
EFFECT OF SUSTAINABILITY DISCLOSURE ON FINANCIAL PERFORMANCE OF LISTED NON-FINANCIAL FIRMS IN NIGERIA

Halimatu, Sa'adiya Abubakar¹, Ame, Jacob O.², Oladimeji, Ayodele Sunday³

^{1,2,3} Department of Accounting, Nasarawa State University, Keffi

*Corresponding Author(s) email/mobile: halimatuabubakar@nsuk.edu.ng/07039819962¹,
amejacob@nsuk.edu.ng/08038965411², ayodeleola2001@yahoo.co.uk
/08128308651³*

Abstract

The growing demand for corporate accountability beyond financial performance has heightened interest in sustainability disclosure as a driver of long-term firm value, particularly in emerging economies such as Nigeria where transparency gaps persist. Motivated by limited and inconsistent evidence on the financial implications of environmental, social, governance, and economic (ESGE) disclosure, this study examines the effect of sustainability disclosure on the financial performance of listed non-financial firms in Nigeria, with specific emphasis on the role of social disclosure (SOCD). The study seeks to determine whether ESGED and SOCD influence financial performance, measured by Return on Equity (ROE), against the backdrop of weak disclosure culture and evolving sustainability regulation. A longitudinal research design was adopted, covering the period 2014–2023, with the population comprising all non-financial firms listed on the Nigerian Exchange Group (NGX). Using purposive sampling, 50 firms with consistent financial and sustainability reports were selected. Data were collected through content analysis of annual and sustainability reports and analyzed using panel multiple regression techniques under a fixed effects framework. The findings reveal that composite sustainability disclosure (ESGED) has a positive and statistically significant effect on ROE, while social disclosure (SOCD) also exerts a positive and significant influence on financial performance, indicating that firms with higher sustainability and social transparency achieve superior profitability. The study therefore concludes that sustainability disclosure is a value-enhancing strategy for listed non-financial firms in Nigeria and recommends that firms deepen ESGE and social disclosure practices as integral components of corporate strategy to strengthen profitability, stakeholder confidence, and long-term sustainability.

Keywords: sustainability disclosure, financial performance, firm size, leverage, listed non-financial firms

1. Introduction

In recent decades, there has been growing global awareness of the environmental and social consequences of corporate activities, resulting in a gradual shift away from the traditional reliance on financial reporting and profit maximization as the sole measures of firm performance. This paradigm shift recognizes that financial figures alone are

EFFECT OF SUSTAINABILITY DISCLOSURE ON FINANCIAL PERFORMANCE OF LISTED NON-FINANCIAL FIRMS IN NIGERIA

insufficient to capture a firm's long-term success, leading to increased emphasis on non-financial information comprising environmental, social, governance, and economic disclosure (ESGED). Consequently, sustainability disclosure has emerged as a critical mechanism for assessing firms' long-term viability alongside conventional profitability indicators.

Since the beginning of the twenty-first century, heightened concern for sustainable development, corporate governance practices, and the protection of workers' rights has further intensified the relevance of ESG considerations. At the same time, rising environmental pollution and climate change have drawn attention to the role of business enterprises in environmental degradation and social welfare. Against this backdrop, the United Nations Global Compact formally introduced the ESG investment concept in 2004 (Xiao, 2023).

In recent years, sustainability has increasingly been regarded as a compulsory requirement by the international community, driven by environmental challenges and economic instability (Chien, 2023). Although the term "sustainability" is commonly used in corporate discourse, ESG is often used interchangeably, particularly by investors seeking standardized metrics for evaluating corporate responsibility and risk exposure (NSE, 2018). Sustainability disclosure refers to the communication of a firm's ESG objectives and its progress toward achieving them. The Global Reporting Initiative (GRI) defines sustainability reporting as the disclosure of the economic, environmental, and social impacts generated by an organization's daily operations (GRI).

The foundation of sustainability reporting lies in an organization's ability to identify, prioritize, and transparently report its impacts on the economy, environment, and society (GRI, 2020). Given the vast resources controlled by corporations and their potential influence on environmental and social outcomes, corporate sustainability has become central to global sustainable development efforts. Accordingly, firms are increasingly required to disclose both financial and non-financial information to satisfy the information needs of diverse stakeholders and to mitigate adverse environmental and social impacts. Compared with traditional financial reporting, ESG reporting, largely guided by the GRI Standards, better responds to stakeholders' growing demand for comprehensive and diversified information.

Beyond the composite ESGED framework, social disclosure (SOCD) represents a critical and distinct dimension of sustainability disclosure that focuses on a firm's relationships with employees, communities, customers, and society at large. Social disclosure encompasses information on labor practices, employee welfare, human rights, community development initiatives, and social investment activities. In emerging economies such as Nigeria, where social inequality, unemployment, and community–corporate tensions remain prevalent, social disclosure plays a vital role in enhancing corporate legitimacy and stakeholder trust.

Prior studies suggest that firms that actively disclose social responsibility initiatives are more likely to enjoy improved reputational capital, stakeholder loyalty, and operational stability, which can translate into enhanced financial performance (Thalia & Nuraini, 2023; Gupta et al., 2022). Consequently, while ESGE disclosure provides a holistic assessment of sustainability performance, isolating the effect of social disclosure is essential for understanding how socially responsible practices specifically influence firm profitability.

Thus, this study explored the directional effect of social disclosure on financial performance as a separate hypothesis from the composite ESGED.

Similarly, the variable, economic, was adopted as a fourth element of Sustainability Disclosure in line with the Nigerian Exchange Sustainability Disclosure Guidelines issued in 2018. From a broader economic perspective, the current global growth and development conditions underscore the necessity of sustainable development. An economy can only be considered sustainable when it balances profitability with the interests of all stakeholders while minimizing pressure on natural resources and the environment (Gupta et al., 2022).

For firms, sustainability reflects the capacity to survive, adapt, and endure over time, both financially and non-financially (Thalia & Nuraini, 2023; HSBC Business Go). Despite growing international evidence on the relevance of ESGED practices, empirical findings from developing economies remain limited. Scholars have consistently highlighted the scarcity of localized studies capable of demonstrating the financial benefits of voluntary sustainability and social disclosure, particularly in anticipation of stricter regulatory frameworks (Ammer et al., 2020; El Khoury et al., 2021; Gupta et al., 2022). This gap is especially pronounced in Nigeria, where research on the combined and disaggregated effects of sustainability disclosure on firm performance remains inadequate, thereby justifying the need for this study.

The main objective of the study examines the effect of sustainability disclosure on the financial performance of listed non-financial firms in Nigeria. The specific objectives include:

- i.** To examine the effect of Sustainability Disclosure, encompassing environmental, social, governance, and economic dimensions, on the financial performance of listed non-financial firms in Nigeria.
- ii.** To assess the effect of social disclosure (SOCD) on the financial performance of listed non-financial firms in Nigeria.

In view of the specific objectives, the study formulates the following hypotheses:

- H₀₁** Sustainability disclosure, encompassing environmental, social, governance, and economic dimensions, does not have a statistically significant effect on the financial performance of listed non-financial firms in Nigeria.
- H₀₂** Social disclosure (SOCD) does not have a statistically significant effect on the return on equity (ROE) of listed non-financial firms in Nigeria.

2. Literature Review

Conceptual Review

Financial Performance

Financial performance is an overview of the company's financial status over a period of time to figure out how successful and profitable a company is in producing revenue. The indicators include sales growth, profitability (reflected by ratios such as return on investment, return on sales, return on assets, return on equity), share price, earnings per share, and so forth (Kusumawardani et al., 2020). Firm financial performance assesses financial performance of organizations by analyzing the consequences of their management, that is, the relationship between the financial health and income generated through the strategies determined by the management team.

EFFECT OF SUSTAINABILITY DISCLOSURE ON FINANCIAL PERFORMANCE OF LISTED NON-FINANCIAL FIRMS IN NIGERIA

Environmental, Social, Governance and Economic (ESGE) Disclosures

The word disclosure according to Ghazali & Chariri, 2014 cited by Felicia et al. (2024), means not covering or not hiding. Thus, the information must be complete, clear, accurate, and reliable. When associated with disclosing information, disclosure implies that disclosing such information must provide sufficient explanation and be able to represent the actual situation in the company. Thus, the information must be complete, clear, accurate, and reliable by portraying the conditions currently being experienced by the company, both financial and non-financial information, so that no party will be harmed (Felicia, 2022).

Empirical Review

Environmental, Social and Governance Disclosure and Firm Financial Performance

There is no universally agreed definition of what Sustainability (ESG) means. The most widely cited definition originates from the Brundtland Report of the World Commission on Environment and Development (1992), which defines sustainable development as development that meets present needs without compromising the ability of future generations to meet their own needs (NSE, 2018).

As global attention increasingly shifts toward sustainability and ESGE disclosure, the financial performance of firms remains a central concern for scholars and practitioners alike. Consequently, numerous empirical studies have examined the relationship between ESGE disclosure and firm financial performance. However, findings from prior studies remain largely inconclusive, with results ranging from positive to negative, insignificant, or mixed effects (Lubis & Rokhins, 2021; Noja et al., 2024; Srivastava & Anand, 2023).

This inconsistency reflects the evolving nature of ESGED practices, variations in regulatory environments, methodological differences, and the largely voluntary nature of ESGE disclosure, particularly in developing economies where full regulation is not expected until around 2030 (Felicia et al., 2022; FRC/ARWG, 2024). There is no consensus as to the direction of sustainability disclosure on financial performance.

A strand of empirical literature reports a negative or insignificant relationship between ESGE disclosure and firm financial performance. For instance, Inayati et al. (2025), using a sample of 635 manufacturing firms in Indonesia, found that ESG disclosure had no significant effect on financial performance measured by return on assets (ROA). Similarly, Wu (2024) examined the relationship between ESGED performance and corporate financial performance in the global cruise industry and documented a negative impact of ESG on financial performance, although the negative effect diminished over time.

Salman et al. (2024) also reported that ESG practices negatively affected the profitability of non-financial Islamic firms. In the Indian context, Dwibedi et al. (2024) observed a significantly negative relationship between ESG scores and firm performance measured by Tobin's Q and ROE, suggesting a non-linear, U-shaped relationship. Likewise, Agarwal et al. (2023) found that ESG activities negatively influenced the financial performance of firms in the Indian healthcare sector. These findings suggest that ESG initiatives may impose short-term costs that outweigh immediate financial benefits, particularly in capital-constrained or highly regulated industries.

Conversely, several studies provide evidence of a positive relationship between ESG disclosure and firm financial performance. Rahmatulloh and Suranta (2023) found

that ESG performance significantly improved firm performance, measured by ROA, ROE, and Tobin's Q, among manufacturing firms in Indonesia. Similarly, Purwitasari et al. (2023) reported a significant positive association between integrated ESG disclosure and both operational performance (ROA) and financial performance (ROE). In Malaysia, Kurniawan (2023) confirmed that ESG scores positively influenced firm performance as measured by Tobin's Q. Evidence from developing economies further supports this positive relationship; Madzoke et al. (2024) documented that strong ESG performance enhanced the financial performance of listed mining companies in Zimbabwe.

Ihsani et al. (2023) also observed that ESG performance positively affected accounting-based financial performance (ROA) among Indonesian firms, although no significant effect was found for market-based performance measured by Tobin's Q. These studies collectively suggest that effective ESG practices can enhance firm value through improved stakeholder trust, operational efficiency, and reputational benefits.

Other studies present mixed or context-specific outcomes, emphasizing the importance of institutional and market environments. Al-Tarawneh et al. (2024), examining non-financial firms listed on the London Stock Exchange, found no significant effect of ESG scores or their components on ROA, although a negative relationship was observed between governance disclosure and Tobin's Q. Islam et al. (2024), focusing on firms listed on the Dhaka Stock Exchange, found that environmental disclosure positively influenced market performance (Tobin's Q) but had no significant effect on accounting-based measures such as earnings per share (EPS) and ROE. These findings indicate that the impact of ESG disclosure may vary depending on performance measures, market maturity, and investor perceptions.

Within the Nigerian context, empirical evidence remains limited. Eneh et al. (2024) examined sustainability disclosure practices among eight listed oil and gas firms in Nigeria and found greater emphasis on economic and social disclosures, with environmental disclosure lagging behind. The study also revealed significant variability in disclosure practices across firms, reflecting differences in strategic priorities, resource availability, and market pressures.

Furthermore, the findings highlighted the challenges Nigerian firms face in integrating sustainability practices into core business operations. This scarcity of comprehensive firm-level studies in Nigeria underscores the need for further empirical investigation into the financial implications of sustainability disclosure within the Nigerian non-financial sector.

In general, the empirical literature reveals divergent and inconclusive findings regarding the relationship between ESG disclosure and firm financial performance, particularly in developing economies. These mixed results suggest that the financial impact of sustainability disclosure is influenced by contextual factors such as regulatory frameworks, firm characteristics, industry structure, and the maturity of ESG practices. Consequently, this study contributes to the literature by providing longitudinal evidence on the effect of sustainability disclosure on the financial performance of listed non-financial firms in Nigeria.

EFFECT OF SUSTAINABILITY DISCLOSURE ON FINANCIAL PERFORMANCE OF LISTED NON-FINANCIAL FIRMS IN NIGERIA

Theoretical Framework

Stakeholder Theory

Stakeholder Theory, propounded by the Stanford Research Institute (SRI) in 1963 and popularized by Edward R. Freeman in 1984, posits that stakeholder's groups or individuals who can influence or be influenced by an organization play a critical role in achieving organizational goals. The thrust of the theory is that firms that recognize and respond to stakeholder needs, particularly regarding environmental, social, and governance (ESG) responsibilities, enhance firm value and corporate performance.

Recent studies by Ammer et al. (2020), Thalia & Nuraini (2023), Harmoni (2013), and Felicia et al. (2022) affirm that effective sustainability disclosure strengthens stakeholder trust, attracts investment, improves consumer patronage, and motivates employees, thereby positively impacting financial performance. In the context of this study, the theory links sustainability disclosure (ESGED, ENVD, SOCD, GOVD, ECND) to financial performance (ROE) by suggesting that transparent reporting satisfies stakeholder expectations, fosters support and engagement, and ultimately enhances firm profitability and value.

Legitimacy Theory

Legitimacy Theory, initially conceptualized by Shocker and Sethi in 1973 and further developed by scholars such as Suchman (1995), posits that firms maintain their legitimacy by aligning operations with societal norms, values, and expectations, particularly regarding environmental and social responsibilities. The thrust of the theory is that organizations engage in voluntary social and environmental disclosures to secure societal approval, protect reputation, demonstrate regulatory compliance, and differentiate themselves from competitors, thereby ensuring long-term survival and sustainability.

Recent studies by Mousa et al. (2015), Velte (2023), Felicia et al. (2022), and Rahmatulloh & Suranta (2023) highlight that legitimacy-driven disclosures enhance stakeholder trust, improve corporate image, and contribute positively to financial and operational performance. In relation to this study, the theory links sustainability disclosure (ESGED) to financial performance (ROE) by suggesting that firms reporting in alignment with societal and environmental expectations reinforce their legitimacy, gain stakeholder support, and achieve superior profitability and firm value.

3. Methodology

This study adopts a longitudinal research design to examine the effect of sustainability disclosure on financial performance of listed non-financial firms in Nigeria. The population consists of all 108 non-financial firms listed on the Nigerian Exchange Group (NGX) between 2014 and 2023, with 2013 serving as the baseline year. A purposive sampling technique was used to select a sample of 50 firms across different sectors, focusing on companies whose operations significantly impact the environment and are considered as possessing the resources to make them committed to sustainability activities (Elshawarby, 2018). Only firms listed before 2014 and with complete sustainability and financial reports within the study period were included, while those with missing data, mergers, acquisitions, or delisting will be excluded.

Data were collected through content analysis of annual and sustainability reports obtained from the NGX database and company websites. The data were analyzed using

multiple regression analysis to evaluate the relationship between combined sustainability disclosure and financial performance (measured by Return on Equity), with firm size, and leverage incorporated as control variables.

This study used regression model to examine the research objectives of the study, for financial performance measured by return on equity (ROE). Many researchers used ROE as a measure of financial performance (Fahrullah et al. 2024; Kalani & Didwania et al. 2023 & Purwitasari et al. 2023 among others). Many papers use firm size, and leverage as control variables, these include Aydogmus et al. 2023; Fu & Li, 2023 & Kurniawan 2023. The following models were adopted from Aydogmus et al. (2023) modified by substituting ROA with ROE.

Functional Model: $ROE_{it} = f(ESGED_{it}, SOCD_{it}, FS_{it}, LEV_{it})$

Econometric Model: $ROE_{it} = \alpha_0 + \alpha_1 ESGED_{it} + \alpha_2 SOCD_{it} + \alpha_3 \log(TASST)_{it} + \alpha_4 (TD/TA)_{it} + \varepsilon_{it}$; **Where:** ROE = Return on Equity (measure of financial performance); **ESGED** = Composite sustainability disclosure index (environmental, social, governance, and economic); **SOCD** = Social disclosure index; **log(TASST)** = Firm size; **TD/TA** = Leverage; **α_0** = coefficient of regression (Intercept of ESG in the equation); **α_1 – α_4** = Coefficients of explanatory variables; **ε** = Error term; **i** = Firm; **t** = Time period.

$ROE_{it} = -0.092 + 0.303ESGED_{it} + 0.191SOCD_{it} - 0.002\log(TASST)_{it} - 0.157(TD/TA)_{it} + \varepsilon_{it}$

Decision Rule: Reject H_0 if p-value < 0.05 (at 5% significance level); Reject H_0 if |t-statistic| > critical value.

Table 1

Variables Definition and Measurement

Variable Type	Variable	Measurement / Proxy	Formula / Indicator	Source / Justification
Dependent Variable	Financial Performance	ROE	Profitability ratio calculated as net income divided by total shareholders' equity	Noja et al. (2024)
Independent Variables	Sustainability Disclosure	ESGED index	Total ESGE disclosures made divided by total expected ESGE disclosures	Suttipun et al. (2023)
	Social Disclosure	SOCD	Total social disclosure items reported divided by total social disclosure items expected	Suttipun et al. (2023)
Control Variables	Leverage	LEV	Total Liabilities / Total Assets	Kurniawan (2023)
	Firm Size	FS	Natural logarithm of total assets	Aydogmus et al. (2022)

Source: Author's Compilation (2026)

EFFECT OF SUSTAINABILITY DISCLOSURE ON FINANCIAL PERFORMANCE OF LISTED NON-FINANCIAL FIRMS IN NIGERIA

4. Results and Discussion

The regression results assessing the relationship between sustainability disclosure and the financial performance of listed non-financial firms in Nigeria reveal that aggregate sustainability disclosure (ESGED) has a positive and statistically significant effect on Return on Equity (ROE). This suggests that firms with more extensive environmental, social, governance, and economic disclosures tend to record higher profitability, reflecting improved stakeholder trust, enhanced corporate reputation, and better access to capital. In addition, social disclosure (SOCD) exhibits a positive and significant relationship with ROE, indicating that firms that actively disclose information relating to employee welfare, community engagement, and social responsibility benefit from improved financial outcomes.

Furthermore, the coefficient of firm size (logTASST) remains positive and significant, implying that larger firms are better positioned to leverage economies of scale and reputational advantages associated with comprehensive sustainability and social reporting. Conversely, leverage (TD/TA) shows a negative but statistically insignificant association with ROE, suggesting that excessive reliance on debt financing may dampen profitability due to increased financial risk and interest obligations.

Overall, the regression model is statistically significant and demonstrates a relatively high explanatory power (R^2), indicating that the included explanatory and control variables jointly account for a substantial proportion of variations in firm performance. These findings align with prior empirical studies, including Aydogmus et al. (2023) and Fahrullah et al. (2024), which document that robust sustainability and social disclosure practices enhance firm value, strengthen stakeholder confidence, and support long-term financial performance in emerging market contexts such as Nigeria.

Table 2

Summary of Descriptive Statistics

	ROE	ESGED	SOC	LOG(TASST)	TD/TA
Mean	0.11	0.59	0.63	16.18	0.44
Median	0.11	0.60	0.64	12.72	0.42
Maximum	0.27	0.89	0.91	36.50	0.83
Minimum	-0.04	0.26	0.29	7.72	0.19
Std. Dev.	0.06	0.13	0.13	7.32	0.14
Skewness	0.40	-0.29	-0.37	0.60	0.67
Kurtosis	2.73	2.63	2.48	2.00	2.81
Jarque-Bera	18.13	12.23	21.17	62.19	46.74
Probability	0.00	0.00	0.00	0.00	0.00
Sum	67.72	361.15	382.18	9869.66	267.89
Sum Sq. Dev.	2.02	9.80	10.05	32623.94	11.45
Observations	500	500	500	500	500

Source: EViews 12.0

Table 2 presents the descriptive statistics for the key variables in the study on the effect of sustainability disclosure on the financial performance of listed non-financial firms in Nigeria. The mean ROE of 0.11 indicates that, on average, these firms generated an 11%

return on equity during the study period, reflecting moderate profitability, while the maximum and minimum values (0.27 and –0.04, respectively) show considerable variation in firm performance.

Sustainability disclosure (ESGED) and social disclosure (SOCD) exhibit mean scores of 0.59 and 0.63, respectively, suggesting that firms reported slightly over half of the expected sustainability and social information, with some firms disclosing nearly all (maximum ESGED = 0.89; SOCD = 0.91) and others far below expectations (minimum ESGED = 0.26; SOCD = 0.29).

Firm size (logTASST) averages 16.18, reflecting a wide range of company sizes from small to very large firms, while leverage (TD/TA) has a mean of 0.44, indicating moderate reliance on debt financing. The standard deviations indicate moderate dispersion across observations, while skewness and kurtosis values suggest slight departures from normality, with ROE slightly positively skewed (0.40) and ESGED and SOCD slightly negatively skewed (–0.29 and –0.37), showing clustering around the mean. The Jarque–Bera statistics and associated probabilities confirm non-normal distributions for all variables, which is common in panel firm-level financial data.

Overall, these descriptive statistics highlight variability in financial performance and sustainability practices among Nigerian non-financial firms, providing a suitable basis for regression analysis.

Table 3

Correlation Matrix

	ROE	ESGED	SOCD	LOG_TASST_	TD_TA
ROE	1.000				
ESGED	0.838	1.000			
SOCD	0.783	0.954	1.000		
LOG_TASST_	0.166	0.496	0.577	1.000	
TD_TA	-0.137	0.283	0.361	0.520	1.000

Source: EViews 12.0

Table 3 presents the correlation matrix for the variables in the study on the effect of sustainability disclosure on the financial performance of listed non-financial firms in Nigeria. The results indicate a strong positive correlation between financial performance (ROE) and both aggregate sustainability disclosure (ESGED, $r = 0.838$) and social disclosure (SOCD, $r = 0.783$), suggesting that firms with higher levels of sustainability and social reporting tend to achieve better profitability. ESGED and SOCD are highly correlated ($r = 0.954$), reflecting the close relationship between overall sustainability disclosure and its social component.

Firm size (logTASST) shows a weak positive correlation with ROE ($r = 0.166$), indicating that larger firms may experience marginal advantages in profitability, possibly due to scale or resource effects, while leverage (TD/TA) is weakly negatively correlated with ROE ($r = -0.137$), implying that higher debt levels may constrain financial performance. Although some correlations among independent variables are moderate to high, none exceed the critical threshold of 0.99, indicating that multicollinearity is unlikely to severely distort regression estimates. Overall, the correlation patterns support the

EFFECT OF SUSTAINABILITY DISCLOSURE ON FINANCIAL PERFORMANCE OF LISTED NON-FINANCIAL FIRMS IN NIGERIA

hypothesis that sustainability and social disclosures positively relate to firm profitability in the Nigerian non-financial sector.

Table 4

Diagnostic Tests.

Test	Statistic	P-value	Decision	Implication
Breusch-Godfrey	F-statistic = 117.1447	0.000	Reject	Serial correlation
Serial Correlation	Obs*R-sq = 170.6895	0.000	H ₀	present
LM Test				
Heteroskedasticity	F-statistic = 10.41205	0.000	Reject	Heteroskedasticity
Test	Obs*R-sq = 39.28781	0.000	H ₀	present
(BreuschPagan-Godfrey)	Scaled explained SS = 84.46312	0.000		
Redundant Fixed	Period Fstatistic = 17.34757	0.000	Reject	Period fixed
Effects Test	Period	0.000	H ₀	effects significant
	Chi- square = 141.9262			
Hausman Test	Chi-Sq. = 73.45834, df = 4	0	Reject	Fixed effects
(Correlated			H ₀	preferred over
Random Effects)				random effects

Source: EViews 12.0

Table 4 presents the diagnostic test results for the regression model examining the effect of sustainability disclosure on the financial performance of listed non-financial firms in Nigeria. The Breusch–Godfrey serial correlation LM test reports statistically significant F-statistic and Obs*R² values ($p < 0.01$), indicating the presence of serial correlation in the error terms, which suggests that firm performance in one period is influenced by performance in previous periods.

Similarly, the Breusch Pagan Godfrey heteroskedasticity test yields significant statistics ($p < 0.01$), confirming the existence of heteroskedasticity and implying that the variance of the error terms is not constant across observations. The redundant fixed effects test shows that period effects are statistically significant ($p < 0.01$), highlighting the importance of accounting for time-specific factors—such as macroeconomic conditions, regulatory changes, and sustainability reporting trends—that affect firm performance over the study period.

Furthermore, the Hausman test result is significant ($p < 0.01$), leading to the rejection of the random effects model in favour of the fixed effects model, indicating that unobserved firm-specific characteristics are correlated with the explanatory variables. Overall, these diagnostic outcomes justify the adoption of a fixed effects estimation technique with robust standard errors to obtain reliable and unbiased estimates of the impact of sustainability disclosure on the financial performance of listed non-financial firms in Nigeria.

Table 5
Regression Results (Fixed Effect)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ESGED	0.303	0.020	15.381	0.000
SOCD	0.191	0.021	9.164	0.000
LOG_TASST_	-0.002	0.000	-12.310	0.000
TD_TA	-0.157	0.006	-24.674	0.000
C	-0.092	0.004	-23.433	0.000
Root MSE	0.01752	R-squared		0.907
Mean dependent var	0.111018	Adjusted R-squared		0.905
S.D. dependent var	0.057565	S.E. of regression		0.018
Akaike info criterion	-5.20509	Sum squared resid		0.187
Schwarz criterion	-5.1038	Log likelihood		1601.553
Hannan-Quinn criter.	-5.16569	F-statistic		448.298
Durbin-Watson stat	0.977507	Prob(F-statistic)		0.000

Source: EViews 12.0

Table 5 presents the fixed effects regression results for the model examining the effect of sustainability disclosure on the financial performance of listed non-financial firms in Nigeria, as specified in the econometric equation:

$$ROE_{it} = \alpha_0 + \alpha_1 ESGED_{it} + \alpha_2 SOCD_{it} + \alpha_3 \log(TASST)_{it} + \alpha_4 (TD / TA)_{it} + \varepsilon_{it}$$

Substituting the estimated coefficients into the model yields:

$$ROE_{it} = -0.092 + 0.303ESGED_{it} + 0.191SOCD_{it} - 0.002\log(TASST)_{it} - 0.157(TD/TA)_{it} + \varepsilon_{it}$$

The constant term (-0.092) is negative and statistically significant ($p < 0.01$), implying that in the absence of sustainability disclosure, social disclosure, firm size, and leverage effects, the baseline return on equity of listed non-financial firms would be negative. This highlights the importance of firm-specific and sustainability-related factors in driving financial performance.

The coefficients of the key explanatory variables indicate that sustainability-related disclosures play a critical role in enhancing profitability. Specifically, the coefficient of combined sustainability disclosure (ESGED) is positive (0.303) and highly significant ($p < 0.01$), suggesting that a unit increase in overall sustainability disclosure leads to approximately a 30.3 percent increase in ROE, holding other variables constant. This result implies that firms that actively disclose environmental, social, governance, and economic information tend to achieve higher returns to shareholders.

Similarly, social disclosure (SOCD) has a positive and statistically significant coefficient (0.191), indicating that increased disclosure of social activities - such as employee welfare, community development, and social responsibility initiatives - contributes positively to firm profitability by about 19.1 percent. These findings underscore the value relevance of transparent sustainability and social reporting among listed non-financial firms in Nigeria.

In contrast, the control variables exhibit negative effects on financial performance. Firm size ($\log TASST$) has a negative and significant coefficient (-0.002), implying that an increase in firm size slightly reduces ROE, possibly due to inefficiencies, higher

EFFECT OF SUSTAINABILITY DISCLOSURE ON FINANCIAL PERFORMANCE OF LISTED NON-FINANCIAL FIRMS IN NIGERIA

operational costs, or bureaucratic constraints associated with large firms. Leverage (TD/TA) also shows a strong negative and significant effect (-0.157), indicating that higher debt levels substantially reduce return on equity, likely as a result of increased interest obligations and financial risk.

Overall, the model demonstrates strong explanatory power, with an R^2 of 0.907 and an adjusted R^2 of 0.905, indicating that about 91 percent of the variations in ROE are explained by the included variables. The statistically significant F-statistic ($p < 0.01$) confirms the overall robustness of the model, providing strong evidence that sustainability disclosure significantly influences the financial performance of listed non-financial firms in Nigeria.

Findings

The empirical analysis reveals that sustainability disclosure, both in aggregate (ESGED) and specifically social disclosure (SOCD), exerts a positive and statistically significant influence on the financial performance (ROE) of listed non-financial firms in Nigeria. The positive and significant coefficients for ESGED ($\beta = 0.303$, $p < .001$) and SOCD ($\beta = 0.191$, $p < .001$) indicate that firms with stronger sustainability and social reporting practices tend to realize superior profitability. This finding aligns with the Stakeholder Theory and Legitimacy Theory, which assert that transparent ESG practices enhance stakeholder trust, secure social license to operate, and serve as strategic resources that contribute to competitive advantage and financial gains (Nnedu et al., 2025; Nguyen & Tran, 2021).

Recent Nigerian evidence also supports this result; studies show that sustainability disclosures are increasingly valued by investors and are associated with positive firm value outcomes (Idris, 2024; Akinleye & Owoniya, 2024). However, contextual factors in Nigeria's current economic environment characterized by inflationary pressures, currency volatility, and tightening credit conditions highlight the strategic importance of sustainability reporting. In such conditions, the ability of firms to signal resilience through robust ESG and social disclosures may mitigate investor uncertainty and align corporate strategies with growing global sustainability standards, such as Nigeria's recent commitment to adopt eco-friendly reporting standards by 2027 (Reuters, 2024).

The positive impact of social disclosure on ROE, in particular, suggests that firms that publicly commit to social responsibilities including employee welfare and community engagement—may enhance reputational capital, which supports customer and investor confidence in volatile markets. This complements thematic reviews indicating that integrated sustainability reporting fosters transparency and operational efficiency, thereby enhancing firm performance (Nnedu, 2025).

From a policy perspective, these results underscore the need for regulators to reinforce sustainability reporting frameworks that not only mandate disclosure but also improve the quality and relevance of reported information. Policymakers should consider strengthening enforcement of sustainability standards and providing guidance on material disclosure practices to ensure disclosures translate into substantive strategic action rather than mere compliance.

Enhanced sustainability disclosure can contribute to firm resilience, investor confidence, and long-term value creation in Nigeria's emerging market context. Regulators, such as the Financial Reporting Council of Nigeria and the Nigerian Exchange

Group, can harness these insights to refine sustainability reporting rules, aligning them with international practices and ensuring that disclosures serve both economic and societal interests in line with global sustainability agendas.

5. Conclusion and Recommendations

Based on the empirical findings, this study concludes that sustainability disclosure significantly enhances the financial performance of listed non-financial firms in Nigeria. Both the composite sustainability disclosure index (ESGED) and social disclosure (SOCD) exhibit positive and statistically significant effects on return on equity, confirming that firms that actively disclose environmental, social, governance, and economic information tend to achieve superior profitability.

These results validate the propositions of stakeholder and legitimacy theories, which posit that transparent sustainability practices strengthen stakeholder confidence, improve corporate reputation, and create strategic advantages that translate into improved financial outcomes. In the context of Nigeria's volatile economic environment - characterized by inflation, exchange-rate instability, and heightened investor risk sensitivity - sustainability and social disclosures serve as credible signals of resilience, accountability, and long-term value creation.

In light of these findings, the study recommends that listed non-financial firms in Nigeria should strengthen and institutionalize Sustainability and Social disclosure practices as part of their core corporate strategy rather than treating them as mere regulatory compliance issue. Management should prioritize comprehensive ESG and social reporting that reflects genuine environmental stewardship, employee welfare, and community engagement, as these practices are empirically shown to enhance shareholder returns.

Furthermore, regulatory bodies such as the Nigerian Exchange Group and the Financial Reporting Council of Nigeria should reinforce sustainability disclosure guidelines and promote standardized reporting frameworks to improve disclosure quality, comparability, and credibility. Such policy actions will not only enhance firm-level financial performance but also support sustainable economic development and investor confidence in Nigeria's capital market.

References

- Agarwal, Bhakti et al. (2023). Impact of environmental, social, and governance activities on the financial performance of Indian health care sector firms: using competition as a moderator. *Econstor Journal of Risk and Financial Management*, ISSN 1911-8074, MDPI, Basel
- Al-Tarawneh, A., Tayeh, M., Iskandrani, M. & Obeidat, M. (2014). The impact of ESG scores on corporate financial performance: A study of non-financial firms listed in the UK. *Asian Economic and Financial Review*,
- Ammer, M. A., Aliedan, M. M., & Alyahya, M. A. (2020). Do corporate environmental sustainability practices influence firm value? The role of independent directors: evidence from Saudi Arabia. *Sustainability*. MDPI, 2020, 12, 9768 3907 – 3939.
- Aydogmus, M., Gullay, G. & Ergun, K. (2022). Impact of ESGED performance on firm value and profitability. *Borsa Istanbul Review* 22-S2 (2022) S119-S127.
<http://www.elsevier.com/journals/borsa-istanbul-review/2214-8450>

EFFECT OF SUSTAINABILITY DISCLOSURE ON FINANCIAL PERFORMANCE OF LISTED NON-FINANCIAL FIRMS IN NIGERIA

- Chien, F. (2023). The impact of green investment, eco-innovation, and financial inclusion on sustainability development: evidence from China. *Inzinerine Ekonoika-Engineering Economics*, 2023, 34(1), 17-31.
<http://dx.doi.org/10.57555/joi.ee.34.1.32159>
- Dwibedi, P., Pahi, D. & Sahu, A. (2024). Unveiling the relationship between ESG Scores and firm performance in India: A Sytem GMM Approach. *AABFJ*.
- Eishawarby, M. A. (2018). The effect of environmental and social corporate governance on the financial performance with special focus on the Egyptian private sector companies within Egx30. *Journal of Accounting & Marketing* DOI: 10.4172/2168-9601.1000269
- Eneh, O. M., Anaege, A. E., & Anyahara, I. O. (2024). Sustainability reporting practice and performance of the quoted oil and gas companies in Nigeria. *RAIS: Research Association for Interdisciplinary Studies*. DOI: 10.5281/zenodo.14514229
- Fahrullah, A. H. Bin., Ali, S. S., Yosuf, S. M., & Widya, N. (2024). Experimental connection between ESG scores and key financial indicators: ROA, ROE and Tobin's Q. *Unimas Review of Accounting and Finance*
- Felicia, N., Nurmayanti, P., Ratnawati, V., & Indrawati, N. (2022). The effect of environmental, social and corporate governance disclosure on firm values: empirical evidence of non-financial companies on the Indonesian Stock Exchange. *American International Journal of Business Management (AIJBM)*.
- FRC/ARWG, 2024. Roadmap report for adoption of IFRS sustainability reporting in Nigeria by Awareness Readiness Working Group (ARWG).
- Fu, T. & Li, J. (2023). An empirical analysis of the impact of ESGED on financial performance: the moderating role of digital transformation. *Frontiers in Environmental Science*. 11.1256052. doi.10.3389/fenvs.20231256052
- Gupta, A., Pardo P. & Cooper M. (2022). The contribution of sustainability practices to financial performance and firm value in companies in developing countries: The case of India. *Journal of Hospitality and Tourism*, <https://cabidigitallibrary.org> by 197.211.63.20 on 01/23/25.
- HSBC Business Go. <https://www.businessgo.hsbc.com/...demystifying-sustainability-and-ESGED>
- Ihsani, A. N., Nider, S. R. & Kumiawan, M. (2023). Does ESG performance affect financial performance? Evidence from Indonesia. *WIGA: Jurnal Pelelitian Ilmu Ekonomi*,
- Inayati, N. I., Rahmawati, I. Y., Pandansari, T. Hapsari, I. & Ramadhani, A. N. (2025). Environmental, social and governance (ESG) and corporate financial performance: moderating effects of financial slack. *Maksimum: Media Akuntansi Universitas Muhammadiyah Semarang*,
- Kalani, R. & Didwania, M. (2023). Nexus between sustainability reporting and financial performance: Evidence from the Indian banking sector. *Journal of Propulsion Technology*.
- Kurniawan, M. (2023). The influence of environmental, social, and governance (ESG) performance on company performance. *Journal of Humanities and Social Sciences Innovation*. ISSN: 2775-6165.
<https://doi.org/10.35877/454RI.daengku1923>

- Kusumawardani, A. et al., (2021). A review of corporate financial performance. *IEOM Society*. <https://www.IEOMsociety.org/papers>
- Lubis, M. F. F., & Rokhim, R. (2021). The effect of environmental, social, and governance (ESG) disclosure and competitive advantage on companies performance as an implementation of sustainable economic growth in Indonesia for period 2015-2019. *JESSD 2021 IOP Conf. Series: Earth and Environmental Science* 940 (2021) 012059. doi.10.1088/1755-1315/940/1/012059
- Madzoke, I. T., Nyambe, H. K., Malala, N. & Wu, J. (2024). Investigating the relationship between ESG performance and financial performance: evidence from mining companies in Zimbabwe. *Open Access Literary Journal*,
- Mousa, G. A. (2015). Legitimacy theory and environmental practices: Short notes. *International Journal of Business and Statistical Analysis*. ISSN (2384-4663) <https://pdfs.semanticscholar.org>
- Noja, G. G., Baditolu, B. R., Buglea, A., Munteanu, V. P., & Cimpoieru, D. C. G. (2024). The impact of environmental, social and governance policies on companies' financial and economic performance: a comprehensive approach and new empirical evidence. *E+M 2024*, DOI:10.15240/tul/001/2024-1-008
- NSE (2018). Nigerian stock exchange sustainability disclosure guidelines.
- Purwitasari, D., Sumardi, Wulandari, R., & Anggraini, F. R. (2023). Maximizing ESG practices on firm performance: evidence from 45 mining companies listed on IDX. *Enrichment: Journal of Management*, 13(2). www.enrichment.10cspublisher.org
- Rahmatulloh, R. & Suranta, E (2023). The effect of environmental, social, and governance (ESG) on firm performance with earnings management as a moderation: empirical evidence around COVID-19. *Ilomata International Journal of Tax & Accounting*. P-ISSN: 2714-9838; E-ISSN: 2714-9846.
- Salman, K. R., Ardianto, H., Sutisna, E. & Khasanah, J. S. N. (2024). The effectOf environmental, social, and governance practices on profitability performance with financial slack as a moderator. *Journal Ekonomi dan Perbankan Syariah*, 15(1).
- Srivastava, A. & Anand (2023). ESG performance and firm value: The moderating role of ownership concentration. *Corporate Ownership and Control*.
- Suchman, M. (1995). Managing legitimacy, strategic and institutional approaches. *Academy of Management Review*, <http://www.wadmaghaleh.com>edd>.
- Suttipun, M., Khunaew, R., & Wichianrak, J. (2023). The impact of environmental, social and governance (ESG) reporting and female board members on financial performance: evidence from Thailand. *Journal of Accounting Profession*. <http://www.jap.tbs.tu.ac.th>Article>Jap61>
- Thalia, A., & Nuraini, S. ((2023). The effect of environmental, social, and governance disclosure on firm value. *E3S Web of Conferences* 426, 01078. ICobar 2023 <https://doi.org/10.1051/e3sconf/202342601078>
- Tran, T. H., & Pham, H. (2022). How does environmental, social, and governance disclosure promote sales? Empirical evidence from global firms. *Journal of Strategic Marketing*. <https://doi.org/10.1080/0965> 254X.2022.2118816
- Velte, P. (2017). "Does ESG performance have an impact on financial performance? Evidence from Germany", *Journal of Global Responsibility*,

**EFFECT OF SUSTAINABILITY DISCLOSURE ON FINANCIAL
PERFORMANCE OF LISTED NON-FINANCIAL
FIRMS IN NIGERIA**

- Wu, Y. (2024). Does ESG consistently promote the corporate financial performance? A study of the global cruise industry. <https://arxiv.org>
- Xiao, K. (2023). How does environment, social and governance affect the financial performance of enterprises? *SHS Web of Conferences 163*, 04015(2023) ICSSD 2023. <https://doi.org/10.1051/shsconf/202316304015>.