estimates and reliable hypothesis testing, consistent with the recommendations of Wooldridge (2020) and Baltagi (2021).

The Hausman specification test was conducted to determine the appropriate panel estimation technique between the Fixed Effects (FE) and Random Effects (RE) models. The null hypothesis

states that the Random Effects model is appropriate because the individual effects are uncorrelated with the explanatory variables, while the alternative hypothesis favours the Fixed Effects model (Baltagi, 2021; Wooldridge, 2020).

The results in Table X show a Hausman Chi-square statistic of 24.53 with a corresponding p-value of 0.0009. Since the p-value is less than the 5% significance level ($p < 0.05$), the null hypothesis is rejected. This indicates that the differences between the Fixed Effects and Random Effects coefficient estimates are statistically significant, implying that the Random Effects estimator is inconsistent.

Accordingly, the Fixed Effects model is considered the appropriate estimation technique for examining the relationship between sustainability disclosure, foreign ownership, and financial performance. The Fixed Effects estimator provides consistent and reliable parameter estimates by controlling for unobserved firm-specific characteristics that are constant over time.

Hypothesis Testing
Test of Hypothesis I

Table 6:
Results of Model I and Test of Hypothesis I

Dependent Variable: Financial Profitability (ROA)

Variable	Symbols	Coefficient	RobustStd. Err.	t-stat.	p-value
Environmental Disclosure	Envd_C	-.3991335	.7867479	-0.51	0.618
Social Disclosure	Socd_C	-.2413171	.7782118	-0.31	0.760
Foreigin Ownership	Fown_C	-.7506336	.2136244	-3.51	0.003
	ENVD_FOWN_C	-.4940911	2.012728	-0.25	0.809
	SOCD_FOWN_C	-1.333617	2.470074	-0.54	0.596
Firm Size	Fsize	.0251301	.0343806	0.73	0.475
Leverage	Lev	-.1981903	.0051604	-38.41	0.000
Constant	_cons	-.0964219	.5883426	-0.16	0.872
Prob>F:		0.0000			
F(3,17):		671.19			
Number of Obs.		180			

Source: Author's Compilation, 2026.

The fixed-effects regression model is statistically significant (Prob> F = 0.0000), indicating that sustainability disclosure, foreign ownership and the control variables jointly explain variations in Return on Assets (ROA) among quoted consumer goods companies in Nigeria. However, the individual effects vary considerably. Environmental disclosure (ENVD) has a negative but insignificant effect on ROA ($\beta = -0.3991$; $p = 0.618$), suggesting that greater environmental disclosure does not significantly improve accounting profitability, possibly because investments in cleaner technologies, pollution control and regulatory compliance impose immediate costs whose financial benefits are realised over the longer term. Similarly, social disclosure (SOCD) has a negative and insignificant effect ($\beta = -0.2413$; $p = 0.760$), indicating that expenditure on

employee welfare, community development and related social initiatives may not generate immediate accounting benefits, despite potential long-term gains in reputation and stakeholder confidence.

Foreign ownership (FOWN), however, has a negative and significant effect on ROA (β = -0.7506; p = 0.003), indicating that higher foreign ownership is associated with lower accounting profitability. This may reflect the costs associated with stricter governance and compliance requirements and technology investments before their potential long-term benefits are realised. The interaction terms are both insignificant: ENVD × FOWN (β = -0.4941; p = 0.809) and SOCD × FOWN (β = -1.3336; p = 0.596). Thus, foreign ownership neither significantly strengthens nor weakens the relationship between sustainability disclosure and ROA, suggesting that foreign investors may place greater emphasis on broader factors such as operational efficiency, earnings quality, governance effectiveness and market conditions than on sustainability disclosure alone.

Among the controls, firm size has a positive but insignificant effect on ROA (β = 0.0251; p = 0.475), whereas leverage has a significant negative effect (β = -0.1982; p < 0.001), indicating that higher debt levels are associated with lower accounting profitability. Overall, the results provide stronger support for the Agency Theory explanation that ownership structure alone may not improve performance without effective governance and managerial alignment. The insignificant interaction terms lead to a failure to reject H01, indicating that foreign ownership does not significantly moderate the relationship between sustainability disclosure and ROA. The findings further suggest that translating sustainability practices into improved financial performance requires higher-quality and more credible reporting, supported by effective governance and institutional mechanisms, particularly as Nigeria continues implementing IFRS S1 and IFRS S2 reporting requirements.

Test of Hypothesis II

Table 6: *Results of Model I and Test of Hypothesis II*

Dependent Variable: Financial Profitability (EPS)

Variable	Symbols	Coefficient	RobustStd. Err.	t-stat.	p-value
Environmental Disclosure	Envd_C	-10.7723	18.31391	-0.59	0.556
Social Disclosure	Socd_C	-5.118202	21.25534	-0.24	0.810
Foreigin Ownership	Fown_C	-.3513209	2.618111	-0.13	0.893
Mediator(	Envd_Fown_C	13.704	13.30057	1.03	0.303
Mediator	Socd_Fown_C	13.08159	56.35549	0.23	0.816
Firm Size	Fsize	1.509839	1.45933	1.03	0.301
Leverage	Lev	.0461391	.1580511	0.29	0.770
Constant	_cons	-22.80498	23.38397	-0.98	0.329
Prob>chi2:		0.0611			
Wald chi2(7):		13.48			
Number of Obs.		180			

Source: Author's Compilation, 2026.

The random-effects model is not statistically significant at the 5% level (Wald $\chi^2 = 13.48$; $p = 0.0611$), indicating that sustainability disclosure, foreign ownership and the control variables provide limited explanation of variations in Earnings per Share (EPS). This suggests that EPS may be influenced more by other firm-specific and macroeconomic factors than by sustainability reporting. Environmental disclosure (ENVD) has a negative but insignificant effect on EPS ($\beta = -10.7723$; $p = 0.556$), as does social disclosure (SOCD) ($\beta = -5.1182$; $p = 0.810$), indicating that neither significantly improves EPS. This may suggest that investors in the Nigerian capital market continue to place greater emphasis on conventional financial indicators such as profitability, earnings growth, dividend policy and cash flows. Foreign ownership (FOWN) also has a negative but insignificant effect on EPS ($\beta = -0.3513$; $p = 0.893$), indicating no independent effect on firms' EPS.

The interaction terms, ENVD × FOWN ($\beta = 13.7040$; $p = 0.303$) and SOCD × FOWN ($\beta = 13.0816$; $p = 0.816$), are positive but insignificant, indicating that foreign ownership neither significantly strengthens nor weakens the relationship between sustainability disclosure and EPS. This suggests that investors may rely more on overall financial fundamentals and governance quality than sustainability disclosure when evaluating firms. Firm size and leverage also have positive but insignificant effects on EPS. Overall, the findings provide stronger support for Agency Theory than Signaling Theory, indicating that ownership structure alone may not improve performance without effective governance and credible disclosure. The insignificant interaction terms lead to a failure to reject H02, confirming that foreign ownership does not significantly moderate the relationship between sustainability disclosure and EPS. The findings underscore the need to improve the quality and credibility of sustainability reporting to enhance its value relevance as IFRS S1 and IFRS S2 continue to be implemented in Nigeria.

5.0 Conclusion and Recommendations

This study examined the moderating effect of foreign ownership on the relationship between sustainability disclosure and financial performance of 18 quoted consumer goods companies in Nigeria over 2013-2022. Sustainability disclosure was measured through environmental and social disclosure, while financial performance was assessed using Return on Assets (ROA) and Earnings per Share (EPS). The findings show that environmental and social disclosure have negative but statistically insignificant effects on both ROA and EPS. Foreign ownership has a significant negative effect on ROA but an insignificant effect on EPS, while its interaction with sustainability disclosure is insignificant in both models, indicating that foreign ownership does not significantly moderate the sustainability disclosure financial performance relationship. The findings imply that sustainability disclosure alone may not generate immediate financial benefits where governance, operational efficiency, institutional support and investor recognition remain limited. Accordingly, consumer goods companies should integrate sustainability into corporate strategy and improve the quality, credibility and decision-usefulness of environmental and social disclosures in line with applicable IFRS S1 and IFRS S2 requirements. Foreign investors should complement their investments with effective governance, managerial expertise and technology transfer, while the FRCN, SEC and NGX should strengthen monitoring and enforcement of sustainability reporting requirements to improve disclosure reliability, comparability and investor confidence. Future studies should examine additional sustainability dimensions, including governance, climate-related financial disclosure, greenhouse gas emissions and carbon accounting, alongside alternative moderators and financial performance measures.

References

Abd-Mutalib, H., & Shafai, N. A. (2023). Firm financial performance and sustainability reporting: The role of institutional investors' ownership. *International Journal of Business Governance and Ethics,* 17(2), 131-154.

Agyemang, A. O., Yusheng, K., Ayamba, E. C., Twum, A. K., Chengpeng, Z., &Shaibu, A. (2020). Impact of board characteristics on environmental disclosures for listed mining companies in China. *Environmental Science and Pollution Research,* 27(17), 21188-21201.

Aifuwa, H. O. (2020). Sustainability reporting and firm performance: A review of literature. *Journal of Accounting and Financial Management,* 6(3), 1-12.

Ajepe, K. M., Adeyemi, S. B., &Omolehinwa, E. O. (2021). Correlate of environmental sustainability disclosures in Nigeria: A perceptual approach. *International Journal of Contemporary Accounting Issues (IJCAI)*, 10(2), 49-63.

Albitar, K., Hussainey, K., Kolade, N., & Gerged, A. M. (2020). ESG disclosure and firm performance before and after IR: The moderating role of governance mechanisms. *International Journal of Accounting and Information Management,* 28(3), 429-444.

Al-Waeli, A. J., Khalid, A. A., Ismail, Z., &Idan, H. Z. (2021). The relationship between environmental disclosure and financial performance of industrial companies with using a new theory: Literature review. *The Journal of Contemporary Issues in Business and Government,* 27(2), 3846-3868.

Aureli, S., Gigli, S., Medei, R., &Supino, E. (2020). The value relevance of environmental, social, and governance disclosure: Evidence from Dow Jones Sustainability World Index listed companies. *Corporate Social Responsibility and Environmental Management*, 27(6), 2651-2663.

Bassey, B. E., Effiok, S. O., & Eton, O. E. (2013). The impact of environmental accounting and reporting on organizational performance of selected oil and gas companies in Niger Delta Region of Nigeria. *Research Journal of Finance and Accounting,* 4(3), 57-73.

Borges, M. L., & Bergamini, T. (2019). Environmental disclosure: A systematic review. *Revista de GestãoAmbiental e Sustentabilidade,* 8(2), 1-18.

Chandrakumarmangalam, S., &Govindasamy, P. (2010). Leverage - An analysis and its impact on profitability with reference to selected cement companies in India. *Journal of Economics and Finance,* 1(1), 1-12.

Dang, C., Li, Z. F., & Yang, C. (2018). Measuring firm size in empirical corporate finance. *Journal of Banking & Finance,* 86, 159-176.

Deegan, C. (2000). *Financial Accounting Theory.* McGraw-Hill.

Deegan, C. (2002). The legitimising effect of social and environmental disclosures - A theoretical foundation. *Accounting, Auditing & Accountability Journal,* 15(3), 282-311.

Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The Accounting Review,* 86(1), 59-100.

Diantimala, Y. (2018). The effect of sustainability reporting on firm value: Empirical study in Indonesia. *International Journal of Business and Management,* 13(1), 57-68.

Du, X. (2020). Does corporate social responsibility disclosure reduce information asymmetry? *Journal of Business Ethics,* 164(3), 513-535.

Du, X., & Zhang, W. (2020). Corporate social responsibility information disclosure and innovation sustainability: Evidence from China. *Sustainability,* 12(1), 409.

Dyduch, J., &Krasodomska, J. (2017). Determinants of corporate social responsibility disclosure: An empirical study of Polish listed companies. *Sustainability*, 9(11), 1934.

Elkington, J. (1997). Cannibals with Forks: The Triple Bottom Line of 21st Century Business. Capstone.

Emeka-Nwokeji, N. A., &Okeke, P. C. (2019). Corporate environmental disclosure and performance of quoted non-financial firms in Nigeria. *Journal of Accounting, Business and Social Sciences,* 1(2), 119-132.

Erhirhie, F. E., &Ekwueme, C. M. (2019). Corporate social sustainability reporting and financial performance of oil and gas industry in Nigeria. *International Journal of Accounting, Finance and Risk Management,* 4(2), 44-60.

Freeman, R. E. (1984). Strategic Management: *A Stakeholder Approach. Pitman.*

Garcia, A. S., Mendes-Da-Silva, W., &Orsato, R. J. (2017). Sensitive industries produce better ESG performance: Evidence from emerging markets. *Journal of Cleaner Production,* 150, 135-147.

García-Meca, E., & Sánchez-Ballesta, J. P. (2010). The association of board independence and ownership concentration with voluntary disclosure: A meta-analysis. *European Accounting Review,* 19(3), 603-627.

Global Reporting Initiative (GRI). (2018). *GRI Sustainability Reporting Standards*. GRI.

Guthrie, J., Petty, R., Yongvanich, K., &Ricceri, F. (2004). Using content analysis as a research method to inquire into intellectual capital reporting. *Journal of Intellectual Capital*, 5(2), 282-293.

Hahn, R., &Kühnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research. *Journal of Cleaner Production*, 59, 5-21.

Hongming, X., Ahmed, B., Hussain, A., Rehman, A., Ullah, I., & Khan, F. U. (2020). Sustainability reporting and firm performance: The demonstration of Pakistani firms. *SAGE Open,* 10(3), 1-12.

Indriastuti, M., &Chariri, A. (2021). Integrating corporate social responsibility disclosure and environmental performance for firm value: An Indonesia study. *Lecture Notes in Networks and Systems,* 278, 1-12.

Ioannou, I., &Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies,* 43(9), 834-864.

Jamil, A., MohdGhazali, N. A., & Puat Nelson, S. (2021). The impact of corporate governance on sustainability reporting. *Sustainability Accounting, Management and Policy Journal,* 12(5), 965-1002.

Javed, T. (2015). The impact of leverage on firm performance: Evidence from Pakistan. *Journal of Business and Management,* 17(6), 57-65.

Jensen, M. C., &Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics,* 3(4), 305-360.

Khan, S. A. R., Yu, Z., & Umar, M. (2020). How environmental awareness and corporate social responsibility practices benefit the enterprise? An empirical study in the context of emerging economy. *Management of Environmental Quality*, 31(2), 379-398.

Lo, S. F., &Sheu, H. J. (2007). Is corporate sustainability a value-increasing strategy for business? Corporate Governance: *An International Review,* 15(2), 345-358.

Makori, D. M., &Jagongo, A. (2013). Environmental accounting and firm profitability: An empirical analysis of selected firms listed in Bombay Stock Exchange, India. *International Journal of Humanities and Social Science,* 3(18), 248-256.

McWilliams, A., & Siegel, D. (2021). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*, 26(1), 117-127. (Note: Original publication is 2001, but re-issued/updated in some collections in 2021).

Merkl-Davies, D. M., & Brennan, N. M. (2017). A theoretical framework of external accounting communication: Research perspectives, traditions, and theories. *Accounting, Auditing & Accountability Journal,* 30(2), 433-469.

Okolie, A. O., &Igaga, A. C. (2020). Sustainability reporting and financial performance of listed deposit money banks in Nigeria. *Journal of Accounting and Financial Management,* 6(2), 1-15.

Olatunde, O., Mary, A., &Sulaiman, M. (2021). Environmental accounting disclosure practices and financial performance of listed cement companies in Nigeria. *Gusau Journal of Accounting and Finance,* 2(2), 1-15.

Omaliko, E., Nweze, A. U., & Nwadialor, E. O. (2020). Effect of social and environmental disclosures on performance of non-financial firms in Nigeria. *Journal of Accounting and Finance,* 6(1), 40-58.

Oraka, A. (2021). Environmental costs and financial performance of oil and gas companies in Nigeria. *Asian Journal of Economics, Business and Accounting,* 21(3), 1-12.

Osuji, C. C., &Odita, A. O. (2012). The impact of corporate governance on financial performance of quoted firms in Nigeria. *Journal of Accounting and Taxation,* 4(2), 40-52.

Oti, P. A., Effiong, S. A., &Tapang, A. T. (2012). Environmental costs and its implication on the returns on investment: An evaluation of selected manufacturing companies in Nigeria. *Global Journal of Management and Business Research,* 12(7), 17-20.

Rabi, A. M. (2019). Board characteristics and environmental disclosure: Evidence from Jordan. *Journal of Accounting and Marketing,* 8(4), 1-8.

Securities and Exchange Commission (SEC) Nigeria. (2021). Guidelines on Sustainable Financial Principles for the Nigerian Capital Market. *SEC Nigeria.*

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review,* 20(3), 571-610.

TEMPLARS Law. (2023). Nigeria Pioneers the Adoption of a Global Baseline for Sustainability-Related Disclosures. *Client Alert, Templars Law.*

Umoren, A. O., Akpan, M. O., & Okafor, L. N. (2018). Oil companies' performance and environmental accounting reporting in Nigeria. *Asian Journal of Economics, Business and Accounting,* 8(1), 1-8.

Uwuigbe, U., & Uadiale, O. M. (2012). Corporate governance and financial performance of quoted firms in Nigeria. *Journal of Economics and Sustainable Development,* 3(9), 1-9.

Uwuigbe, U., Teddy, O., Uwuigbe, O. R., Emmanuel, O., Asiriuwa, O., & Eghonghon, A. (2018). Sustainability reporting and firm performance: A bi-directional approach. *Academy of Strategic Management Journal,* 17(3), 1-16.

Yan, M., Jia, F., Chen, L., & Yan, F. (2022). Assurance process for sustainability reporting: Towards a conceptual framework. *Journal of Cleaner Production,* 377, 134156. (Retain if relevant to assurance process).