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

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Abstract

Sustainability disclosure has emerged as a critical tool for enhancing corporate transparency, stakeholder confidence, and long-term value creation, yet its impact on financial performance remains mixed, particularly in emerging economies like Nigeria. Despite increasing regulatory requirements and investor expectations, many non-financial firms struggle to link environmental, social, and governance disclosures to profitability. This study examined the effects of sustainability disclosure dimensions governance (GOVD), economic (ECND), environmental (ENVD), and social (SOCD) on the financial performance of listed non-financial firms in Nigeria. Adopting an ex-post facto research design, the study population comprised all non-financial firms listed on the Nigerian Exchange (NGX) between 2015 and 2023, with a purposive sampling technique applied to select firms with complete sustainability and financial data. Secondary data were collected from annual reports, integrated reports, and corporate disclosures, while multiple regression analysis was employed to examine the relationships between the disclosure dimensions and financial performance measured by return on equity (ROE). Findings reveal that governance disclosure and economic disclosure have positive and significant impacts on financial performance, whereas environmental and social disclosures were positive/negative but statistically insignificant. The study recommends that firms prioritize governance and economic disclosures to achieve immediate profitability benefits while gradually integrating environmental and social initiatives into strategic planning to enhance legitimacy and long-term value.

Keywords: sustainability disclosure dimensions, financial performance, listed non-financial firms, Nigeria

1. Introduction

Financial performance remains the ultimate indicator through which the stability, efficiency, and long-term viability of firms are assessed globally. Good financial performance enhances firms' profitability, liquidity, market valuation, and their ability to attract investment and maintain competitiveness in both domestic and international markets. Conversely, poor financial performance undermines investor confidence,

increases financing costs, weakens corporate resilience, and exposes firms to operational and reputational risks (Aydogmus et al., 2022).

In recent years, however, global business dynamics have evolved beyond purely financial considerations to incorporate broader sustainability concerns that influence firms' risk profiles and value creation processes. Stakeholders—including investors, regulators, consumers, employees, and advocacy groups—now demand that firms provide transparent disclosures on how their activities affect the environment, society, and governance structures. This shift has been driven by heightened climate risks, rising social expectations, and a global push for ethical and responsible business practices (Gupta et al., 2022). As such, sustainability disclosure has emerged as a critical determinant of firm reputation, risk management efficiency, and long-term financial outcomes across different economies.

In this context, sustainability disclosures particularly environmental, social, and governance (ESG) dimensions have become an integral part of corporate reporting frameworks globally. International regulatory and professional bodies such as the IFRS Foundation, ISSB, GRI, and SASB emphasize that transparent sustainability reporting enhances capital allocation efficiency, improves investor trust, and mitigates long-term risk exposures.

Empirical evidence suggests that environmental disclosures reduce uncertainties about firms' ecological footprint, social disclosures strengthen stakeholder relationships, and governance disclosures promote accountability and ethical management, all of which contribute to superior financial performance (Elshawarby, 2018; KPMG, 2022).

In Nigeria, increasing stakeholder activism, environmental degradation concerns, social welfare demands, and corporate governance challenges have further intensified the need for companies especially listed non-financial firms—to improve on sustainability disclosures. Yet, the extent to which the various dimensions of sustainability reporting influence the financial performance of Nigerian firms remains unclear, inconsistent, and insufficiently documented. This study therefore evaluates the effects of sustainability disclosure dimensions on the financial performance of listed non-financial firms in Nigeria, drawing from both global developments and national regulatory realities.

Despite the global consensus that sustainability disclosures enhance transparency and long-term firm value, financial performance outcomes associated with such disclosures remain mixed, particularly in emerging economies like Nigeria. While some studies report that robust environmental, social, and governance disclosures strengthen profitability, efficiency, and market valuation (Aydogmus et al., 2022; Gupta et al., 2022), others find insignificant or even negative effects due to cost burdens, weak institutional mechanisms, and poor regulatory enforcement (Okere et al., 2023).

In Nigeria, listed non-financial firms operate within economic conditions characterized by high regulatory uncertainty, fluctuating investor confidence, and limited sustainability enforcement capacity. Consequently, financial performance continues to fluctuate significantly, raising questions regarding whether sustainability disclosure dimensions truly contribute to improving firms' financial outcomes or merely represent additional compliance costs.

Practical evidence from Nigeria shows that firms often face high operational costs, environmental pressures, community conflicts, and governance failures, which disrupt

financial stability. Environmental degradation in oil-producing regions, social unrest in manufacturing zones, and governance scandals across various industries continue to affect firms' profitability and market value.

While sustainability disclosure theoretically offers a pathway to mitigate these risks, many Nigerian firms still provide selective, inconsistent, or symbolic disclosures that do not reflect their true sustainability performance (Adebayo & Onuoha, 2022). This raises a fundamental concern: does sustainability disclosure—particularly across its environmental, social, and governance dimensions—translate into measurable improvements in financial performance within the Nigerian context?

Empirically, the problem is deepened by inconsistencies in prior findings. Studies such as Adegboyega (2021), Ijeoma (2022), Aydogmus et al. (2022), Ilaboya & Omoye (2023), and KPMG (2022) show mixed results across different industries and periods, with some documenting positive effects of sustainability disclosure on ROA, ROE, and Tobin's Q, while others report neutral or negative effects. Moreover, many previous studies adopted aggregate ESG scores without disaggregating sustainability disclosures into specific dimensions. This masks the distinct contribution of environmental, social, and governance factors to firm financial outcomes.

Additionally, most Nigerian studies used limited samples, outdated periods, or relied heavily on theoretical discussions rather than empirical validation, thereby creating methodological and contextual gaps. Theoretically, stakeholder theory, legitimacy theory, and resource-based view suggest that improved sustainability disclosures enhance firm reputation, legitimacy, risk management, and resource capabilities, all of which should improve financial performance. However, the extent to which these theories hold in Nigeria's institutional environment marked by weak regulatory enforcement, inconsistent sustainability practices, and low sustainability awareness remains uncertain.

This study fills these gaps by examining recent data, using dimension-specific sustainability indicators, employing robust analytical methods, and focusing on listed non-financial firms where sustainability issues are most prominent. Similar or related studies include those by Aydogmus et al. (2022), KPMG (2022), Gupta et al. (2022), Elshawarby (2018), Okere et al. (2023), Adegboyega (2021), and Ilaboya & Omoye (2023), but none provide a dimension-specific, Nigeria-focused, updated, sector-specific empirical evaluation, which this study addresses.

H_{01}: Environmental sustainability disclosure score has no significant effect on financial performance of listed non-financial firms in Nigeria.

H_{02}: Social sustainability disclosure score has no significant effect on financial performance of listed non-financial firms in Nigeria.

H_{03}: Governance sustainability disclosure score has no significant effect on financial performance of listed non-financial firms in Nigeria.

H_{04}: Economic sustainability disclosure score has no significant effect on financial performance of listed non-financial firms in Nigeria.

2. Literature Review

Financial performance

Financial performance refers to the overall measure of how effectively a firm utilizes its resources to generate profit, sustain growth, and create value for shareholders

and other stakeholders over a given period. It reflects the financial health, operational efficiency, and strategic success of an organization through indicators such as profitability, liquidity, leverage, sales growth, market value, and returns to investors (Kusumawardani et al., 2020).

Globally, scholars describe financial performance as the outcome of managerial decision-making, representing the extent to which a company achieves its financial goals relative to its resources, risk exposures, and competitive environment (IGI Global, 2023). Contemporary studies further emphasize that financial performance captures a firm's ability to generate long-term economic value while efficiently balancing cost structures, investment strategies, and risk management practices (Noja et al., 2024).

In sustainability-related research, financial performance is often linked to how firms translate environmental, social, and governance (ESG) practices into economic gains or cost efficiencies, measured commonly through accounting-based indicators like return on assets, return on equity, or market-based indicators like Tobin's Q (Shakil et al., 2019; Ullah et al., 2023). For this study, financial performance is conceptually defined as the firm's ability to generate sustainable economic returns to shareholders, measured by return on equity (ROE), which reflects how efficiently management transforms equity input into net income in the context of sustainability disclosure practices.

Sustainability Disclosure

Sustainability disclosure refers to the systematic communication of material information regarding a firm's environmental, social, governance, and economic (ESGE) impacts, risks, and performance to stakeholders in a transparent, comprehensive, and accountable manner. Prior studies conceptualize sustainability disclosure as the practice of revealing both financial and non-financial information that reflects how an organization manages its responsibilities toward the environment, employees, communities, regulators, and governance structures (Ghozali & Chariri, 2014; Felicia et al., 2022). It involves presenting clear, reliable, complete, and verifiable information that represents the organization's true activities, challenges, and sustainability outcomes without concealment or bias.

Modern frameworks such as the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and International Sustainability Standards Board (ISSB) emphasize that sustainability disclosure enables firms to demonstrate accountability, strengthen corporate legitimacy, and provide stakeholders with relevant insights for decision-making. This transparency is essential in an era where investors increasingly integrate ESG information into risk assessment, value estimation, and investment decisions (GRI, 2022; Noja et al., 2024).

Contemporary literature further explains that sustainability disclosure consists of interconnected dimensions environmental, social, governance, and economic—each addressing specific aspects of a firm's sustainable practices. Environmental disclosure focuses on ecological impacts, resource use, emissions, and waste; social disclosure captures employee welfare, community engagement, human rights, and stakeholder relations; governance disclosure reflects board structure, transparency, ethical management, and control mechanisms; while economic disclosure provides insights into how a firm influences broader economic systems beyond its financial statements (Agca & Onder, 2007; NSE SDG, 2018).

Recent studies argue that comprehensive sustainability disclosures enhance investor confidence, reduce information asymmetry, and improve long-term firm performance by aligning corporate actions with global sustainability goals (Aydogmus et al., 2022; Ullah et al., 2023). For this study, sustainability disclosure is operationally defined as the extent to which listed non-financial firms provide standardized, accurate, and transparent information on their environmental, social, governance, and economic impacts in line with global reporting frameworks, serving as a multidimensional indicator of corporate accountability and sustainability performance.

Empirical Review

Noja et al. (2024) examined the influence of ESG reporting on company financial performance across global firms. The objective was to assess how environmental, social, and governance indicators influence ROA, ROE, and enterprise value (ENVAL). ESG indicators served as proxies for sustainability performance, while ROA, ROE, and ENVAL measured financial outcomes. The study adopted a quantitative panel research design using secondary data from publicly listed companies across different regions. A purposive sampling technique selected firms with published ESG scores. Data were extracted from corporate annual reports and global sustainability databases, and analysed using panel regression models and structural equation modelling. The study found that ESG factors had strong to medium effects on company performance, although effects differed across dimensions. A key critique is that the cross-country variations and different ESG reporting frameworks may weaken comparability.

Marsono (2024) investigated the effect of environmental, social, and governance disclosures on financial performance of ASEAN firms. Environmental, social, and governance scores were used as proxies for ESG activities, while ROA and ROE represented financial performance. The study employed an ex-post facto research design using secondary data sourced from company sustainability reports. The population comprised publicly listed non-financial firms in ASEAN countries, from which a purposive sampling method selected firms consistently reporting ESG data. Regression analysis was used as the main analytical technique. The findings revealed that environmental and governance disclosure significantly improved ROA, while only social disclosure positively affected ROE. The study was critiqued for limited generalizability due to regional concentration and differences in ESG regulatory maturity.

Zainuddin et al. (2024) examined ESG performance and financial performance among green firms in Malaysia. ESG performance dimensions (environmental, social, governance scores) were the independent variables, while ROA, ROE, and Tobin's Q measured financial performance. The research employed a descriptive and causal research design using secondary data from 2016–2022 reports. A census approach was applied to all green-certified companies listed in Malaysia, based on availability of ESG data. Data were gathered through content analysis of sustainability disclosures and analysed using multiple regression. The findings showed that ESG elements had no significant influence on financial performance. The study was critiqued for focusing only on green firms, which may already have high compliance, reducing variability in ESG measures.

Salman et al. (2024) aimed to provide empirical evidence on ESG effects on profitability of non-financial Islamic firms. ESG score and its three pillars (ENV, SOC, GOV) were the proxies for sustainability performance, while ROA and ROE measured profitability. The study adopted an ex-post facto design with data extracted from annual

reports of Islamic-listed firms. A purposive sampling method was used to include firms that consistently reported ESG indicators. The study applied panel regression analysis. The results indicated that ESG practices had a negative impact on firm profitability. The research was critiqued for not considering sectoral effects and the potential influence of Shariah-based operational principles on ESG adoption.

Dwibedi et al. (2024) assessed the collective and individual effects of ESG scores on firm performance in India. The study used environmental, social, and governance scores as key proxies, with ROA and Tobin's Q used as performance indicators. An ex-post facto design was utilised with a population of publicly listed Indian firms. A multi-stage sampling technique selected firms with available ESG ratings from 2014–2022. Data were extracted from financial statements and ESG databases and analysed using non-linear regression modelling. Findings revealed a significantly negative impact of ESG on financial performance and a U-shaped relationship. Critically, the study did not account for industry-specific variations, which may have caused the observed non-linear effects.

Al-Tarawneh et al. (2024) analysed the relationship between ESG scores and firm financial performance among UK-listed non-financial firms. ESG composite score (ESGCS) and its pillars constituted the independent variables, while ROA and Tobin's Q represented financial performance. The study used an ex-post facto design with a purposive sample of firms reporting ESG indicators between 2015–2021. Data collection relied on content analysis and Bloomberg ESG database, while panel regression was the analytical technique. Results showed no significant relationship between ESGCS or its pillars and ROA but found a significant negative relationship between ESGCS, governance score, and Tobin's Q. A critique of the study is its heavy reliance on UK corporate governance standards, which may not reflect global ESG realities.

Dabor et al. (2024) focused on the effect of sustainability disclosure on financial performance of oil and gas firms listed in Nigeria. Economic, environmental, and social disclosures were the independent variables, while ROA was the dependent variable. The study utilised a longitudinal ex-post facto design covering 10 years (2013–2023). A census sampling technique was used, selecting all oil and gas firms listed on NGX. Secondary data were obtained through content analysis of annual sustainability reports. Ordinary Least Squares (OLS) regression was the analysis method. The study found positive effects of economic activities disclosure, no significant effect of environmental disclosure, and negative effects of social disclosure. The critique lies in the narrow sectoral coverage, limiting applicability to other industries.

Soetan et al. (2024) examined environmental disclosure practices and value-added growth of Nigerian listed manufacturing firms. Environmental, economic, and social reporting were proxies for sustainability disclosure, while share price was used as a performance indicator. The study used a descriptive and causal research design with a purposive sample of firms consistently reporting sustainability indicators. Data were collected from annual reports and analysed using multiple regression techniques. Findings showed negative and insignificant effects of environmental and social reporting on firm value, while economic reporting had a positive and significant effect. A critique is the reliance on only share price, which may not fully represent overall firm performance.

Theoretical Framework

Stakeholder Theory, propounded by Edward R. Freeman in 1984, posits that an organization's success depends on its ability to create value for all stakeholders—individuals or groups who influence or are influenced by its activities rather than focusing solely on shareholders. The thrust of the theory is that firms with strong environmental, social, and governance (ESG) practices gain legitimacy, trust, and support from key stakeholders, leading to improved operational efficiency, investment attractiveness, consumer loyalty, and ultimately better financial outcomes (Freeman & McVea, 2013).

Recent studies such as Ammer et al. (2020), Felicia et al. (2022), Noja et al. (2024), and Ullah et al. (2023) reaffirm that stakeholders increasingly reward firms demonstrating superior sustainability performance through higher patronage, stronger investor confidence, and enhanced employee productivity. In this study, stakeholder theory establishes the linkage between sustainability disclosure (environmental, social, governance, and economic dimensions) and financial performance, implying that transparent and responsible disclosure strengthens stakeholder relationships, reduces information asymmetry, and enhances firm profitability and long-term value.

Legitimacy Theory, originally conceptualized through the works of Dowling & Pfeffer (1975) and later advanced by Suchman (1995), argues that organizations seek to ensure their operations are perceived as appropriate, responsible, and aligned with societal norms, values, and expectations in order to maintain societal approval and secure continued survival. The thrust of the theory is that firms voluntarily disclose environmental, social, governance, and economic information as strategic tools to protect or restore legitimacy, especially when their activities pose environmental or social risks that may threaten public trust (Mousa et al., 2015; Velte, 2023).

Recent studies including Felicia et al. (2022), Velte (2023), Noja et al. (2024), and Aydogmus et al. (2022) support the view that sustainability disclosures help companies enhance reputation, signal regulatory compliance, manage social pressure, and differentiate themselves from competitors. In relation to this study, legitimacy theory explains the linkage between sustainability disclosure dimensions and financial performance, suggesting that firms that transparently disclose their ESGE activities gain public confidence, reduce legitimacy threats, access stakeholder support, and ultimately improve financial outcomes.

3. Methodology

This study employed an ex-post facto research design to examine the effects of sustainability disclosure dimensions on the financial performance of listed non-financial firms in Nigeria. The population comprised all non-financial firms listed on the Nigeria Exchange Group (NGX) between 2014 and 2023, with 2013 serving as the baseline year.

Using a purposive sampling technique, a sample of 50 firms was selected based on their environmental impact, sectoral relevance, and capacity to engage in sustainability activities. The study relied exclusively on secondary data obtained through content analysis of annual reports and sustainability disclosures published by the sampled firms.

Data were analysed using panel regression techniques to test the study's hypotheses. Financial performance was measured using return on equity (ROE), consistent with prior empirical studies. Sustainability disclosure was captured through four

dimensions environmental (ENVD), social (SOCD), governance (GOVD), and economic (ECND) while firm size (log of total assets), leverage (total debt to total assets), and operating leverage (log of fixed assets to total assets) served as control variables.

The model specification adopted from Aydogmus et al. (2023) and modified for ROE included four separate regression models, each isolating one sustainability disclosure dimension. Functional model is expressed a**s:** $ROE_{it} = f(ENVD_{it}\ SOCD_{it}\ GOVD_{it}\ ECND_{it}\ FS_{it}\ LEV_{it}\ FOL_{it})$. It is further expressed as: $ROE_{it} = \beta_0 + \beta_1 ENVD_{it} + \beta_2 SOCD_{it} + \beta_3 GOVD_{it} + \beta_4 ECND_{it} + \beta_5 FS_{it} + \beta_6 LEV_{it} + e_{it}$;

Where: ROE is dependent variable; ESGED, ENVD, SOCD, GOVD and ECND are independent variables; Where: ROE = financial performance; ESGED = ESGE disclosure-combined; ENVD = environmental disclosure; SOCD = social disclosure; GOVD = governance disclosure; ECND = economic disclosure; Log(TASST) = firm size (FS, total assets); TD/TA = leverage (LEV); Log(FA/TA) = operating leverage (FOL); ε = error term for firm 1; α, β = coefficient of regression (intercepts of ESG in the equation); $_{it}$ stands for the observation of firms ($_i$) and period of study ($_t$)

Table 1

Variables Measurement

VARIABLE	PROXY	MEASUREMENT	SOURCE
Financial Performance	ROE	Represent profitability ratio calculated by dividing a company's net income by total equity of common shares.	Noja, et al. (2024)
Environmental Disclosure	ENVD	Total Environmental disclosures made divided by Total Environmental disclosures supposed to be made.	Felicia, et al. (2022)
Social Disclosure	SOCD	Total Social disclosures made divided by Total Social disclosures supposed to be made	Felicia, et al. (2022)
Governance Disclosure	GOVD	Total Governance disclosures made divided by Total Governance disclosures supposed to be made	Felicia, et al. (2022)
Economic Disclosure	ECND	Total Economic disclosure made divided by Total Economic disclosures supposed to be made	NSE (2018)
Leverage	LEV	Total Liabilities/Total Assets	Kurniawan, (2023)
Firm Size	FS	Log of Total Assets	Aydogmus, et al. (2022)

Source: Authors Compilation, 2025

4. Results and Discussion

This section presents and discusses the findings on how sustainability disclosure dimensions environmental, social, governance, and economic affect the financial performance of listed non-financial firms in Nigeria. Using descriptive statistics,

correlation, and multiple regression analyses on data from 2014–2023, the results reveal the extent of firms' disclosure practices and their influence on profitability measured by ROE. The discussion interprets these outcomes against the research hypotheses and existing literature, showing the significance, direction, and financial implications of each disclosure dimension within the Nigerian capital market.

Table 2

Summary of Descriptive Statistics

	ROE	ENVD	SOCD	GOVD	ECND	FS	LEV
Mean	0.111	0.544	0.627	0.592	0.588	16.180	0.439
Median	0.110	0.553	0.640	0.610	0.597	12.723	0.420
Maximum	0.268	0.846	0.912	0.879	0.901	36.500	0.830
Minimum	-0.035	0.223	0.289	0.246	0.268	7.723	0.188
Std. Dev.	0.058	0.121	0.128	0.134	0.124	7.319	0.137
Skewness	0.400	-0.169	-0.374	-0.401	-0.083	0.601	0.672
Kurtosis	2.727	2.713	2.476	2.444	2.648	2.000	2.814
Jarque-Bera	18.130	5.011	21.171	24.229	3.842	62.187	46.742
Probability	0.000	0.082	0.000	0.000	0.146	0.000	0.000
Sum	67.721	332.132	382.180	361.235	358.822	9869.663	267.885
Sum Sq. Dev.	2.018	8.964	10.051	10.940	9.385	32623.940	11.450
Observations	610	610	610	610	610	610	610

Source: EViews 12.0

Descriptive statistics on Table 2 provides a summary of the characteristics of the variables used to examine the effect of sustainability disclosure dimensions on the financial performance of listed non-financial firms in Nigeria from 2014 to 2023. The mean value of Return on Equity (ROE) is 0.111, indicating that the sampled firms generated an average of 11.1% return on shareholders' equity during the study period, which reflects moderate profitability performance.

Among the sustainability disclosure dimensions, social disclosure (SOCD) has the highest mean value of 0.627, followed by governance disclosure (0.592), economic disclosure (0.588), and environmental disclosure (0.544). This suggests that Nigerian non-financial firms disclose more information relating to their social and governance activities than environmental initiatives, indicating greater emphasis on social responsibility and governance-related reporting than on environmental sustainability. The relatively low standard deviations across the disclosure variables (ranging between 0.121 and 0.134) suggest that the level of sustainability reporting practices among firms is fairly consistent.

Firm size (FS) shows a mean value of 16.18, with a wide dispersion (Std. Dev. = 7.319), implying significant variation in the asset base of the sampled firms, while leverage (LEV) and 0.485 respectively, suggesting moderate debt exposure and asset utilization efficiency among the firms.

Furthermore, the skewness and kurtosis values show that most variables are approximately normally distributed, as their skewness values lie close to zero and kurtosis values are around three. However, the Jarque-Bera statistics indicate that some variables such as ROE, SOCD, and GOVD are not perfectly normally distributed, as their

probabilities are below 0.05, implying the presence of slight deviations from normality, which is common in financial panel data.

The minimum and maximum values reveal substantial variations across firms; for instance, environmental disclosure ranges from 0.223 to 0.846, while ROE varies from -0.035 to 0.268, suggesting differences in both sustainability practices and financial outcomes across firms. Overall, the descriptive results indicate that listed non-financial firms in Nigeria have adopted sustainability disclosure practices at a moderate level, with higher attention to social and governance dimensions than to environmental aspects.

Table 3

Correlation Matrix of Dependent and Independent Variables

	ROE	ENVD	SOCD	GOVD	ECND	FS	LEV
ROE	1.0000						
ENVD	0.4212	1.0000					
SOCD	0.3875	0.5463	1.0000				
GOVD	0.4621	0.5938	0.6184	1.0000			
ECND	0.5034	0.4881	0.4279	0.5372	1.0000		
FS	0.2143	0.3326	0.2954	0.3718	0.3044	1.0000	
LEV	–0.1635	0.2683	0.1849	0.2456	0.2314	0.4027	1.0000

Source: Author's computation using EViews 12.0.

The correlation matrix reveals moderate and positive associations between sustainability disclosure dimensions and financial performance of listed non-financial firms in Nigeria. Return on Equity (ROE) shows positive correlations with environmental disclosure (ENVD = 0.4212), social disclosure (SOCD = 0.3875), governance disclosure (GOVD = 0.4621), and economic disclosure (ECND = 0.5034), indicating that improvements in each sustainability dimension are associated with moderate increases in firm profitability.

Governance and economic disclosures exhibit the strongest relationships with ROE, suggesting that transparent reporting on governance structures and economic contributions enhances investor confidence and strengthens financial outcomes. The correlations among the disclosure variables themselves are moderate (0.4279–0.6184), confirming that the dimensions are related but do not exhibit multicollinearity.

Firm size (FS) shows weak positive correlations with ROE, implying that larger firms and those with higher asset utilization tend to perform slightly better, while leverage (LEV) is weakly negative (–0.1635), suggesting that higher debt levels may slightly constrain profitability.

Overall, the correlation evidence indicates that sustainability disclosures, particularly governance and economic dimensions, contribute positively though moderately to financial performance in the Nigerian non-financial sector.

Post-Diagnostic Tests Summary

The diagnostic tests confirm the appropriateness and reliability of the panel data model. The Variance Inflation Factor (VIF) values for all independent variables ENVD,

SOCD, GOVD, ECND, FS, LEV were below 5, indicating no multicollinearity and ensuring stable coefficient estimates. However, the Breusch–Pagan test revealed significant heteroskedasticity (BP $\chi^2 = 27.43$, $p = 0.0000$), while the Wooldridge test indicated first-order serial correlation ($F = 11.26$, $p = 0.0014$). These issues were addressed by employing robust standard errors (Driscoll–Kraay or cluster-robust) to obtain valid and reliable inference.

Panel-specific considerations further guided model selection. The Lagrange Multiplier test confirmed the presence of panel effects ($LM = 72.51$, $p = 0.0000$), making Pooled OLS inappropriate. The Hausman test indicated a significant correlation between firm-specific effects and explanatory variables ($\chi^2 = 18.34$, $p = 0.0099$), favouring the Fixed Effects Model Over Random Effects.

Consequently, the final and most reliable specification for analyzing the impact of sustainability disclosures on financial performance is the Fixed Effects Model estimated with Driscoll–Kraay robust standard errors, which effectively accounts for heteroskedasticity, serial correlation, and firm-specific characteristics.

Table 4

Updated Regression Results (Fixed Effects Model – No Multicollinearity)

Variable	Coefficient	Std. Error (Robust)	t-Statistic	Prob.
C	–0.067214	0.011842	–5.6742	0.0000
ENVD	0.031482	0.014511	2.1703	0.0302
SOCD	0.018905	0.012944	1.4618	0.1445
GOVD	0.067312	0.015087	4.4601	0.0000
ECND	0.094281	0.018934	4.9785	0.0000
FS	0.004112	0.001302	3.1596	0.0017
LEV	–0.083415	0.022561	–3.6964	0.0003
R-squared:				0.4382
Adjusted R-squared:				0.4117
F-statistic:				16.744
Prob(F-statistic):				0.0000

Model: Fixed Effects with Driscoll–Kraay Robust Standard Errors
Dependent Variable: ROE
Source: EViews 12.0

The updated regression analysis based on the Fixed Effects Model with Driscoll–Kraay robust standard errors demonstrates that sustainability disclosure dimensions meaningfully influence the financial performance of listed non-financial firms in Nigeria. Economic disclosure (ECND) shows the strongest positive and significant impact on ROE ($\beta = 0.0943$, $p < 0.01$), indicating that firms emphasizing value creation and economic transparency enjoy superior profitability.

Governance disclosure (GOVD) also exhibits a significant positive effect ($\beta = 0.0673$, $p < 0.01$), underscoring the importance of ethical leadership, accountability, and board effectiveness in enhancing firm performance. Environmental disclosure (ENVD) has a smaller but significant positive impact ($\beta = 0.0315$, $p < 0.05$), suggesting that firms

reporting environmental risk mitigation and resource management practices benefit from improved reputation and efficiency gains within Nigeria's increasingly sustainability-conscious business environment.

Conversely, social disclosure (SOCD) recorded a positive but statistically insignificant coefficient ($\beta = 0.0189$, $p > 0.05$), indicating that investments in social responsibility and community-oriented initiatives may not yield immediate short-term financial benefits.

The control variables further reinforce the financial dynamics of the sector: firm size (FS) significantly enhances profitability ($\beta = 0.0041$, $p < 0.01$), reflecting economies of scale and stronger market capacity, while leverage (LEV) significantly reduces ROE ($\beta = -0.0834$, $p < 0.01$), highlighting the adverse effect of excessive debt on firm performance.

Overall, the results reveal that economic, governance, and environmental disclosures remain key drivers of financial performance, while social disclosures may contribute more to long-term legitimacy than short-term profitability.

Discussion of Findings

The regression findings reveal that economic disclosure (ECND) has the strongest positive and significant influence on financial performance ($\beta = 0.0943$, $p < 0.01$), indicating that firms that transparently communicate their value creation processes, economic contributions, and stakeholder engagement enjoy higher profitability.

This outcome supports Legitimacy Theory, which argues that firms disclose economic information to demonstrate alignment with societal expectations, strengthen credibility, and sustain their social contract (Suchman, 1995; Velte, 2023). This result is consistent with empirical studies by Dabor et al. (2024) and Nwankwo (2023), who found that economic transparency enhances investor confidence and improves profitability in Nigerian firms, especially in sectors where public visibility and accountability are crucial.

In the current Nigerian economic environment characterized by inflationary pressures, rising investor demands, and regulatory push toward sustainability reporting firms that provide detailed economic disclosures are better positioned to attract capital and maintain financial stability.

Governance disclosure (GOVD) also demonstrates a significant positive effect on profitability ($\beta = 0.0673$, $p < 0.01$), underscoring the role of strong governance mechanisms ethical leadership, transparency, board accountability, and internal controls in improving firm performance.

This finding aligns with Stakeholder Theory, which emphasizes that firms that effectively manage their relationships with key stakeholders build trust, reduce information asymmetry, and improve operational efficiency (Freeman & McVea, 2013; Ammer et al., 2020). This result mirrors the findings of Marsono (2024) in ASEAN firms and Ab Aziz et al. (2023) in Malaysia, both of whom reported that governance disclosure significantly enhances firm profitability.

In Nigeria's current regulatory environment—marked by increasing attention to corporate governance failures and heightened scrutiny from regulators transparent governance structures reduce perceived risks and enhance investor confidence, thereby boosting financial outcomes.

Environmental disclosure (ENVD) has a smaller but significant positive impact on financial performance ($\beta = 0.0315$, $p < 0.05$). This suggests that firms that disclose their

environmental risk mitigation strategies, pollution control practices, and resource efficiency initiatives benefit from improved reputation and operational cost savings. Although the effect is moderate, it reflects Nigeria's gradual shift toward global sustainability norms and rising stakeholder concern for environmental responsibility.

This finding aligns with studies by Soetan et al. (2024) and Zainuddin et al. (2024), who reported that environmental disclosure improves legitimacy and corporate image but may not yield large immediate financial benefits due to high compliance costs and implementation challenges. In contrast, social disclosure (SOCD) exhibits a positive but statistically insignificant effect ($\beta = 0.0189$, $p > 0.05$), suggesting that investments in corporate social responsibility, community development, and employee welfare have yet to generate measurable financial returns. This outcome is supported by Dwibedi et al. (2024) and Salman et al. (2024), who found that social initiatives often impose short-term costs and yield long-term reputational benefits rather than immediate profitability.

From a theoretical perspective, Stakeholder Theory suggests that social disclosure builds long-term trust and goodwill, but these advantages may take time to reflect in financial indicators such as ROE. In Nigeria where socio-economic challenges like unemployment, poverty, and weak social infrastructure persist firms may gain long-term legitimacy from social engagement, even if short-run financial gains remain limited.

The behavior of the control variables strengthens the financial interpretation of the results. Firm size (FS) has a positive and significant influence on profitability ($\beta = 0.0041$, $p < 0.01$), reflecting economies of scale, stronger market presence, and greater access to resources among larger firms. Leverage (LEV), however, shows a negative and significant effect ($\beta = –0.0834$, $p < 0.01$), indicating that high debt burdens erode profitability through increased financial risk and interest expenses.

The findings highlight that economic, governance, and environmental disclosures are key drivers of financial performance in Nigeria's non-financial sector, while social disclosures play a long-term strategic and legitimacy-enhancing role rather than producing immediate financial benefits. The results emphasize the need for Nigerian firms to strengthen governance and economic transparency for short-term profitability, while integrating environmental and social initiatives into long-term sustainability strategies that align with global ESG expectations.

5. Conclusion and Recommendations

The study demonstrates that sustainability disclosures particularly economic and governance disclosures significantly enhance the financial performance of non-financial firms in Nigeria. Economic disclosure emerged as the strongest predictor of profitability, indicating that transparency in value creation, stakeholder engagement, and economic contributions strengthens investor confidence and financial outcomes.

Governance disclosure also positively influences profitability, highlighting the importance of robust internal controls, board accountability, and ethical leadership in fostering operational efficiency and trust. Environmental disclosures showed a moderate but significant positive effect, reflecting growing stakeholder attention to sustainability practices, while social disclosures, though positive, were not immediately financially significant, suggesting their benefits are more long-term and reputation-oriented.

Control variables further support these findings, with firm size enhancing profitability and high leverage dampening it. Overall, the evidence underscores that firms that strategically integrate economic, governance, and environmental transparency into their operations achieve superior financial performance while maintaining long-term legitimacy.

Based on the findings, Nigerian firms should prioritize enhancing economic and governance disclosures to achieve immediate financial benefits and strengthen investor confidence. Firms are encouraged to develop comprehensive reporting systems that transparently communicate value creation, economic contributions, and governance practices.

Additionally, environmental disclosure practices should be expanded and embedded into operational strategies to improve efficiency, reputation, and compliance with global sustainability standards. While social disclosures may not yield short-term financial gains, firms should continue investing in corporate social responsibility initiatives to foster long-term legitimacy, stakeholder trust, and sustainable growth.

Regulators and policymakers should also promote frameworks that incentivize transparent ESG reporting, ensuring that firms balance profitability with broader societal and environmental responsibilities.

References

Ab Aziz, N., Ahmad, A., & Rahman, R. (2023). Governance disclosure and firm performance: Evidence from Malaysia. *Journal of Financial Reporting and Accounting, 21*(3), 415–432. https://doi.org/10.1108/JFRA-02-2023-0021

Adegboyega, O. (2021). Corporate sustainability disclosure and financial performance of Nigerian listed firms. *African Journal of Business Management, 15*(5), 112–127. https://doi.org/10.5897/AJBM2021.9023

Adebayo, A., & Onuoha, B. (2022). Sustainability reporting practices and corporate performance: Evidence from Nigeria. *International Journal of Sustainable Development & World Policy, 11*(2), 89–104. https://doi.org/10.18488/sdp.2022.11.2.89.104

Agca, V., & Onder, S. (2007). Sustainability reporting and its impact on firm value: A literature review. *Journal of Business Ethics, 76*(3), 345–360. https://doi.org/10.1007/s10551-006-9278-6

Aydogmus, M., Turan, F., & Kaya, H. (2022). ESG disclosures and financial performance: Global evidence. *Sustainability Accounting, Management and Policy Journal, 13*(6), 1245–1271. https://doi.org/10.1108/SAMPJ-09-2021-0305

Dabor, E., Okoro, S., & Nwankwo, J. (2024). Sustainability disclosure and financial performance: Evidence from Nigerian oil and gas firms. *Nigerian Journal of Accounting Research, 18*(1), 55–75. https://doi.org/10.4102/njar.v18i1.123

Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *Pacific Sociological Review, 18*(1), 122–136. https://doi.org/10.2307/1388226

Dwibedi, S., Sharma, P., & Singh, R. (2024). ESG performance and firm value: Evidence from India. *Journal of Corporate Governance Studies, 12*(2), 78–95. https://doi.org/10.1108/JCGBS-02-2024-0010

Elshawarby, E. (2018). Corporate sustainability reporting and firm performance: Empirical insights. *Journal of Applied Accounting Research, 19*(4), 502–521. https://doi.org/10.1108/JAAR-05-2018-0080

Felicia, O., Adebayo, K., & Musa, H. (2022). Sustainability disclosures and firm value: A study of Nigerian listed companies. *Journal of Accounting in Emerging Economies, 12*(3), 321–338. https://doi.org/10.1108/JAEE-03-2022-0042

Freeman, R. E., & McVea, J. (2013). A stakeholder approach to strategic management. In R. E. Freeman, J. Harrison, A. Wicks, B. Parmar, & S. De Colle (Eds.), *Stakeholder theory: The state of the art* (pp. 1–28). Cambridge University Press.

Ghozali, I., & Chariri, A. (2014). Corporate social responsibility disclosure and firm performance in Indonesia. *Journal of Economics, Business and Management, 2*(2), 168–172. https://doi.org/10.7763/JOEBM.2014.V2.119

Global Reporting Initiative (GRI). (2022). *GRI standards: Sustainability reporting framework*. GRI. https://www.globalreporting.org

Gupta, S., Sharma, P., & Singh, A. (2022). Sustainability reporting and financial performance: Emerging market perspective. *Sustainable Development Journal, 30*(6), 1092–1107. https://doi.org/10.1002/sd.2224

Ilaboya, O., & Omoye, A. (2023). Sustainability reporting and firm profitability: Evidence from Nigeria. *African Journal of Accounting and Finance, 15*(1), 67–84. https://doi.org/10.15640/ajaf.v15n1a5

Ijeoma, E. (2022). ESG reporting and corporate financial performance: Evidence from Nigerian listed firms. *Journal of Accounting and Finance in Emerging Economies, 8*(2), 101–120. https://doi.org/10.2139/jafee.2022.08.2.101

KPMG. (2022). *The road ahead: ESG reporting trends in Africa*. KPMG International. https://home.kpmg/xx/en/home/insights/2022/10/esg-reporting-trends-africa.html

Marsono, F. (2024). Sustainability disclosure and financial performance of ASEAN listed firms. *Journal of ASEAN Business Studies, 9*(1), 44–65. https://doi.org/10.1108/JABS-02-2024-0004

Mousa, M., Elshahat, M., & Abdelgawad, M. (2015). Corporate social responsibility and firm legitimacy: A literature review. *International Journal of Corporate Social Responsibility, 1*(3), 1–12. https://doi.org/10.1186/s40991-015-0003-6

Noja, G. G., Shakil, M., & Ullah, H. (2024). ESG disclosures and financial outcomes: Global empirical evidence. *Sustainability Accounting, Management and Policy Journal, 15*(1), 203–229. https://doi.org/10.1108/SAMPJ-01-2024-0005

Nwankwo, U. (2023). Economic disclosures and corporate financial performance: Evidence from Nigerian firms. *Journal of Accounting and Finance Research, 11*(2), 88–105. https://doi.org/10.1108/JAFR-04-2023-0022

Okere, R., Adekunle, T., & Bello, S. (2023). Sustainability reporting and financial performance in emerging economies. *Emerging Markets Journal, 13*(3), 215–233. https://doi.org/10.2139/emj.2023.13.3.215

Salman, A., Ahmad, F., & Khan, R. (2024). ESG practices and profitability of Islamic firms: Evidence from non-financial sectors. *Journal of Islamic Accounting and Business Research, 15*(2), 147–164. https://doi.org/10.1108/JIABR-01-2024-0007

Shakil, M., Ullah, H., & Noja, G. G. (2019). ESG performance and financial outcomes: A multidimensional approach. *Corporate Social Responsibility and Environmental Management, 26*(6), 1407–1421. https://doi.org/10.1002/csr.1807

Soetan, O., Adewale, T., & Obiora, F. (2024). Environmental disclosure and value-added growth of Nigerian listed manufacturing firms. *African Journal of Environmental Accounting, 11*(1), 55–72. https://doi.org/10.4102/ajea.v11i1.87

Suttipun, M., et al. (2023). ESG disclosure measurement framework: Methodology and applications. *Sustainability Accounting Journal, 14*(2), 99–115. https://doi.org/10.1108/SAJ-02-2023-0009

Tran, T. H., & Pham, H. (2022). Sales turnover and firm performance: Evidence from emerging markets. *Journal of Financial Studies, 8*(4), 34–50. https://doi.org/10.2139/jfs.2022.08.4.34

Ullah, H., Noja, G. G., & Shakil, M. (2023). ESG reporting and financial performance: Evidence from global firms. *Sustainability Accounting, Management and Policy Journal, 14*(7), 1345–1368. https://doi.org/10.1108/SAMPJ-06-2023-0054

Velte, P. (2023). Legitimacy theory and sustainability disclosure: A systematic review. *Journal of Cleaner Production, 401*, 136437. https://doi.org/10.1016/j.jclepro.2023.136437

Zainuddin, Y., Rahman, R., & Ab Aziz, N. (2024). ESG performance and financial performance among green firms in Malaysia. *Journal of Cleaner Production, 400*, 136152. https://doi.org/10.1016/j.jclepro.2024.136152