

MODERATING ROLE OF ESG DISCLOSURE IN THE RELATIONSHIP BETWEEN BOARD DIVERSITY AND FINANCIAL PERFORMANCE: EVIDENCE FROM THE FINANCIAL SERVICES SECTOR

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Abstract

Despite increasing efforts to improve corporate governance in emerging markets, financial institutions in Nigeria continue to face inconsistent financial performance, largely due to underutilized board diversity and weak ESG disclosure practices. This study investigates the moderating effect of Environmental, Social, and Governance (ESG) disclosure on the relationship between board diversity and financial performance among Nigerian financial institutions. The objective is to determine whether ESG disclosure enhances the impact of board diversity on firm profitability, measured by Return on Assets (ROA). An ex post facto research design was employed, using panel data from 28 listed financial institutions on the Nigerian Exchange Group (NGX) between 2018 and 2023. A census sampling method with data filters was applied. Descriptive statistics, correlation analysis, diagnostic tests, and panel regression models (fixed effects) were utilized for analysis. Findings revealed that board diversity has a positive and significant effect on financial performance. ESG disclosure also showed a statistically significant positive effect on ROA. More importantly, the interaction term between board diversity and ESG disclosure was significant, indicating that ESG practices strengthen the positive impact of board heterogeneity on firm performance. The study concludes that diverse boards and transparent ESG reporting are both critical drivers of profitability in Nigeria's financial sector. It recommends that regulators enforce board diversity mandates, standardize ESG disclosure frameworks, and encourage firms to integrate ESG strategies within board-level governance.

Keywords: Board Diversity, ESG Disclosure, Financial Performance, ROA, Nigerian Financial Institutions, Corporate Governance, Panel Regression

1.0 Introduction

Financial performance remains a central benchmark for evaluating the strategic direction and health of business enterprises, especially in emerging economies. Globally, return on assets (ROA) continues to serve as a reliable indicator of how efficiently firms utilize their assets to generate earnings. However, shifts in regulatory expectations, stakeholder interests, and sustainability imperatives are rapidly altering the performance landscape. In today's global market, financial returns are no longer isolated from governance structures, ethical disclosures, and boardroom dynamics. Across regions, firms are increasingly pressured to align corporate performance with long-term, sustainable value creation through transparent governance practices.

In this dynamic environment, the roles of corporate governance and Environmental, Social, and Governance (ESG) disclosures have become particularly pronounced. Research suggests that ESG integration positively correlates with operational and market outcomes when supported by robust governance structures (Bassey, Falack, & Adiga, 2023). Multinational institutions now expect transparency in ESG practices to safeguard investor confidence and stakeholder trust. In developing countries like Nigeria, the movement toward ESG consciousness is growing, although implementation remains uneven across sectors. This gap presents an opportunity to

explore how disclosure standards, especially within the context of ESG, influence the financial outcomes of Nigerian firms.

As organizations strive to balance financial imperatives with responsible governance, board composition plays a vital role in shaping these outcomes. Board diversity encompassing gender, ethnicity, age, and professional background enhances decision-making quality and reduces groupthink. Studies show that diverse boards improve the quality of sustainability disclosures and align governance strategies with performance goals (Yahaya, Salihu, & Gboyega, 2024). The representation of diverse voices on corporate boards has also been linked to more comprehensive ESG reporting, which in turn fosters better financial outcomes. In the Nigerian context, firms that strategically integrate diverse governance boards report improved ROA, particularly when these boards are empowered to influence ESG disclosure practices (Akpan & Nkpodot, 2025).

Nigeria's financial sector is critical to the national economy, yet it faces unique challenges including regulatory uncertainties, weak investor protection mechanisms, and governance inconsistencies. Despite having some of the largest financial institutions in West Africa, the sector is characterized by underwhelming returns compared to global counterparts. Several studies confirm that governance inefficiencies contribute to inconsistent ROA trends across Nigerian firms (Bala & Ibrahim, 2022). While board diversity has improved incrementally, questions remain regarding its practical influence on performance outcomes. In particular, limited ESG transparency weakens the ability of board diversity to drive firm value, revealing a significant moderation gap that merits deeper inquiry.

Recent empirical findings further establish that ESG disclosure does not act in isolation but interacts with board structures to influence financial performance. Evidence from Nigeria suggests that ESG transparency significantly amplifies the effect of board attributes such as gender and professional experience on ROA (Oladutire, 2023). Furthermore, in highly regulated sectors like finance, where trust and accountability are paramount, ESG disclosures serve not only as reputational tools but as functional mechanisms for strengthening internal controls. Firms with more open ESG reporting frameworks often experience greater investor confidence, translating to enhanced asset returns and long-term financial stability (Michael, 2024).

Interestingly, the link between board diversity and financial performance is neither direct nor uniform. Studies have highlighted that the benefits of a diverse boardroom are conditional upon an environment that encourages disclosure and transparency (Bala & Ibrahim, 2022). In sectors where ESG disclosures are sparse or inadequately enforced, the potential advantages of board diversity may be muted. This is particularly relevant in the Nigerian financial context, where some institutions demonstrate strong governance reforms but lack ESG disclosure compliance. Consequently, understanding how ESG disclosure moderates the impact of board diversity on firm profitability becomes essential for both policymakers and practitioners.

Although prior research has examined ESG disclosures and board diversity as independent constructs, fewer studies have explored the interaction between the two in shaping firm-level financial outcomes in emerging markets. The Nigerian setting presents a compelling case, given its complex governance environment and increasing investor demand for sustainable practices. The financial services sector, with its regulatory pressure and data-rich infrastructure, provides an ideal context to investigate this interaction. Moreover, the ROA metric offers a practical lens

through which firms' internal efficiency and governance effectiveness can be examined in tandem (Bassey et al., 2023).

Despite mounting evidence that board diversity enhances corporate performance and that ESG disclosure reinforces stakeholder confidence, the Nigerian financial services sector still grapples with inconsistencies in profitability and disclosure practices. While firms have begun to adopt more inclusive board structures, the absence of consistent ESG transparency undermines the potential of these governance reforms. Moreover, existing performance gaps highlight that board diversity alone may not suffice in improving ROA unless moderated by robust ESG reporting standards. This points to a critical gap in both research and practice that demands focused attention.

This study addresses the unresolved question of whether ESG disclosure serves as an effective moderator in the relationship between board diversity and financial performance, specifically measured by ROA. By focusing on financial institutions in Nigeria, the research aims to provide timely insights into how inclusive governance structures, when aligned with transparent ESG practices, can drive superior asset utilization and long-term profitability. This study seeks to bridge the practical disconnect between governance reforms and financial outcomes in one of Africa's most strategically significant sectors. It is against this backdrop that the study tests the following hypothesis:

H₀₁: Board diversity has no significant effect on financial performance of Nigerian financial institutions.

H₀₂: ESG disclosure has no significant effect on financial performance of Nigerian financial institutions.

H₀₃: ESG disclosure does not significantly moderate the relationship between board diversity and financial performance of Nigerian financial institutions.

2.0 Literature Review

Financial performance remains a critical measure of a firm's operational effectiveness, particularly in sectors where efficiency and governance are closely linked. Scholars have conceptualized it through multiple indicators such as return on assets (ROA), return on equity (ROE), and Tobin's Q, yet ROA remains widely adopted for its ability to reflect internal efficiency in asset utilization (Hassan & Ogundipe, 2023; Ezeani, 2021). In the African context, particularly Nigeria, ROA has proven relevant in evaluating how well firms convert their asset base into net earnings, especially in regulated sectors like banking and insurance (Okoye & Ezenwakwelu, 2022; Akanbi & Salau, 2024). Studies also emphasize that ROA is less prone to market volatility compared to market-based metrics, making it preferable in developing economies (Abubakar & Bello, 2020; Adebayo & Amos, 2023). Recent literature further supports ROA as a reliable proxy for financial performance due to its objectivity and consistency in firm-level analysis (Nwokolo & Ugoani, 2023; Ahmed & Danjuma, 2022). Moreover, it enables fair comparison across firms with varying capital structures, which is crucial in multi-firm sectoral studies (Onuoha, 2021; Tobi & Fagbenro, 2023). Given its empirical validity and alignment with past governance-performance research, this study adopts Return on Assets

(ROA) as the measure of financial performance, defined as the ratio of net income to total assets, a representation of a firm's ability to generate earnings from its asset base.

Concept of Board Diversity

Board diversity has become a central pillar of modern corporate governance, recognized for its potential to enhance strategic oversight, stakeholder inclusiveness, and decision-making quality. It is typically conceptualized as the degree of heterogeneity among board members based on observable and non-observable traits such as gender, age, ethnicity, professional background, tenure, and educational diversity (Afriyie & Tipong-Annor, 2025). In emerging markets like Nigeria, gender diversity has been a predominant focus, though broader demographic and experiential differences are gaining attention due to their influence on board effectiveness and firm outcomes (Otovesu, 2025). Recent studies argue that diverse boards are more likely to challenge management decisions, minimize groupthink, and promote transparency, especially when firms are exposed to reputational risks (Hollobon, Hughes, & Williams, 2025). Empirical findings from African banking institutions also suggest that diversity contributes to enhanced monitoring and reduced insolvency risk (Afriyie & Tipong-Annor, 2025). Furthermore, diversity in cognitive perspectives enhances responsiveness to ESG concerns and stakeholder expectations, aligning corporate behavior with sustainable development goals (Yanney, 2025). The dynamic nature of board diversity in the African governance context has also been linked with regulatory compliance and ethical leadership performance (Georgiou, 2025). This study adopts board diversity as a multi-dimensional construct, primarily operationalized through gender diversity, age range, and educational background of board members, consistent with governance literature in financial institutions across emerging economies.

Concept of ESG Disclosure

Environmental, Social, and Governance (ESG) disclosure has emerged as a critical mechanism for corporate accountability, transparency, and sustainable development, particularly in developing economies. ESG disclosure is conceptualized as the extent to which firms publicly report non-financial information related to environmental practices, social responsibility, and governance frameworks (Akanbi & Salau, 2024). In Nigeria and other African countries, regulatory pressure, investor expectations, and international benchmarking have gradually increased the emphasis on ESG transparency (Onuoha & Okeke, 2021). ESG disclosure is often viewed not only as a compliance tool but also as a strategic communication medium that enhances investor trust, stakeholder engagement, and firm reputation (Ajide & Lawal, 2022). Moreover, recent studies suggest that ESG disclosure plays a moderating role by reinforcing the effectiveness of internal governance structures such as board diversity and ethical oversight (Adebayo & Amos, 2023). Companies with higher ESG reporting quality are better positioned to signal long-term risk management and resilience to institutional investors, particularly in volatile economic environments like Nigeria (Akinyemi, 2023). As a result, firms in the financial services sector are increasingly incorporating ESG metrics into annual and sustainability reports to align with global standards and attract capital (Abubakar & Bello, 2020). For the purpose of this study, ESG disclosure is conceptualized as the degree to which a firm publicly reports standardized information on its environmental impact, social initiatives, and governance practices, particularly in line with global benchmarks such as GRI or SASB.

Empirical Review

Board Diversity and Financial Performance

Recent empirical investigations increasingly highlight the detailed relationship between board diversity and financial performance in emerging markets. In their study of Nigerian oil and gas firms, Gbenga and Bot (2025) found that gender and nationality diversity on corporate boards improved sustainability-related disclosures, which indirectly enhanced financial outcomes. Similarly, Mshana, Dendula, and Marwa (2025) discovered that a heterogeneous board composition contributes positively to financial performance across East African listed companies by fostering innovation and reducing groupthink. Leon, Jati, and Haitsam (2025) supported this claim in their assessment of consumer non-cyclical firms, noting that age and gender diversity were significantly linked to profitability and operational efficiency. Further emphasizing the value of inclusive governance, Steenkamp and Terblanche (2025) examined post-King IV reforms in South Africa and concluded that increased board diversity was associated with improved sustainability and financial metrics. In Ghana, Tipong-Annor and Afriyie (2025) found a direct relationship between board gender diversity and lower insolvency risk, suggesting better financial control and monitoring. Likewise, Shanikat and Aldabbas (2025), in a study from Jordan, confirmed that diverse audit committees enhance fraud detection, thereby safeguarding financial performance. In a pan-African banking context, Saka and Zhang (2025) observed that board diversity significantly improved return on assets, especially in deposit money banks across Sub-Saharan Africa. Extending to the MENA region, Kateb (2025) found that gender-diverse boards significantly enhanced financial outcomes by aligning profitability with sustainability practices. Hasan (2025) argued that board diversity plays a critical role in shaping ESG strategies that, in turn, influence firm value across ASEAN economies. Moreover, Almulhim and Metwally (2025), studying Saudi financial firms, demonstrated that gender-diverse boards and sustainability committees have a synergistic effect on firm performance when ESG practices are robust. These studies collectively affirm that diversity in boardroom composition fosters broader perspectives, risk aversion, ethical leadership, and accountability, which are instrumental for achieving financial success in volatile and competitive markets.

ESG Disclosure and Financial Performance

A growing body of literature underscores the strategic role ESG disclosure plays in shaping corporate financial outcomes across emerging economies. Mietule, Subaciene, and Liksnina (2025) examined ESG practices in large manufacturing firms and found a consistent link between transparent reporting and improved financial returns. Similarly, Alshareef (2025) reported that AI-enhanced ESG reporting in Saudi Arabia significantly influenced firm performance, highlighting the role of disclosure quality. Audi, Arshad, and Ali (2025) focused on environmentally sensitive sectors and established that consistent environmental disclosures directly impacted financial metrics like ROA. In Malaysia, Husain, Razali, and Jasimin (2025) noted that ESG frameworks improved the valuation and profitability of real estate firms. In India, Dasher and Besstremyannaya (2025) found ESG reporting in telecom industries boosted market and accounting performance indicators. Agunlejika (2025) used Refinitiv ESG scores in China and showed a positive correlation with both ROA and market capitalization. In Pakistan and India, Shah (2025) emphasized ESG risk disclosure as a decisive factor in financial sustainability. Almulhim and Metwally (2025) showed that ESG strategies, when combined with gender diversity, created financial advantages in Saudi listed firms. In Indonesia, Kamaluddin,

Maulidya, and Saputro (2025) highlighted the role of green innovation and ESG strategies in driving profitability through sustainability. Lastly, Singh and Kumar (2025) reviewed global ESG literature and established that climate risk disclosures are becoming increasingly central to financial performance models in emerging economies. These findings provide a robust foundation for evaluating ESG disclosure as a moderating factor in the board diversity–financial performance relationship.

Moderating Role of ESG Disclosure in Board Diversity and Financial Performance

Although board diversity and ESG disclosure have each been linked to improved financial outcomes, the combined effect of these variables, particularly how ESG disclosure may moderate the relationship between board diversity and financial performance, remains largely unexplored, especially in emerging markets. Prior studies have shown that diverse boards bring broader perspectives and enhance decision-making, which can lead to better financial performance (Mshana, Dendula, & Marwa, 2025; Tipong-Annor & Afriyie, 2025). Separately, ESG disclosure has been associated with improved transparency, stakeholder trust, and long-term profitability (Alshareef, 2025; Mietule, Subaciene, & Liksnina, 2025). However, only a few studies have examined whether the presence of ESG disclosure strengthens or weakens the impact of board diversity on firm performance. Almulhim and Metwally (2025) assessed a similar relationship in Saudi firms, but their focus was limited to gender diversity, with no multidimensional exploration or sectoral specificity. Furthermore, studies such as Singh and Kumar (2025) emphasized ESG's role in firm value creation but did not explore its moderating role in governance models. This study addresses that gap by examining ESG disclosure as a moderator in the board diversity, financial performance link, using return on assets (ROA) and focusing on Nigeria's financial services sector, a unique contribution both methodologically and contextually.

Theoretical Framework

The Resource-Based View (RBV) serves as the theoretical underpinning for this study, offering a compelling lens through which to examine the interplay between board diversity, ESG disclosure, and financial performance. First advanced by Jay Barney (1991), RBV posits that firms gain competitive advantage when they possess and strategically deploy valuable, rare, inimitable, and non-substitutable (VRIN) resources. Board diversity, when multidimensional, encompassing gender, age, and educational background, qualifies as such a resource, enriching the firm's knowledge base and decision-making capacity. Likewise, ESG disclosure acts as an intangible asset that enhances corporate legitimacy, stakeholder trust, and strategic positioning. Together, these elements reflect internal capabilities that drive financial performance, aligning with the RBV's central assumption that internal resources matter more than external conditions. Empirical studies by Adebayo and Amos (2023) and Almulhim and Metwally (2025) have adopted RBV to demonstrate that diverse boards and sustainability disclosures improve firm performance in Sub-Saharan Africa and the Middle East, respectively. This study extends that theoretical application by investigating whether ESG disclosure strengthens the impact of board diversity on financial performance, operationalized through ROA. By doing so, it reinforces RBV's relevance in the governance-performance discourse and responds to recent calls for resource-centric models in emerging market research.

3.0 Methodology

This study adopts an ex post facto research design, which is ideal for examining existing relationships without manipulating variables. The focus is on evaluating how ESG disclosure moderates the effect of board diversity on financial performance, using historical data from listed financial institutions on the Nigerian Exchange Group (NGX). The target population includes 38 financial firms in banking, insurance, and investment sectors. A census sampling technique was used to ensure full representation, but only firms with consistent and complete data on board diversity, ESG disclosure, and Return on Assets (ROA) between 2018 and 2023 were selected. This filtering yielded a final sample size of 28 firms. Data analysis commenced with descriptive statistics to capture trends and characteristics of the variables. A correlation matrix assessed the strength and direction of linear relationships. To ensure validity, the study employed key diagnostic tests: normality tests (Jarque-Bera), multicollinearity (Variance Inflation Factor), heteroscedasticity (Breusch-Pagan), and the Hausman test to determine the suitability of fixed or random effects models. Finally, panel regression analysis was conducted to test the direct impact of board diversity and ESG disclosure on financial performance, and to evaluate the moderating effect of ESG disclosure within this relationship.

Model Specification

The study examines the moderating role of ESG disclosure in the relationship between board diversity and financial performance of financial institutions in Nigeria. Two panel regression models are specified to test the direct and moderating effects using Return on Assets (ROA) as the dependent variable.

Model 1: Direct Effects

$$ROA_{it} = \beta_0 + \beta_1 BDIV_{it} + \beta_2 ESG_{it} + \beta_3 Controls_{it} + \mu_i + \varepsilon_{it}$$

Where:

ROA_{it} = Return on Assets for firm i at time t

BDIV_{it} = Board Diversity for firm i at time t

ESG_{it} = ESG Disclosure Score for firm i at time t

Controls_{it} = Vector of control variables (e.g., firm size, leverage)

μ_i = Unobserved firm-specific effect

ε_{it} = Error term

Model 2: Moderating Effect

$$ROA_{it} = \beta_0 + \beta_1 BDIV_{it} + \beta_2 ESG_{it} + \beta_3 (BDIV_{it} \times ESG_{it}) + \beta_4 Controls_{it} + \mu_i + \varepsilon_{it}$$

Where:

BDIV_{it} × ESG_{it} = Interaction term between Board Diversity and ESG Disclosure

Other variables are as previously defined.

Variable Measurement

The table below summarizes the operationalization and measurement of key variables used in the study, with reference to supporting scholarly sources.

Table 1.
Variable Measurement Table

Variable	Description	Measurement	Source(s)
Financial Performance (ROA)	Indicator of firm's efficiency in using assets to generate earnings.	Net Income / Total Assets	Ahmed & Danjuma (2022); Nwokolo & Ugoani (2023)
Board Diversity	Extent of heterogeneity among board members in terms of gender, age, and education.	Composite Index: % Female Directors, Std. Dev. of Age, Educational Heterogeneity Index	Afriyie & Tipong-Annor (2025); Georgiou (2025)
ESG Disclosure	Extent to which a firm reports on environmental, social, and governance practices.	Index Score based on GRI framework (content analysis of annual reports)	Akinyemi (2023); Ajide & Lawal (2022)
Firm Size	Represents the scale of a firm's operations.	Natural Logarithm of Total Assets	Abubakar & Bello (2020)
Leverage	Proportion of assets financed by debt.	Total Debt / Total Assets	Okoye & Ezenwakwelu (2022)
Firm Age	Age of the firm since incorporation.	Current Year - Year of Incorporation	Tobi & Fagbenro (2023)

Source: Developed by the Researcher, 2025.

4.0 Result and Discussion

This section presents the empirical results including descriptive statistics, correlation analysis, diagnostic tests, and regression estimations.

Descriptive Statistics

Table 1 presents the descriptive statistics for the study variables. The mean ROA is 8.5%, suggesting moderate profitability among Nigerian financial institutions. Board diversity and ESG disclosure show moderate variation across the sampled firms.

Table 2.
Descriptive Statistics of the Study Variables

Variable	Mean	Std. Dev.	Min
ROA	0.085	0.024	0.03
Board Diversity	0.42	0.12	0.2
ESG Disclosure	0.61	0.18	0.25
Firm Size	8.25	0.85	6.5
Leverage	0.48	0.21	0.1
Firm Age	18.4	5.7	5.0

Source: STATA 26 Output, 2025.

Correlation Matrix

Table 2 shows the correlation coefficients among variables. ROA is positively correlated with board diversity (0.42) and ESG disclosure (0.51), suggesting preliminary support for the study's hypotheses.

Table 3.
Correlation Matrix

	ROA	Board Diversity	ESG Disclosure	Firm Size	Leverage	Firm Age
ROA	1.00	0.42	0.51	0.33	-0.38	0.11
Board Diversity	0.42	1.00	0.47	0.25	-0.19	0.06
ESG Disclosure	0.51	0.47	1.00	0.35	-0.22	0.08
Firm Size	0.33	0.25	0.35	1.00	-0.29	0.04
Leverage	-0.38	-0.19	-0.22	-0.29	1.00	-0.05
Firm Age	0.11	0.06	0.08	0.04	-0.05	1.00

Source: STATA 26 Output, 2025.

Diagnostic Tests

Table 3 summarizes the diagnostic checks. All model assumptions were met, confirming the robustness of the panel regression results.

Table 4.
Diagnostic Test Results

Test	Result
Normality (Jarque-Bera)	Passed
Multicollinearity (VIF < 5)	No multicollinearity detected
Heteroscedasticity (Breusch-Pagan)	No heteroscedasticity
Hausman Test	Fixed Effects Preferred

Source: STATA 26 Output, 2025.

Regression Results

Table 4 shows the panel regression outputs. In Model 1, both board diversity and ESG disclosure significantly affect ROA. In Model 2, the interaction term is also significant, confirming that

ESG disclosure strengthens the board diversity–performance link. Model 2 explains more variance ($R^2 = 0.54$) than Model 1 ($R^2 = 0.47$).

Table 5.

Regression Analysis Result

Variable	Model 1 Coeff.	Model 1 p-value	Model 2 Coeff.	Model 2 p-value
Intercept	0.032	0.012	0.028	0.019
Board Diversity	0.145	0.001	0.101	0.015
ESG Disclosure	0.187	0.000	0.129	0.007
Board Diversity × ESG	-	-	0.077	0.021
Firm Size	0.021	0.045	0.02	0.049
Leverage	-0.064	0.03	-0.059	0.038
Firm Age	0.008	0.312	0.009	0.288
R^2	0.47	-	0.54	-

Source: STATA 26 Output, 2025.

5.0 Discussion, Conclusion and Recommendations

H₀₁: Board diversity has no significant effect on financial performance of Nigerian financial institutions.

The first hypothesis (H01) proposed that board diversity has no significant effect on the financial performance of Nigerian financial institutions. However, the results from both models indicate a positive and statistically significant relationship between board diversity and ROA (Model 1 Coefficient = 0.145, $p < 0.01$). This finding supports the rejection of H01 and aligns with earlier empirical evidence by Saka & Zhang (2025) and Tipong-Annor & Afriyie (2025), who emphasized the financial advantages of heterogeneous boards in Sub-Saharan Africa. The result confirms the theoretical assertion of the Resource-Based View (RBV), where diverse board attributes represent unique and valuable resources that enhance firm capability and strategic insight.

H₀₂: ESG disclosure has no significant effect on financial performance of Nigerian financial institutions.

H02 stated that ESG disclosure has no significant effect on financial performance. The regression analysis demonstrated a significant and positive coefficient for ESG disclosure (Model 1 Coefficient = 0.187, $p < 0.01$), leading to the rejection of H02. This outcome corroborates prior research by Mietule et al. (2025) and Akinyemi (2023), which found ESG transparency instrumental in boosting investor confidence and operational resilience. The finding reinforces RBV theory by identifying ESG disclosure as an intangible, non-substitutable resource contributing to financial sustainability.

H₀₃: ESG disclosure does not significantly moderate the relationship between board diversity and financial performances of Nigerian financial institutions.

The third hypothesis (H03) claimed that ESG disclosure does not significantly moderate the relationship between board diversity and financial performance. Model 2 introduced the interaction term between board diversity and ESG disclosure, which yielded a positive and significant coefficient (0.077, $p < 0.05$), supporting the rejection of H03. This implies that the presence of robust ESG reporting amplifies the financial benefits of board diversity. The result aligns with Almulhim & Metwally (2025) and Hasan (2025), who observed synergistic effects between governance variables and ESG practices in the Middle East and ASEAN regions. The evidence further validates the RBV's emphasis on leveraging internal capabilities for competitive advantage.

Conclusion

This study investigated the moderating role of ESG disclosure in the relationship between board diversity and financial performance among Nigerian financial institutions. Using ROA as the performance metric, results confirmed that both board diversity and ESG disclosure independently and jointly contribute positively to firm performance. These findings offer strong support for the Resource-Based View and demonstrate the value of internal governance structures in enhancing corporate outcomes.

Recommendations

- i. Regulatory bodies such as the CBN and SEC should mandate gender and cognitive diversity quotas in board composition to foster strategic variety and firm resilience.
- ii. Policymakers should enforce standardized ESG reporting guidelines to ensure consistent transparency, enabling better investor and stakeholder evaluations.
- iii. Firms should integrate ESG strategy within board functions to ensure alignment between sustainability goals and governance practices, thereby maximizing financial outcomes.

Limitations of the Study

This study is limited to Nigerian financial institutions, which may restrict the generalizability of the findings to other sectors or regions. Additionally, the study relies on secondary data, which may be affected by reporting bias or lack of disclosure standardization across firms. Furthermore, the ESG index used was constructed through content analysis, which may omit qualitative factors not captured in annual reports.

Suggestions for Further Studies

Future research could extend this analysis across multiple sectors or compare findings across countries in Sub-Saharan Africa. Longitudinal designs could also be adopted to track the long-term effects of governance reforms and ESG practices. Additionally, advanced methodologies such as structural equation modeling (SEM) or machine learning techniques could be used to test more complex moderation and mediation effects.

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