



Effect of corporate governance attributes on risk disclosure of listed financial firms in Nigeria

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Abstract

This study empirically investigates the effect of corporate governance attributes on the level of Risk Disclosure among listed financial firms in Nigeria. Specifically, the study examines the effect of Board Independence (BIND), Board Gender Diversity (BGD), Board Expertise (BET), and Audit Committee Gender Diversity (ACGD) on Risk Disclosure. The research utilizes ex-post facto research design with a sample of 300 firm-year observations from 30 listed financial firms over a 10-year period (2015-2024), employing a Random Effects panel regression model. The findings show that Board Independence, Board Gender Diversity, and Audit Committee Gender Diversity have statistically significant and positive effects on risk disclosure. Conversely, Board Expertise was found to have a non-significant effect on Risk Disclosure. The study concludes that board independence and gender diversity at both board and audit committee levels are crucial for listed financial firms seeking to mitigate information asymmetry and improve stakeholder confidence through enhanced risk disclosure. The recommendation is for management and regulatory bodies to focus resources on strengthening board independence and promoting gender diversity in corporate governance structures to meet global standards for corporate transparency and accountability.

Keywords: Corporate Governance, Board Independence, Board Gender Diversity, Board Expertise, Audit Committee Gender Diversity, Risk Disclosure, Listed Financial Firms, Agency Theory, Nigeria.

Introduction

Risk disclosure (RD) serves as a fundamental mechanism for conveying critical information about organizational uncertainties, vulnerabilities, and risk management strategies to external stakeholders (Elmarzouky et al., 2023). In an era characterized by financial market complexity and heightened regulatory scrutiny, comprehensive risk disclosure plays a central role in closing the information gap between management and external stakeholders. This, in turn, enhances market confidence, builds investor trust, and attracts long-term institutional participation (Albitar et al., 2022). Empirical studies consistently demonstrate that firms with robust disclosure practices enjoy lower cost of capital and higher firm valuations, primarily because transparency reduces information asymmetry and strengthens market trust (Nahar et al., 2020; Khatib & Nour, 2021).

Corporate governance, once viewed primarily as a compliance mechanism, has evolved into a strategic cornerstone for ensuring organizational accountability and transparency (Elamer et al., 2020). The composition and characteristics of the board of directors, including



independence, diversity, and expertise, significantly influence the quality and extent of corporate disclosures (Alkurdi et al., 2021). Empirical findings indicate that sound governance practices, supported by effective board structures and audit committee oversight, lead to enhanced disclosure quality, reduced earnings management, and greater stakeholder confidence (Habtoor et al., 2022; Al-Shaer & Zaman, 2024).

The relationship between corporate governance and risk disclosure is grounded in agency and signaling theories (Neifar & Jarboui, 2023). Firms with strong governance mechanisms possess superior internal controls and monitoring capabilities that generate comprehensive risk information. When this information is disclosed to external stakeholders, it signals managerial competence and forward-looking governance practices (Bamahros et al., 2022). Effective board structures inherently demand accountability and transparency, motivating firms to reveal risk-related information that reduces investor skepticism and agency costs (Elshandidy et al., 2022).

This study investigates how specific attributes of corporate governance, Board Independence (BIND), Board Gender Diversity (BGD), Board Expertise (BET), and Audit Committee Gender Diversity (ACGD) affect the extent of risk disclosure. Board independence enhances the monitoring function of the board, ensuring that management provides comprehensive and unbiased risk information to stakeholders (Almustafa et al., 2023). Gender diversity brings different perspectives, enhanced risk awareness, and stronger ethical orientation to boardroom discussions, potentially translating into more transparent disclosure practices (Birindelli et al., 2022). Board expertise, particularly in finance and accounting, provides directors with the technical competence to understand complex risk issues and evaluate the adequacy of risk disclosures (Habib & Hasan, 2023). Similarly, audit committee gender diversity may enhance the quality of disclosure oversight through heightened attention to detail and greater diligence in reviewing risk reports (Zalata et al., 2022).

However, much of the empirical evidence on corporate governance and risk disclosure originates from developed markets, particularly in Europe and North America, where institutional quality and regulatory enforcement differ markedly from emerging economies (Elamer et al., 2021). There remains a significant knowledge gap in financial system in emerging economies like Nigeria, where unique regulatory frameworks, ownership structures, and institutional characteristics may influence the governance-disclosure relationship differently (Ozili, 2023). Moreover, past studies often treat governance as a single, undifferentiated construct, overlooking the distinct contributions of individual governance mechanisms. This limits our understanding of which governance elements most effectively influence transparency.

Methodologically, many studies depend on simple measures of governance that fail to capture the nuanced effects of specific board and committee characteristics (Hassan et al., 2024). These limitations have constrained empirical insights into the mechanisms linking governance quality



with transparency outcomes, particularly in the context of financial firms that face unique risk profiles and regulatory requirements.

In a post-global financial crisis era that emphasizes organizational resilience and stakeholder protection, regulators and investors increasingly demand that firms connect their governance structures to transparent risk communication (Alharbi et al., 2024). Financial firms, in particular, face exposure to credit, market, liquidity, and operational risks, making transparent risk disclosure indispensable for maintaining stakeholder confidence and market stability (Adelopo et al., 2022). Yet, research remains scarce on how specific board characteristics and audit committee composition facilitate comprehensive risk disclosure within this sector in Nigeria.

Given these empirical, theoretical, and methodological gaps especially the lack of integrated evidence examining Board Independence, Board Gender Diversity, Board Expertise, and Audit Committee Gender Diversity simultaneously this study fills a crucial; by providing sector-specific and contextually grounded insights into how corporate governance attributes drive risk disclosure in listed financial firms in Nigeria, the study aims to guide both policymakers and corporate boards. The objective is to empirically assess the effect of these four governance mechanisms on risk disclosure measured by a comprehensive disclosure index. The expected contribution is to enhance understanding of how well-designed governance structures translate into transparency and improved stakeholder confidence.

Literature Review

Risk Disclosure

Risk Disclosure refers to the provision of information about organizational risks, uncertainties, and risk management strategies in corporate reports beyond the minimum regulatory requirements (Elmarzouky et al., 2023). Conceptually, RD is a strategic communication tool employed by management to reduce information asymmetry, signal superior governance practices, and enhance stakeholder trust (Nahar et al., 2020). It typically encompasses qualitative descriptions of risk governance frameworks, quantitative risk metrics (such as Value-at-Risk figures), forward-looking statements about potential uncertainties, and detailed explanations of risk mitigation strategies (Salem et al., 2021). In empirical studies, the extent of risk disclosure is most frequently operationalized using a Disclosure Index, which is a comprehensive score derived from the ratio of disclosed items to total items included in a predefined disclosure checklist based on regulatory requirements, accounting standards, and best practice guidelines (Khatib & Nour, 2021; Al-Shaer & Zaman, 2024).

Board Independence

Board Independence refers to the proportion of non-executive directors who have no material relationship with the company other than their board membership (Almustafa et al., 2023). Independent directors are considered essential for effective corporate governance because they



are expected to provide objective oversight of management, free from conflicts of interest that might compromise their monitoring function (Elamer et al., 2020). The presence of independent directors strengthens the board's ability to challenge management decisions, demand accountability, and ensure that corporate disclosures accurately reflect the firm's risk profile (Habtoor et al., 2022).

Independent directors bring external perspectives and professional reputations that they seek to protect, creating incentives for them to ensure transparent and comprehensive disclosure practices (Neifar & Jarboui, 2023). Their monitoring role is particularly important in financial firms, where complex financial instruments and risk exposures require careful oversight to protect stakeholder interests (Bamahros et al., 2022). When boards have substantial independent representation, they are better positioned to demand comprehensive risk reporting from management, as independent directors face fewer conflicts of interest in pushing for transparency that might reveal management shortcomings.

The effectiveness of board independence depends not only on the proportion of independent directors but also on their willingness and ability to exercise independent judgment (Alkurdi et al., 2021). Truly independent boards create governance environments where management is held accountable for the quality and comprehensiveness of risk disclosures, ultimately enhancing the information available to external stakeholders for decision-making purposes.

Board Gender Diversity

Board Gender Diversity refers to the proportion of female directors serving on the corporate board (Birindelli et al., 2022). Gender diversity has gained increasing attention in corporate governance research based on the proposition that diverse boards bring a broader range of perspectives, experiences, and cognitive approaches to strategic decision-making (Amorelli & García-Sánchez, 2021). Female directors are often associated with enhanced monitoring intensity, greater risk awareness, and stronger ethical orientations that may positively influence corporate disclosure practices (Agyemang-Mintah & Schadewitz, 2023).

Research suggests that women tend to be more risk-conscious and may bring heightened attention to stakeholder concerns, including the need for transparent communication about organizational risks (Orazalin & Baydauletov, 2020). Female directors may also foster more inclusive boardroom discussions that consider a wider range of perspectives, potentially leading to more comprehensive assessment and disclosure of risk-related information (García-Sánchez et al., 2022). Their presence on boards may challenge groupthink and encourage more rigorous evaluation of management's risk reporting practices.

From a resource dependence perspective, gender diversity enhances the board's access to diverse networks, experiences, and knowledge bases that can improve the quality of governance oversight (Saona et al., 2022). In the context of risk disclosure, female directors may be more attuned to the importance of transparent communication with stakeholders and



may advocate for more comprehensive risk reporting as part of their commitment to good governance practices.

Board Expertise

Board Expertise refers to the proportion of directors possessing professional qualifications in finance, accounting, or related fields (Habib & Hasan, 2023). Financial expertise on the board is considered essential for effective oversight of complex financial matters, including the evaluation of risk management practices and the adequacy of risk disclosures (Alharbi et al., 2024). Directors with relevant professional backgrounds are better equipped to understand sophisticated financial instruments, interpret risk metrics, and assess whether disclosed information accurately represents the firm's risk profile.

The presence of financially qualified directors enhances the board's capacity to engage meaningfully with management on risk-related matters and to evaluate the completeness and accuracy of risk disclosures (Bhuiyan et al., 2023). Expert directors can identify gaps in risk reporting, question management's risk assessments, and advocate for more comprehensive disclosure practices. Their technical competence enables them to fulfill their monitoring responsibilities more effectively, particularly in financial firms where risk complexity requires specialized knowledge.

However, the effect of board expertise on disclosure may depend on how expertise is distributed across governance bodies. While board-level expertise provides general oversight capacity, specialized expertise within the audit committee which has direct responsibility for financial reporting oversight may be more consequential for disclosure outcomes (Hassan et al., 2024). The interplay between board-level and committee-level expertise merits careful empirical investigation.

Audit Committee Gender Diversity

Audit Committee Gender Diversity refers to the proportion of female members serving on the audit committee (Zalata et al., 2022). The audit committee is the governance body most directly responsible for overseeing financial reporting quality, internal controls, and disclosure practices (Albitar et al., 2022). As such, the composition of the audit committee is particularly consequential for the quality and comprehensiveness of corporate disclosures, including risk reporting.

Female audit committee members may bring distinctive qualities that enhance disclosure oversight, including heightened attention to detail, greater diligence in reviewing financial reports, and stronger commitment to transparency (Agyemang-Mintah & Schadewitz, 2023). Research suggests that women on audit committees may be more likely to question management's reporting choices and advocate for more comprehensive disclosure practices (Al-Shaer & Zaman, 2024). Their presence may enhance the audit committee's effectiveness in fulfilling its oversight responsibilities related to risk disclosure.



The effect of gender diversity may be particularly pronounced within audit committees because of the committee's specialized focus on financial reporting and disclosure matters. While board-level gender diversity influences overall governance quality, audit committee gender diversity directly affects the oversight of disclosure practices, potentially making it a more powerful determinant of risk disclosure quality (Habtoor et al., 2022).

Empirical Review

Board Independence and Risk Disclosure

A substantial body of literature supports a positive and significant relationship between board independence and the level of risk disclosure, primarily grounded in agency theory (Elamer et al., 2021). Studies argue that independent directors serve as effective monitors of management and are more likely to demand comprehensive risk reporting to fulfill their fiduciary duties to shareholders (Nahar et al., 2020). Specifically, the enhanced monitoring resulting from board independence reduces managerial opportunism in disclosure decisions, thereby incentivizing firms to provide transparent risk information (Habtoor et al., 2022; Alkurdi et al., 2021). This positive effect is often pronounced in regulated industries like financial services, where independent oversight is particularly valuable for ensuring disclosure quality (Bamahros et al., 2022; Al-Shaer & Zaman, 2024).

Conversely, some empirical literature identifies a negative or non-significant relationship, often attributed to factors such as information asymmetry between independent directors and management, or the limited time and resources available to independent directors for detailed disclosure oversight (Neifar & Jarboui, 2023). Critics argue that independent directors may lack the firm-specific knowledge necessary to effectively evaluate risk disclosures, potentially leading to superficial oversight that does not translate into disclosure improvements (Ozili, 2023). In contexts where independent directors serve on multiple boards or face other constraints, their monitoring effectiveness may be limited (Elshandidy et al., 2022).

Studies finding non-significant relationships often attribute this to measurement issues or contextual factors that moderate the independence-disclosure relationship (Salem et al., 2021). The heterogeneity of findings across different institutional contexts suggests that the effect of board independence on risk disclosure may be contingent on regulatory environment, ownership structure, and other governance mechanisms operating simultaneously.

Board Gender Diversity and Risk Disclosure

Empirical research predominantly supports a positive and significant association between board gender diversity and risk disclosure, arguing that female directors enhance governance quality and promote transparency (Birindelli et al., 2022; García-Sánchez et al., 2022). Studies suggest that gender-diverse boards are associated with better monitoring, more comprehensive disclosure practices, and reduced information asymmetry (Agyemang-Mintah & Schadewitz, 2023). Female directors are often characterized as more risk-conscious and ethically oriented,



leading to more comprehensive risk communication with stakeholders (Orazalin & Baydauletov, 2020; Amorelli & García-Sánchez, 2021).

Research from multiple institutional contexts supports the positive gender diversity-disclosure relationship. Studies in European markets find that firms with higher female board representation provide more extensive voluntary disclosures (Saona et al., 2022). Similarly, research in developing economies documents positive associations between gender diversity and corporate transparency (Elamer et al., 2021). The theoretical mechanism typically invokes resource dependence theory, suggesting that diverse boards access broader networks and perspectives that enhance governance quality.

However, some studies report weak or non-significant relationships, particularly in contexts where female board representation remains low or where women occupy token positions without substantive influence (Almustafa et al., 2023). Critics argue that the relationship between gender diversity and disclosure may be non-linear, with meaningful effects emerging only when female representation exceeds a certain threshold (Bhuiyan et al., 2023). Contextual factors such as cultural attitudes toward gender roles and institutional support for diversity may moderate these relationships.

Board Expertise and Risk Disclosure

Empirical evidence on the relationship between board expertise and risk disclosure presents mixed findings. Some studies document a positive and significant relationship, arguing that financially qualified directors possess the technical competence to understand complex risk issues and demand comprehensive disclosure (Habib & Hasan, 2023). Expert directors can more effectively evaluate the adequacy of risk disclosures and identify gaps in management's risk reporting, potentially leading to improved disclosure quality (Bhuiyan et al., 2023; Hassan et al., 2024).

However, other studies find weak or non-significant relationships between board-level expertise and disclosure outcomes (Khatib & Nour, 2021). One explanation is that the effect of expertise may be more pronounced at the audit committee level, where members have direct responsibility for financial reporting oversight, rather than at the full board level (Alharbi et al., 2024). Board-level expertise may be less consequential for disclosure when expert directors are not specifically tasked with oversight of financial reporting matters.

Additionally, in financial firms where complex financial knowledge is widespread among directors, the marginal contribution of additional board expertise may be limited (Adelopo et al., 2022). The relationship may also depend on how expertise is measured and whether it captures genuinely relevant qualifications for risk disclosure oversight. These mixed findings suggest the need for context-specific empirical investigation.



Audit Committee Gender Diversity and Risk Disclosure

A growing body of empirical research supports a positive and significant relationship between audit committee gender diversity and disclosure quality (Zalata et al., 2022; Al-Shaer & Zaman, 2024). Studies argue that female audit committee members bring distinctive qualities including heightened attention to detail, greater diligence in reviewing financial reports, and stronger commitment to transparency that enhance disclosure oversight (Agyemang-Mintah & Schadewitz, 2023). The specialized role of the audit committee in financial reporting oversight makes its composition particularly consequential for disclosure outcomes.

Research documents that audit committees with female members are associated with higher quality financial reporting, reduced earnings management, and more comprehensive disclosures (Habtoor et al., 2022; Albitar et al., 2022). Female audit committee members may be more likely to question management's reporting choices and advocate for more transparent communication with stakeholders. Their presence may enhance the audit committee's effectiveness in fulfilling its oversight responsibilities related to risk disclosure.

Some studies suggest that the effect of gender diversity may be particularly pronounced within audit committees compared to the full board because of the committee's direct responsibility for disclosure oversight (Elmarzouky et al., 2023). While board-level gender diversity influences overall governance quality, audit committee gender diversity may have more direct and immediate effects on disclosure practices.

Theoretical Framework

Agency Theory

The most relevant theoretical framework for this study, which focuses on the effect of specific corporate governance mechanisms on the extent of Risk Disclosure, is Agency Theory complemented by Resource Dependence Theory. Agency Theory directly addresses the monitoring function of corporate governance mechanisms in reducing information asymmetry between management (agents) and shareholders (principals) (Neifar & Jarboui, 2023). The presence of independent directors, diverse board members, and qualified experts serves to constrain managerial opportunism and ensure that corporate disclosures accurately reflect the firm's risk profile.

From an agency perspective, comprehensive risk disclosure reduces agency costs by providing principals with information needed to evaluate management's stewardship and decision-making (Elshandidy et al., 2022). Effective governance mechanisms compel management to be transparent about organizational risks, reducing the potential for managers to exploit information asymmetries for personal benefit. Independent and diverse boards are better positioned to demand comprehensive disclosure because they face fewer conflicts of interest and bring broader perspectives to governance oversight.



Resource Dependence Theory provides a complementary lens, emphasizing how diverse boards access broader networks, experiences, and knowledge bases that enhance governance quality (Saona et al., 2022). Gender diversity and expertise diversity expand the board's cognitive resources, enabling more comprehensive evaluation of risk management practices and disclosure adequacy. Directors with diverse backgrounds contribute different perspectives on stakeholder expectations, potentially leading to more responsive and comprehensive risk communication.

The justification for prioritizing these theoretical perspectives lies in the study's focus on how board and committee characteristics influence disclosure outcomes. Agency Theory explains the monitoring mechanism through which independent and diverse governance structures promote transparency, while Resource Dependence Theory explains how diversity enhances governance capacity. Together, these frameworks provide robust explanatory power for the hypothesized relationships between governance attributes and risk disclosure among listed financial firms in Nigeria.

Methodology

This study adopts a positivist research philosophy coupled with a quantitative research design utilizing an ex-post facto approach to test the hypothesized relationships between corporate governance attributes and risk disclosure. The target population comprises all financial firms listed on the Nigerian Exchange Group, including deposit-money banks, insurance companies, and other regulated financial institutions. A purposive sampling technique was employed to select firms based on criteria including consistent listing status and availability of required disclosure information across the study period (2015-2024), resulting in a sample of 30 firms and 300 firm-year observations.

The variables and measurements are clearly defined: the dependent variable, Risk Disclosure (RD), is quantified using a Disclosure Index calculated as the ratio of disclosed risk-related items to total items in a predetermined checklist, derived from annual reports and corporate filings based on regulatory requirements and best practice guidelines. The independent variables are: Board Independence (BIND), measured as the ratio of non-executive directors to total board members; Board Gender Diversity (BGD), measured as the percentage of female directors on the board; Board Expertise (BET), measured as the percentage of directors with professional finance or accounting qualifications; and Audit Committee Gender Diversity (ACGD), measured as the percentage of women on the audit committee. Firm Size (FSIZE), measured by the natural logarithm of total assets, and Leverage (LEV), measured as total debt divided by total equity, serve as control variables.

Data collection methods involved gathering secondary, archival data from audited financial reports, annual reports, and corporate governance statements over the study period. The rigor of the methodology was ensured through systematic content analysis for RD scoring and careful verification of governance data from multiple sources.



The quantitative data collected was analyzed using robust inferential statistics, including descriptive statistics, correlation analysis, and Panel Regression Analysis—justified by the necessity to control for unobserved firm-specific heterogeneity inherent in longitudinal data from listed firms. The statistical technique employed was determined by the results of the Hausman test. The primary Model Specification for testing the hypotheses is formulated as follows:

$$RD_{it} = \beta_0 + \beta_1 BIND_{it} + \beta_2 BGD_{it} + \beta_3 BET_{it} + \beta_4 ACGD_{it} + \beta_5 FSIZE_{it} + \beta_6 LEV_{it} + \varepsilon_{it}$$

Where:

RD_{it} represents the Risk Disclosure Index for firm i in year t

$BIND_{it}$ is Board Independence

BGD_{it} is Board Gender Diversity

BET_{it} is Board Expertise

$ACGD_{it}$ is Audit Committee Gender Diversity

$FSIZE_{it}$ is Firm Size (control variable)

LEV_{it} is Leverage (control variable)

β_0 is the intercept

β_1 to β_6 are the regression coefficients

ε_{it} is the error term

This approach allows for the simultaneous testing of all four null hypotheses by assessing the statistical significance and direction of β_1 , β_2 , β_3 , and β_4 , providing clear evidence regarding the empirical effect of corporate governance mechanisms on the transparency of listed financial firms in Nigeria.



Table 1: Variable Measurements and Empirical Evidence

S/N	Variable	Proxy	Measurement	Empirical Evidence
Dependent Variable				
1	Risk Disclosure	Risk Disclosure Index (RDI)	Ratio of disclosed risk items to total items in a disclosure checklist	Elmarzouky et al. (2023); Khatib & Nour (2021)
Independent Variables				
2	Board Independence	BIND	Ratio of non-executive directors to total board members	Nahar et al. (2020); Alkurdi et al. (2021); Birindelli et al. (2022);
3	Board Gender Diversity	BGD	Percentage of female directors on the board	García-Sánchez et al. (2022)
4	Board Expertise	BET	Percentage of directors with professional finance/accounting qualifications	Habib & Hasan (2023); Hassan et al. (2024)
5	Audit Committee Gender Diversity	ACGD	Percentage of women on the audit committee	Zalata et al. (2022); Al-Shaer & Zaman (2024)
Control Variables				
6	Firm Size	FSIZE	Natural logarithm of total assets	Elamer et al. (2021); Elshandidy et al. (2022)
7	Leverage	LEV	Total debt divided by total equity	Nahar et al. (2020); Bamahros et al. (2022)

Source: Researchers' Computation, 2025



Results and Discussion

Descriptive Statistics

Table 2 presents the descriptive statistics for the dependent variable, Risk Disclosure (RD), and the four independent variables (BIND, BGD, BET, ACGD) along with the control variables (FSIZE, LEV) across 300 observations (N=300).

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
RD	300	.548	.126	.296	.851
BIND	300	.585	.087	.404	.785
BGD	300	.182	.070	.053	.344
BET	300	.485	.095	.299	.711
ACGD	300	.219	.070	.061	.397
FSIZE	300	18.743	1.805	15.242	22.172
LEV	300	.658	.158	.350	.935

Source: STATA 17 Output, 2025

The dependent variable, Risk Disclosure (RD), exhibits a mean of 0.548, indicating that, on average, the listed financial firms disclose approximately 54.8% of the risk-related items included in the disclosure checklist. This suggests that the firms engage in moderate levels of risk disclosure, revealing just over half of the expected risk information. The standard deviation of 0.126 shows a reasonable degree of variation in disclosure practices among the sampled firms, and the range from a minimum of 0.296 to a maximum of 0.851 confirms substantial heterogeneity in disclosure quality across Nigerian financial firms.

Regarding the independent variables, Board Independence (BIND) has a mean of 0.585 (58.5%) with a standard deviation of 0.087, indicating that on average, approximately 59% of board members in the sampled firms are non-executive directors. This level exceeds the minimum threshold typically recommended by corporate governance codes. The range from 0.404 to 0.785 shows that while some firms have boards where non-executive directors constitute less than half of the membership, others achieve nearly 80% independence.

Board Gender Diversity (BGD) has a mean of 0.182 (18.2%) with a standard deviation of 0.070, indicating that women represent less than one-fifth of board members on average. The range from 0.053 to 0.344 reveals that female representation varies substantially, with some boards having only token female participation while others approach one-third female membership. This finding highlights the ongoing challenge of achieving gender balance in Nigerian corporate boardrooms.

Board Expertise (BET) has a mean of 0.485 (48.5%) with a standard deviation of 0.095, indicating that approximately half of board members possess professional finance or



accounting qualifications. For financial firms where understanding complex financial matters is crucial, this level of expertise is noteworthy but suggests potential for enhancement.

Audit Committee Gender Diversity (ACGD) has a mean of 0.219 (21.9%) with a standard deviation of 0.070, slightly higher than board-level gender diversity. The range from 0.061 to 0.397 indicates that female representation on audit committees varies considerably across the sampled firms.

The control variables show that the mean firm size (FSIZE) is 18.743 (representing substantial total assets), and mean leverage (LEV) is 0.658 (65.8%), indicating that debt financing constitutes a significant portion of capital structure, which is characteristic of financial firms.

Correlation Matrix

Table 3 provides the Pearson correlation coefficients among the key variables, assessing the linear relationships between them.

Table 3: Matrix of Correlations

Variables	(1) RD	(2) BIND	(3) BGD	(4) BET	(5) ACGD	(6) FSIZE	(7) LEV
(1) RD	1.000						
(2) BIND	-0.223	1.000					
(3) BGD	0.295	0.255	1.000				
(4) BET	0.187	0.152	-0.063	1.000			
(5) ACGD	0.398	-0.052	0.214	0.027	1.000		
(6) FSIZE	-0.024	-0.111	-0.179	-0.036	0.161	1.000	
(7) LEV	0.105	-0.131	0.281	0.095	0.053	-0.053	1.000

Source: STATA 17 Output, 2025

The correlations between the independent variables and the dependent variable (RD) reveal preliminary associations:

RD and BIND (-0.223): There is a moderate negative bivariate correlation between Board Independence and Risk Disclosure. This unexpected negative relationship may be confounded by other variables and requires multivariate analysis to isolate the true effect.

RD and BGD (0.295): There is a moderate positive correlation between Board Gender Diversity and Risk Disclosure, suggesting that firms with higher female board representation tend to disclose more comprehensive risk information.



RD and BET (0.187): A weak positive correlation exists between Board Expertise and Risk Disclosure, indicating that boards with higher proportions of financially qualified directors are associated with somewhat better disclosure practices.

RD and ACGD (0.398): The strongest positive correlation exists between Audit Committee Gender Diversity and Risk Disclosure, suggesting that female representation on audit committees is substantially associated with enhanced risk disclosure quality.

Regarding inter-correlations among independent variables, all correlation coefficients are below 0.30, with the highest being between BGD and LEV (0.281) and between BGD and BIND (0.255). These moderate-to-weak correlations indicate that multicollinearity is not a serious concern, as no correlation exceeds the critical threshold of 0.70.

Diagnostic Tests

Table 4: Diagnostic Tests

Diagnostic Test	Statistic (Value)	Degrees of Freedom	P-value
Heteroskedasticity Test (Breusch–Pagan/Cook–Weisberg)	$\chi^2(1) = 0.03$	1	0.862
Multicollinearity Test (Variance Inflation Factor - VIF)	Max VIF = 1.22	6 Independent Variables	N/A
Mean VIF	1.13	-	N/A
Model Selection Test (Hausman Specification Test)	$\chi^2 = 5.82$	-	0.561

Source: STATA 17 Output, 2025

Heteroskedasticity Test (Breusch–Pagan/Cook–Weisberg Test)

The test yielded a Chi-square statistic (χ^2) of 0.03 with 1 degree of freedom, and the associated P-value is 0.862. Since the P-value substantially exceeds the conventional significance level of 0.05, we fail to reject the null hypothesis of homoskedasticity. This indicates that the variance of the residuals is constant across all levels of the independent variables, ensuring reliable standard errors for the regression coefficients.

Multicollinearity Test (Variance Inflation Factor - VIF)

The maximum Variance Inflation Factor (VIF) among the independent variables is 1.22, with a mean VIF of 1.13. Since all VIF values are substantially below the threshold of 5 (and far below the critical threshold of 10), the study concludes that multicollinearity is not a concern. The four governance variables and two control variables measure sufficiently distinct dimensions, allowing for reliable interpretation of their individual effects on risk disclosure.



Model Selection Test (Hausman Specification Test)

The Hausman test produced a Chi-square value of 5.82 with a P-value of 0.561. Since the P-value substantially exceeds the 0.05 significance level, we fail to reject the null hypothesis that the Random Effects model is appropriate. This indicates that the Random Effects Model is the preferred estimation technique, accounting for firm-specific unobserved heterogeneity while offering efficiency gains over the Fixed Effects model.

Regression Results

Table 5: Random Effects Regression Results

RD	Coef.	St.Err.	t-value	p-value	[95% Conf.	Interval]	Sig
BIND	.271	.087	3.11	0.002	.100	.441	***
BGD	.326	.088	3.70	0.000	.153	.498	***
BET	.128	.092	1.40	0.163	-.052	.308	
ACGD	.436	.093	4.67	0.000	.253	.619	***
FSIZE	.024	.010	2.28	0.023	.003	.044	**
LEV	.086	.035	2.43	0.015	.017	.156	**
Constant	-.542	.178	-3.05	0.002	-.891	-.193	***
Statistic						Value	
Mean dependent var						0.548	
SD dependent var						0.126	
Overall R-squared						0.684	
Number of obs						300	
Chi-square						456.82	
Prob > chi ²						0.000	
R-squared within						0.712	
R-squared between						0.658	

Note: *** $p < .01$, ** $p < .05$, * $p < .1$

Source: STATA 17 Output, 2025

Discussion of Findings

The Random Effects panel regression model (justified by the Hausman test) demonstrates strong explanatory power, evidenced by an Overall R-squared of 0.684 and a highly significant Chi-square test (Prob > $\chi^2 = 0.000$), indicating that the independent variables collectively explain approximately 68.4% of the variation in Risk Disclosure (RD).

Hypothesis 1: Board Independence (BIND) has no significant effect on Risk Disclosure

The coefficient for BIND is positive and statistically significant ($\beta = 0.271$; $p = 0.002$). Therefore, the null Hypothesis (H_{01}) is **rejected**, concluding that Board Independence has a significant positive effect on the level of risk disclosure. A 10-percentage point increase in



board independence is associated with approximately a 2.7 percentage point increase in the Risk Disclosure Index score, *ceteris paribus*.

This finding strongly supports agency theory, which posits that independent directors serve as effective monitors of management and promote transparent disclosure practices (Elamer et al., 2020). Independent directors, being free from management influence, are more likely to demand comprehensive risk reporting to fulfill their fiduciary duties to shareholders (Habtoor et al., 2022). Notably, this positive multivariate result contrasts with the negative bivariate correlation observed earlier (-0.223), indicating that after controlling for other governance mechanisms and firm characteristics, board independence exerts a genuinely positive influence on risk disclosure. This finding aligns with recent studies by Almustafa et al. (2023) and Alkurdi et al. (2021) who documented positive relationships between board independence and corporate transparency in emerging markets.

Hypothesis 2: Board Gender Diversity (BGD) has no significant effect on Risk Disclosure

The coefficient for BGD is positive and statistically significant ($\beta = 0.326$; $p < 0.001$). Therefore, the null Hypothesis (H_{02}) is **rejected**, concluding that Board Gender Diversity has a significant positive effect on risk disclosure. A 10 percentage point increase in the proportion of female directors is associated with approximately a 3.26 percentage point increase in the Risk Disclosure Index score.

This finding strongly supports resource dependence theory, demonstrating that gender diversity brings valuable and unique resources to the boardroom, including different perspectives, enhanced risk awareness, and stronger ethical orientation (Birindelli et al., 2022). Female directors may be more attuned to stakeholder concerns and more committed to transparent communication, which translates into more comprehensive risk disclosure (Agyemang-Mintah & Schadewitz, 2023). This result has important policy implications, supporting initiatives aimed at increasing female representation on corporate boards in Nigeria's financial sector. The finding is consistent with García-Sánchez et al. (2022) and Orazalin & Baydauletov (2020) who found positive associations between gender diversity and corporate disclosure quality.

Hypothesis 3: Board Expertise (BET) has no significant effect on Risk Disclosure

The coefficient for BET is positive but statistically insignificant ($\beta = 0.128$; $p = 0.163$). Therefore, the null Hypothesis (H_{03}) is **not rejected**, concluding that Board Expertise does not significantly affect the level of risk disclosure.

Although the coefficient is positive, suggesting that having financially qualified directors on the board may contribute positively to risk disclosure, the effect is not strong enough to be statistically distinguishable from zero after controlling for other governance mechanisms. One possible explanation is that in financial firms where complex financial knowledge is widespread, the marginal contribution of additional board expertise may be limited (Adelopo et al., 2022). Alternatively, the effect of expertise may be more consequential at the audit



committee level, where members have direct responsibility for disclosure oversight (Hassan et al., 2024). This finding is consistent with Khatib & Nour (2021) who found weak relationships between board-level expertise and disclosure outcomes in their meta-analysis.

Hypothesis 4: Audit Committee Gender Diversity (ACGD) has no significant effect on Risk Disclosure

The coefficient for ACGD is positive and statistically highly significant ($\beta = 0.436$; $p < 0.001$). Therefore, the null Hypothesis (H_{04}) is **rejected**, concluding that Audit Committee Gender Diversity has a significant positive effect on risk disclosure. A 10-percentage point increase in the proportion of female audit committee members is associated with approximately a 4.36 percentage point increase in the Risk Disclosure Index score.

This finding underscores the critical importance of gender diversity specifically within audit committees the governance body most directly responsible for overseeing financial reporting quality and disclosure practices (Zalata et al., 2022). Female audit committee members may bring heightened attention to detail, greater diligence in reviewing risk disclosures, and stronger commitment to transparency (Al-Shaer & Zaman, 2024). The magnitude of this coefficient, being the largest among all independent variables, highlights gender diversity in audit committees as a particularly powerful driver of risk disclosure quality. This result aligns with Elmarzouky et al. (2023) and Habtoor et al. (2022) who documented the significant influence of audit committee characteristics on disclosure practices.

Conclusion and Recommendations

This study confirms that specific corporate governance mechanisms significantly impact risk disclosure practices among listed financial firms in Nigeria. The findings provide strong empirical support for agency theory and resource dependence theory within the financial sector context, demonstrating that investments in board independence and gender diversity at both board and audit committee levels are perceived by stakeholders as credible indicators of governance quality and organizational transparency.

The study establishes that:

Board Independence has a statistically significant and positive effect on risk disclosure. Firms with higher proportions of non-executive directors demonstrate substantially greater levels of risk transparency, confirming the monitoring role of independent directors in promoting comprehensive disclosure practices.

Board Gender Diversity exerts a significant positive influence on risk disclosure, indicating that female board representation enhances governance quality and promotes more comprehensive risk communication with stakeholders.

Board Expertise does not significantly affect risk disclosure after controlling for other governance mechanisms. While the direction of the relationship is positive, the effect is not



statistically distinguishable from zero, suggesting that expertise may be more consequential at the specialized audit committee level rather than the full board.

Audit Committee Gender Diversity emerges as the strongest predictor of risk disclosure quality, demonstrating that gender diversity within the governance body directly responsible for disclosure oversight has the most pronounced effect on transparency outcomes.

These findings contribute to the growing body of literature on corporate governance and disclosure by providing context-specific evidence from the Nigerian financial sector. The significant effects of independence and diversity align with theoretical predictions while extending empirical evidence to an understudied emerging market context.

Based on the empirical findings, the following recommendations are offered:

Boards of directors should prioritize the appointment of independent non-executive directors with demonstrated commitment to transparency and stakeholder accountability. Given the significant positive effect of board independence, firms should strive for boards with substantial independent representation beyond minimum regulatory requirements.

Financial firms should actively pursue gender diversity initiatives at both board and audit committee levels. Given that audit committee gender diversity demonstrated the strongest effect on risk disclosure, firms should particularly prioritize the recruitment and appointment of qualified female professionals to their audit committees.

Management should recognize risk disclosure as a strategic tool for building stakeholder trust and reducing information asymmetry. Investment in disclosure systems, processes, and governance structures will enhance the quality and comprehensiveness of risk reporting.

Regulatory authorities should implement policies to promote gender diversity on corporate boards and audit committees. The strong positive effects of both board gender diversity and audit committee gender diversity provide empirical justification for gender diversity requirements or targets in corporate governance codes.

References

- Adelopo, I., Yekini, K., & Raimi, L. (2022). Corporate governance and risk disclosure in Nigerian banks. *Journal of African Business*, 23(2), 456-478. <https://doi.org/10.1080/15228916.2021.1954876>
- Agyemang-Mintah, P., & Schadewitz, H. (2023). Gender diversity and firm value: Evidence from UK financial institutions. *International Journal of Accounting & Information Management*, 31(1), 35-58. <https://doi.org/10.1108/IJAIM-06-2022-0132>
- Albitar, K., Al-Shaer, H., & Elmarzouky, M. (2022). Do assurance and assurance providers enhance COVID-related disclosures in CSR reports? An examination in the UK context. *International Journal of Accounting & Information Management*, 30(3), 410-433. <https://doi.org/10.1108/IJAIM-01-2022-0005>



- Alharbi, R., Elnahass, M., & McLaren, J. (2024). Board financial expertise and corporate risk disclosure: Evidence from MENA banks. *Journal of International Financial Management & Accounting*, 35(1), 78-112. <https://doi.org/10.1111/jifm.12185>
- Alkurdi, A., Hussainey, K., Tahat, Y., & Aladwan, M. (2021). The impact of corporate governance on risk disclosure: Jordanian evidence. *Corporate Governance*, 21(7), 1369-1386. <https://doi.org/10.1108/CG-01-2021-0037>
- Almustafa, H., Nguyen, Q. K., Liu, J., & Dang, V. C. (2023). The impact of board characteristics on corporate risk disclosure: Evidence from Vietnam. *Cogent Business & Management*, 10(1), 2183840. <https://doi.org/10.1080/23311975.2023.2183840>
- Al-Shaer, H., & Zaman, M. (2024). Audit committee gender diversity and corporate environmental, social, and governance disclosure. *Accounting, Auditing & Accountability Journal*, 37(1), 206-235. <https://doi.org/10.1108/AAAJ-02-2023-6285>
- Amorelli, M. F., & García-Sánchez, I. M. (2021). Trends in the dynamic evolution of board gender diversity and corporate social responsibility. *Corporate Social Responsibility and Environmental Management*, 28(2), 537-554. <https://doi.org/10.1002/csr.2079>
- Bamahros, H. M., Alquhaif, A., Qasem, A., Wan-Hussin, W. N., & Thomran, M. (2022). Corporate governance and risk disclosure: Evidence from the main market listed companies in Malaysia. *Risks*, 10(10), 185. <https://doi.org/10.3390/risks10100185>
- Bhuiyan, M. B. U., Cheema, M. A., & Man, Y. (2023). Risk committee, corporate risk-taking and firm value. *Managerial Finance*, 49(2), 314-336. <https://doi.org/10.1108/MF-04-2022-0178>
- Birindelli, G., Ferretti, P., Chiappini, H., & Cosentino, A. (2022). Board gender diversity and corporate environmental sustainability: A cross-national analysis. *Corporate Social Responsibility and Environmental Management*, 29(4), 1029-1043. <https://doi.org/10.1002/csr.2252>
- Elamer, A. A., Ntim, C. G., Abdou, H. A., & Pyke, C. (2020). Sharia supervisory boards, governance structures and operational risk disclosures: Evidence from Islamic banks in MENA countries. *Global Finance Journal*, 46, 100488. <https://doi.org/10.1016/j.gfj.2019.100488>
- Elamer, A. A., Ntim, C. G., Abdou, H. A., Zalata, A. M., & Elmagrhi, M. H. (2021). The impact of multi-layer governance on bank risk disclosure in emerging markets: The case of Middle East and North Africa. *Accounting Forum*, 45(2), 169-201. <https://doi.org/10.1080/01559982.2021.1872784>
- Elmarzouky, M., Albitar, K., & Hussainey, K. (2023). Corporate governance and risk disclosure: Evidence from COVID-19 pandemic. *International Journal of Accounting & Information Management*, 31(1), 59-78. <https://doi.org/10.1108/IJAIM-05-2022-0108>
- Elshandidy, T., Neri, L., & Guo, Y. (2022). Determinants and consequences of risk disclosure quality: A meta-analysis. *International Journal of Accounting*, 57(2), 2250009. <https://doi.org/10.1142/S1094406022500093>
- García-Sánchez, I. M., Hussain, N., Khan, S. A., & Martínez-Ferrero, J. (2022). Do markets punish or reward corporate social responsibility decoupling? *Business & Society*, 61(6), 1431-1476. <https://doi.org/10.1177/00076503211024131>
- Habib, A., & Hasan, M. M. (2023). Business strategies and financial reporting quality: An empirical analysis. *Accounting & Finance*, 63(1), 601-639. <https://doi.org/10.1111/acfi.13047>



- Habtoor, O. S., Omer, W. K. H., & Al-Shammari, B. (2022). The role of board subcommittees in corporate risk disclosure. *Journal of Risk and Financial Management*, 15(10), 476. <https://doi.org/10.3390/jrfm15100476>
- Hassan, M. K., Rabbani, M. R., & Ali, M. A. (2024). Corporate governance and sustainability disclosure: A systematic review. *Sustainability Accounting, Management and Policy Journal*, 15(1), 187-223. <https://doi.org/10.1108/SAMPJ-06-2022-0331>
- Khatib, S. F. A., & Nour, A. N. I. (2021). The impact of corporate governance on firm performance during the COVID-19 pandemic: Evidence from Malaysia. *Journal of Asian Finance, Economics and Business*, 8(2), 943-952. <https://doi.org/10.13106/jafeb.2021.vol8.no2.0943>
- Nahar, S., Azim, M., & Hossain, M. M. (2020). Risk disclosure and risk governance characteristics: Evidence from a developing economy. *International Journal of Accounting & Information Management*, 28(4), 577-605. <https://doi.org/10.1108/IJAIM-07-2019-0083>
- Neifar, S., & Jarboui, A. (2023). Corporate governance and risk disclosure: A systematic literature review. *Risk Management*, 25, 122-163. <https://doi.org/10.1057/s41283-022-00112-w>
- Orazalin, N., & Baydauletov, M. (2020). Corporate social responsibility strategy and corporate environmental and social performance: The moderating role of board gender diversity. *Corporate Social Responsibility and Environmental Management*, 27(4), 1664-1676. <https://doi.org/10.1002/csr.1915>
- Ozili, P. K. (2023). Corporate governance research in Nigeria: A review. *SN Business & Economics*, 3(1), 44. <https://doi.org/10.1007/s43546-023-00427-8>
- Salem, I. H., Ayadi, S. D., & Hussainey, K. (2021). Corporate governance and risk disclosure quality in the Gulf Region. *Journal of Accounting in Emerging Economies*, 11(2), 239-268. <https://doi.org/10.1108/JAEE-01-2020-0011>
- Saona, P., Muro, L., & Alvarado, M. (2022). How do the ownership structure and board of directors' features impact earnings management? The Spanish case. *Journal of International Financial Management & Accounting*, 33(1), 48-79. <https://doi.org/10.1111/jifm.12133>
- Zalata, A. M., Ntim, C. G., Choudhry, T., & Zhang, Q. (2022). Female directors and managerial opportunism: Monitoring versus advisory female directors. *The Leadership Quarterly*, 33(1), 101545. <https://doi.org/10.1016/j.leaqua.2021.101545>