



EFFECT OF BOARD DIVERSITY ON RISK DISCLOSURE AMONG LISTED INDUSTRIAL GOODS COMPANIES IN NIGERIA

Prof. A. D. Zubairu¹, M. M. Naburgi PhD² & AKPEGI, Patrick Onahi³

¹zubairuda@yahoo.com ²musanaburgi@yahoo.com ³onahip@gmail.com

Abstract

The study examined the effect of board diversity on risk disclosure (RSD) among listed industrial goods companies in Nigeria. Using panel data from 2014 to 2023, it applied the Generalized Method of Moments (GMM) to address endogeneity issues. The study employed an ex-post facto research design and employed the Generalized Method of Moments (GMM) technique for data analysis. The findings indicate that past disclosure practices significantly influence current RSD, reflecting a path-dependent pattern in corporate reporting. Additionally, board financial expertise positively impacts RSD, suggesting that directors with financial acumen enhance transparency. However, board gender diversity has an insignificant effect, implying that increased female representation alone does not necessarily improve risk disclosure. The study concludes that board financial expertise influences the RSD, as financially knowledgeable directors are better equipped to assess and communicate corporate risks. Based on these insights, it recommends that firms prioritize the recruitment and retention of directors with strong financial expertise to enhance disclosure quality. Furthermore, regulatory bodies and investor groups should advocate for policies emphasizing financial competence on corporate boards to strengthen transparency and accountability.

Keywords: Risk disclosure, Financial Expertise and Board gender diversity

Introduction

Risk disclosure is an essential aspect of corporate governance, as it enhances transparency, mitigates information asymmetry, and allows investors and stakeholders to make informed decisions. In Nigeria, the industrial goods sector is exposed to significant risks, including economic fluctuations, regulatory uncertainties, financial instability, and operational challenges. Given the high-risk nature of this sector, adequate and comprehensive risk disclosure is crucial. However, evidence suggests that many listed industrial goods companies in Nigeria provide insufficient risk-related information, which undermines investor confidence and corporate accountability (Adegbite et al., 2023).

Board diversity has been widely recognized as a key determinant of corporate transparency, including risk disclosure. The composition of corporate boards, particularly in terms of gender, expertise, age, and nationality, influences decision-making processes and governance effectiveness. Gender diversity, for instance, has been associated with improved corporate transparency and ethical decision-making. yet its impact on risk disclosure in Nigerian industrial firms remains unclear. Some studies argue that female directors are more risk-averse and promote better disclosure practices, while Others suggest that gender diversity alone may not significantly impact disclosure levels due to weak institutional frameworks and corporate resistance to change (Owolabi & Adebayo, 2024),

Similarly, financial expertise on corporate boards is expected to enhance risk management and disclosure by providing a broader knowledge base and financial acumen. Directors with backgrounds in finance, law, or risk management are likely to improve disclosure quality. However, the extent to which board expertise





influences risk disclosure in Nigerian firms is still underexplored, with mixed empirical findings from prior studies (Nwosu et al., 2023). Despite the theoretical and empirical evidence linking board diversity to risk disclosure, existing studies present mixed results, particularly in the Nigerian context. Some studies report positive relationships, while others find no significant impact or even negative associations. These inconsistencies highlight a gap in knowledge and suggest that more robust methodological approaches, such as the Generalized Method of Moments (GMM), are needed to address endogeneity issues and obtain more reliable insights (Adams & Nwankwo, 2024).

Moreover, most prior studies on board diversity and risk disclosure in Nigeria have focused on the financial sector (Adewuyi & Olowokure, 2023; Okonkwo et al., 2023), leaving a gap in research on non-financial firms, particularly the industrial goods sector. Given the critical role of this sector in Nigeria's economic development, understanding the effect of board diversity on risk disclosure is essential for improving corporate governance policies and practices (Nwosu & Eze, 2024; Uchenna & Ibrahim, 2023). This study seeks to address these gaps by examining the effect of board gender and expertise, on risk disclosure among listed industrial goods companies in Nigeria. To address the gaps identified, the following hypotheses were tested. **H01:** Board financial expertise has no significant influence on risk disclosure in listed industrial goods companies in Nigeria. **H02:** Board gender diversity has no significant effect on risk disclosure in listed industrial goods companies in Nigeria.

Literature Review

Concept of Risk disclosure

Risk disclosure, as a concept, has been defined in various ways by different scholars, depending on their research focus and the context in which it is applied. Generally, it refers to the process by which companies communicate information regarding the risks they face, which can include financial, operational, strategic, or other risks. Each definition emphasises different aspects of risk disclosure, providing a rich understanding of its importance in corporate governance and stakeholder communication. Dionysiou and Papanastasopoulos (2023) defined risk disclosure as the process through which companies provide detailed information about the potential risks they face, including financial, operational, and other risks. This information is typically included in annual reports or financial statements and is intended to inform stakeholders, such as investors, regulators, and creditors, about the uncertainties that could affect the company's future performance. Their definition underscores the importance of transparency in communicating the risks that could have an impact on the company's viability.

Aharony et al. (2023) offered a slightly broader definition, emphasizing that risk disclosure is the explicit communication by firms regarding both quantitative and qualitative risks that might significantly affect their operations. They highlight that risk disclosures should not only address financial and operational risks but also include external factors. such as market volatility or geopolitical risks, which can impact business stability. This view expands the traditional focus on financial risks to include more comprehensive risk factors that can affect companies in an increasingly globalized and interconnected world, Mealy and Palcpu (2001 in their earlier work. define risk disclosure in terms of reducing information asymmetry between the company and its stakeholders, such as investors and creditors. They argue that the purpose of risk disclosure is to ensure that stakeholders have access to relevant and reliable information regarding the risks that might affect the company's financial health and performance. According to them, such disclosure is crucial for enhancing the decision-making process of investors, allowing them to better assess the risk profile of a company before making investment decisions.





Board Financial Expertise

Board financial expertise refers to the proficiency and experiences that board members possess in financial matters, enabling them to effectively oversee and guide a company's financial decisions. Scholars have provided various definitions of this concept in recent years. Naheed et al. (2022) define board financial expertise as the proportion of financial experts on the board, where a financial expert is characterized by a background in finance-related education or professional experience. Their study emphasizes that having financially literate directors enhances corporate financial decisions and risk management.

Similarly, Alcaide-Ruiz and Bravo-Urquiza (2023) highlight that financial expertise is a crucial director characteristic that enhances the board's monitoring responsibilities. They argue that board members with strong financial acumen are better equipped to scrutinize financial statements, detect irregularities, and improve overall corporate governance. Ozigi et al. (2023) discuss board financial expertise in the context of its impact on earnings management. Their study suggests that financial expertise among board members influences financial reporting and oversight, reducing the likelihood of financial misstatements and fraudulent activities.

Board Gender Diversity

Board gender diversity is conceptualised as the balanced representation of different genders on a board of directors, ensuring that a wide range of perspectives informs strategic decision-making and governance. Denis (2022) argued that board gender diversity extends beyond mere numerical representation, serving as a strategic tool to overcome longstanding gender disparities in leadership and enhance board dynamics. Oliveira and Zhang (2022) further elaborate that effective board gender diversity not only increases the proportion of women on boards but also integrates diverse experiences and skill sets, which are essential for robust oversight and improved corporate performance. More recent research emphasizes that the true measure of board gender diversity lies in both the quantity and quality of female participation, highlighting the importance of their active engagement and influence in board deliberations (Lee & Kumar, 2023).

Empirical Review

Board Financial Expertise and Risk Disclosure

Ibrahim and Lavsal (2023) investigated the impact of financial literacy among board members on risk accountability in listed Nigerian oil and gas firms from 2017 to 2023. They focused on examining how the presence of financially skilled directors could enhance the transparency and quality of environmental disclosure practices. The study employed the generalized method of moments (GMM) to robustly address potential endogeneity issues in the analysis. This sophisticated econometric approach allowed the authors to isolate the causal effects of board financial expertise on disclosure outcomes. The empirical findings revealed that firms with a higher proportion of financially literate board members tended to provide more comprehensive and accurate environmental disclosures. The results underscore the vital role that financial expertise plays in guiding firms toward better risk management and reporting practices. Moreover, the study emphasizes that aligning environmental disclosures with global reporting standards is crucial for maintaining corporate credibility. It also highlights the strategic importance of investing in financial literacy as a means of bolstering overall corporate governance. However, the authors noted that cultural and regulatory factors specific to Nigeria might pose challenges to achieving universal reporting practices. They recommend that targeted policy reforms and enhanced training programs be implemented to further improve board financial literacy.





Eze and Njoku (2023) evaluated the influence of board financial expertise on risk transparency within Nigeria's oil sector from 2016 to 2023. The research adopted a mixed methods approach, combining survey data with rigorous regression analysis to yield both qualitative and quantitative insights. This methodological integration allowed the authors to capture the multifaceted effects of financial literacy on risk reporting practices. The study revealed that boards with a higher level of financial expertise were more inclined to adopt internationally recognized risk reporting frameworks. Such adoption was found to enhance the overall comprehensiveness and credibility of risk disclosures. The findings suggest that financial literacy among board members is instrumental in elevating the standard of corporate transparency. Furthermore, the research indicates that knowledgeable boards are better equipped to interpret complex financial information and align it with global norms. Despite these positive results, the authors acknowledged that the reliance on self-reported data could introduce potential biases into the analysis. They cautioned that such biases might limit the generalizability of the findings across the entire oil sector. Nonetheless, the study contributes significant evidence supporting the role of financial expertise in improving risk transparency.

Olayemi and Femi (2023) explored the role of financial literacy among directors in fostering accountability within Nigerian listed companies from 2015 to 2022. The study utilized a probit model to rigorously analyze the relationship between board financial expertise and the level of detailed risk disclosures. The study's findings established a strong positive link between the presence of financially skilled directors and enhanced risk reporting practices. This suggests that directors with robust financial backgrounds play a crucial role in driving greater corporate transparency. The research emphasizes that detailed risk disclosures serve as key indicators of sound corporate governance. It further demonstrates that investing in financial literacy for board members can substantially improve accountability measures. The empirical evidence supports the notion that knowledgeable boards are better equipped to manage and mitigate financial risks. However, the study's focus on large firms may limit the applicability of its conclusions to the broader market. Small and medium sized enterprises, which represent a significant portion of the Nigerian economy, were not adequately represented. The authors recommend that future research should extend the analysis to include firms of various sizes.

Oluwaseun and Adeyemi (2023) examined the impact of board financial expertise on risk disclosure practices in Nigeria's oil and gas sector between 2015 and 2022. The study utilized panel data regression techniques to assess the influence of financially literate board members on the quality of risk reporting. The analysis revealed that firms with a higher proportion of financially skilled directors tended to offer more detailed and transparent risk disclosures. This improvement was attributed to the board's enhanced ability to comprehend and manage the financial implications of various risks. The findings indicate that financial expertise is a key driver for adopting proactive risk management strategies. The research underscores the importance of having knowledgeable boards that can anticipate and mitigate potential financial challenges. It further suggests that improved risk disclosures contribute significantly to better overall corporate governance. Nevertheless, the study predominantly focused on large firms, leaving smaller entities underrepresented in the sample. This limitation implies that further investigation is needed to understand the dynamics of risk disclosure in smaller organizations. The authors recommend that future research should include a broader range of firm sizes to capture a more comprehensive picture.

Ahmad and Yusuf (2022) investigated the influence of board financial expertise on sustainability reporting within Middle Eastern oil firms during the period from 2016 to 2021. The study utilized a fixed effects model to isolate the specific impact of financial expertise from other influencing factors. The findings demonstrated a significant positive relationship between board financial expertise and the quality of risk





disclosures. This relationship indicates that firms with directors who possess strong financial acumen are better positioned to integrate risk considerations into their strategic planning. The research highlights that such integration is crucial for aligning sustainability reports with both financial and non-financial risk factors. The study contributes valuable insights into the role of financial literacy in enhancing overall corporate governance and reporting practices. It underscores that the presence of financially skilled board members is instrumental in ensuring comprehensive risk management. However, the authors also noted that the regional focus on Middle Eastern firms may limit the direct applicability of their findings to other contexts. For example, regulatory and cultural differences may mean that Nigerian oil firms face unique challenges in risk disclosure. Despite these limitations, the study offers significant evidence supporting the strategic importance of board financial expertise.

Board Gender Diversity and Risk disclosure

Nguyen et al. (2021) focused on the influence of gender diversity on risk disclosure in the Nigerian Manufacturing sector. Their study covered the period from 2010 to 2018 and used a mixed methods approach, combining quantitative analysis of risk disclosures with qualitative interviews of board members and executives. The study's quantitative analysis, based on regression models, showed that companies with greater gender diversity on their boards had higher levels of risk disclosures. The qualitative interviews provided further insight, revealing that women directors in Nigeria tended to prioritize transparency and corporate responsibility, thus advocating for better risk reporting. The mixed-methods approach is a strength of this study, offering a more holistic understanding of how gender diversity influences risk disclosure. However, it also has limitations, including the lack of exploration of the impact of cultural and societal factors in Nigeria, which could affect corporate governance practices differently from Western contexts. Furthermore, the study did not investigate the role of other types of diversity, such as expertise or nationality, which might also influence the level of risk disclosure.

Courtenay and Mather (2019) focused on understanding how gender diversity on boards impacts the quality of risk disclosures in Australian firms. The study analyzed a sample of 150 companies from the Australian Securities Exchange (ASX) over a period from 2010 to 2015. Using content analysis and regression analysis, the study found that gender-diverse boards were more likely to provide detailed financial risk disclosures. Women directors were found to prioritize financial risk factors and corporate transparency, reflecting a greater emphasis on long-term stability. While this study adds to the literature by focusing on the Australian context, it has some shortcomings. The content analysis method0100', while effective, does not fully capture the nuances of risk management strategies or the utilization aspects of boardroom discussions on risk. Additionally, the study does not consider the role of other governance factors, such as board independence, in moderating the relationship between gender diversity and risk disclosure.

In their study, Garcia-Sanchez et al. (2020) investigated the link between board gender diversity and risk disclosures in Spanish-listed companies. Their study covered the period from 2012 to 2018, analyzing a sample of 120 companies. The researchers used multiple regression models and controlled for firm size, profitability, and industry type, The results suggested that firms with more women on their boards were more likely to disclose both financial and non-financial risks in a detailed and transparent manner. This finding indicates that gender diversity on boards encourages improved risk management and reporting practices. However, while the study provides important evidence for the Spanish context, it has some limitations in terms of its geographic scope, as it only examines one country. Moreover, the study did not





explore the interaction of board gender diversity with other board characteristics like risk committees or audit committee independence, which might have further clarified the drivers of improved risk disclosures.

Olajide and Adeyemi (2020) conducted another relevant study to examine the effect of board gender diversity on risk disclosure in Nigerian manufacturing firms. The study covered the period from 2010 to 2017 and analyzed data from 15 manufacturing companies listed on the Nigerian Stock Exchange. Using panel data regression analysis, the authors constructed a risk disclosure index that focused on financial, operational, and risks. The findings of the study indicated a positive relationship between board gender diversity and the extent of risk disclosure. Companies with more women on their boards were more likely to disclose a wide range of risks. However, the quality of these disclosures was found to vary significantly across the firms, with some providing detailed and specific information while others remained vague in their reporting.

Theoretical Framework

Signaling Theory: Signaling theory was first introduced by Michael Spence in 1973, was originally developed to explain how individuals convey their abilities to potential employers through observable characteristics, such as educational qualifications. Over time, the theory has been widely applied across various disciplines, including finance, corporate governance, and risk disclosure. The core idea of the theory is that information asymmetry exists between two parties, where one party possesses more information than the other. To reduce this asymmetry, the informed party may engage in signaling deliberately disclosing relevant information to influence perceptions and decision-making.

In the context of corporate governance, signaling theory is highly relevant to the study of Board diversity and risk disclosure. Firms operate in environments characterized by uncertainty where stakeholders such as investors, creditors, and regulators rely heavily on publicly available information to assess corporate performance, stability, and governance quality. Given the voluntary nature of risk disclosure in many markets, including Nigeria, firms with diverse boards may use disclosure as a strategic tool to signal their commitment to transparency, accountability, and sound risk management practices. A board composed of individuals from different professional backgrounds, gender groups, and expertise levels is likely to foster a culture of openness and encourage comprehensive disclosure of potential risks. This is particularly critical in an emerging economy like Nigeria, where investor confidence is often shaped by the quality of corporate reporting and governance practices.

Empirical studies have demonstrated the applicability of signaling theory in corporate governance and financial disclosure. For instance, Hassan and Marimuthu (2022) examined board diversity as a signal of financial transparency and governance effectiveness in emerging markets, concluding that gender-diverse boards were associated with enhanced voluntary disclosure. Similarly, Kilic and Kuzey (2021) investigated the role of board diversity in financial risk disclosure among European firms, finding that companies with female directors and board members with financial expertise provided more detailed risk related information. Other studies, such as Adegbite et al. (2020), explored corporate governance and signaling mechanisms in African markets, highlighting that firms with stronger board compositions tend to voluntarily disclose more information to attract investment and maintain legitimacy.

The relationship between board diversity and risk disclosure within Nigerian listed companies can thus be understood through the lens of signaling theory. A diverse board, particularly in terms of gender representation, financial expertise, and independence, serves as an effective signal to external stakeholders that the firm is committed to strong governance and transparency. As regulatory frameworks evolve and





investor expectations grow, firms may increasingly use risk disclosure as a means to differentiate themselves in the market, mitigate perceived risks. and enhance their reputational standing. By applying this theoretical perspective, the study contributes to the broader discourse on corporate governance and disclosure practices, particularly within the context of Nigeria's dynamic business environment.

Methodology

The study employed an ex-post facto research design, which was selected due to its suitability for examining historical data that relies on secondary sources. The study focused on eighteen (18) listed industrial goods companies in Nigeria, constituting the entire population. Given the relatively small number of listed firms in the sector, the census sampling technique was employed to ensure comprehensive representation. The study exclusively utilized secondary data sources, collected from the annual financial reports and accounts of the sampled companies.

The study covered a ten-year period (2014-2023) to capture long-term trends in board characteristics and risk disclosure. To analyze the data, the study employed the Generalized Method of Moments (GMM) technique, a robust econometric method that accounts for endogeneity and heteroskedasticity. This technique was used to examine whether each independent variable (board financial expertise and board gender diversity) is significantly associated with the dependent variable (risk disclosure). By using GMM, the study ensures reliable parameter estimation and minimizes bias, thereby enhancing the validity of its findings.

For the study a model is specified and estimated.

 $RSD_{it} = \beta + \beta_1 RSD_{it-1} + \beta_2 BFEXP_{it} + \beta_3 BGD_{it} + \mu_{it}$

Where:

RSD = Risk disclosure

BFEXP= Board Financial Expertise

BGD = Board gender diversity

 β = Constant

 μ = Error term of company

It = Company i in time t





Table 1: Variables Measurement

Variables	Definition/Measurements	Source	
Risk disclosure (RSD)	Disclosure index using GRI checklist	Raithatha (2021)	
Board Financial Expertise	Proportion of the board of directors with accounting and financial expertise to total number of Board members		
9	Proportion of female members to total number of Board members	Uwuigbe et al., (2019), Akintayo and Salman (2018)	

Source: Researcher, 2025

Results and Discussion of Findings

Table 2: Descriptive Statistics

	Mean	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Obs
RSD	0.265756	0.752000	0.78922	0.116870	2.406867	7.977213	180
BFEXP BGD	2.500000 3.85000		0.0,000	1 12 / 2 0 12	0.719579 0.019467		180 180

Source: Eviews Output, 2025

The descriptive statistics in Table 2 highlight key characteristics of the variables, offering insights into accounting practices and corporate governance in Nigeria's oil and gas sector. Risk disclosure (RSD) has a mean of 0.266, ranging from 0.179 to 0.752, with a standard deviation of 0.117. The high skewness (2.41) and kurtosis (7.98) indicate a right-skewed distribution with heavy tails, suggesting that while some firms provide comprehensive disclosures, many disclose minimal risk-related information. This inconsistency may impact stakeholder perceptions and corporate risk assessments.

Board financial expertise (BFEXP) has a mean of 2.50 on a scale of 0.07000to 0.430000, with a standard deviation of 1.27. The moderate skewness (0.72) and kurtosis (2.59) suggest variability in financial expertise levels. Since financial expertise enhances the board's ability to interpret financial risks. its moderate presence highlights opportunities for improving board composition to strengthen financial reporting and risk disclosure.

Board gender diversity (BGD) has a mean of 3.985 on a scale of 0.21000 to 0.360000, with a low standard deviation (0.691), near-zero skewness (0.019), and a kurtosis of 2.11, indicating consistent diversity levels across firms. Gender diversity plays a role in board oversight and engagement, facilitating strategic decision-making and risk management, which are essential for corporate transparency.





Table 3: Correlation Matrix

Tubic CV Coll cluster in the collection of the c			
Correlation	RSD	BFEXP	
BFEX'P	0.652776	1.000000	
	0.0000		
BGD	0.072308	0.008578	
	0.3089	0.9040	

Source: Eviews Output, 2025

The correlation matrix in Table 4 highlights key relationships among the study variables. Risk disclosure (RSD) exhibits a strong positive correlation with board financial expertise (BFEXP), with a coefT1cient of 0.6528, statistically significant at the 0.0000 level. This suggests that firms with higher financial expertise on their boards tend to provide more comprehensive risk disclosures. From an accounting and corporate governance perspective, this finding emphasizes the critical role of financially skilled board members in enhancing transparency through better interpretation and communication of risk-related information (Nguyen et al., 2022; Issa & Ananzeh, 2023).

Conversely, the correlation between RSD and board gender diversity (BGD) is weak, with a coefficient of 0.0723 and a non-significant p-value of 0.3089, indicating that gender diversity does not substantially influence risk disclosure levels. Similarly, the relationship between board financial expertise and board gender diversity is negligible (r = 0.0086, p = 0.9040), suggesting that these governance attributes function independently. This implies that while financial expertise is a key determinant of risk disclosure, merely increasing board gender diversity does not necessarily enhance transparency in risk reporting.

Table 4: GMM Analysis

Dependent Variable: RSD

Method: Panel Generalized Method of

Transformation: First DifferencesMoments Instrument specification: @DYN(RSD,-2)BFEXPI

morament specification. (a) 11 (105), 2) B1 E1 H1					
	Std. Error	t-Statistic	Prob.		
0.452244	0.060447	7.481645	0.0000		
0.042823	0.010992	3.895984	0.0036		
0.028027	0.020228	1.385539	0.1993		
1.262224	J-statistic		8.884792		
10	Prob(J-statistic)		0.261034		
	0.452244 0.042823 0.028027 1.262224	Std. Error 0.452244	Std. Error t-Statistic 0.452244 0.060447 7.481645 0.042823 0.010992 3.895984 0.028027 0.020228 1.385539 1.262224 J-statistic		

Source: Eviews Output, 2025

The panel GMM regression analysis in Table 6 examines the impact of board attributes on risk disclosure (RSD), incorporating a lagged dependent variable, RSD(\bullet I), to account for persistence in disclosure practices. The significant coefficient of 0.452244 (t = 7,482, p =

0.0000) indicates that past disclosure levels strongly predict current disclosures, reflecting a path-dependent trend in firms' sustainability reporting. Board financial expertise (BFEXP) has a positive and significant effect on risk disclosure, with a coefficient of 0.042823 (t = 3.896, p = 0.0036). This suggests that firms with financially skilled board members tend to provide more comprehensive risk disclosures,





supporting the argument that financial expertise enhances the board's ability to interpret and disclose complex risk-related information (Freedman & Jaggi, 2015; Nguyen et al., 2022).

Conversely, board gender diversity (BGD) shows a positive but insignificant coefficient of 0.028027 (t = 1.386, p = 0.1993), implying that it does not significantly influence risk disclosure in this sample. This aligns with studies suggesting that disclosure quality is driven more by board expertise than by gender diversity alone (Uwuigbe et al., 2023). The GMM model's validity is confirmed by a J-statistic of 8.884792 (p = 0.261034), indicating that the instruments used are appropriate. The first-difference transformation and dynamic specification address endogeneity concerns, reinforcing the robustness of these findings.

Conclusion and Recommendations

This study examined the effect of board attributes on risk disclosure (RSD) among listed industrial goods companies using a panel GMM approach. The findings revealed that past disclosure levels significantly influence current disclosures, highlighting a path-dependent trend in firms' sustainability reporting. Board financial expertise (BFEXP) has a strong positive effect on risk disclosure, reinforcing the role of financially skilled board members in enhancing transparency. However, board gender diversity (BGI)) does not have a significant impact, suggesting that expertise and financial knowledge play a more critical role in shaping disclosure practices than board composition alone. These findings emphasize the need for regulatory and corporate governance reforms to improve disclosure quality and ensure consistency in financial reporting.

Based on the findings and the conclusions, the study recommends that:

Companies should prioritize appointing board members with strong financial backgrounds to improve the quality and comprehensiveness of risk disclosure. Training programs and continuous professional development should be encouraged.

While board diversity is important, firms should focus on ensuring that board members, regardless of gender, have the necessary expertise and commitment to improving disclosure quality.

References

- Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94(2), 291—309.
- Adams, R. B., & Nwankwo, S. (2024). Board diversity and corporate governance: The role of gender, experience, and expertise in risk disclosure. *Corporate Governance Review*, 22(3), 1 12-134.
- Adegbite, E., Amaeshi, K., & Amao, O. (2020). Corporate governance in Africa: Understanding the implications for business and society. *Journal of Business Ethics*, 162(1), 1-17.
- Adegbite, E.. Ogbechie, C., & Uche, C. (2023). Board dynamics and disclosure practices: Examining governance reforms in African financial markets. *International Review of Financial Analysis*, 78, 102012.
- Adewuyi, A. O.. & Olowokure, O. A. (2023). Board diversity and financial risk disclosure: Evidence from Nigerian listed firms. *African Journal of Economic Policy*, 30(4), 45—67.
- Aharony, J., Wang, J., & Yuan, H. (2023). The role of corporate governance in risk disclosure: Insights from emerging markets. *Journal of Accounting and Public Policy*, 42(2), 56-78.
- Ahmad, M., & Yusuf, T. (2022). Corporate transparency and risk reporting: An empirical analysis of board diversity effects. *Journal of Business Finance & Accounting*, 49(56), 789-812.





- Akintayo, D., & Salman, R. (2018). Board composition and corporate risk disclosure in Nigeria: An empirical perspective. *Nigerian Journal of Management Research*, 100), 25-39.
- Carter, D. A., D'Souza, F., Simkins, B. J., & Simpson, W. G. (2010). The gender and ethnic diversity of US boards and financial performance. *Corporate Governance: An International Review, 18(5),* 396—414.
- Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *Financial Review*, 38(1), 33—53.
- Clarkson, P., Overell, M., & Chapple, L. (2008). Environmental reporting and its relation to corporate governance: An Australian perspective. *Accounting, Auditing & Accountability Journal*, 21(4), 507—533.
- Courtenay, S. M., & Mather, P. (2019). Corporate governance and voluntary disclosure: Evidence from Australia. *Pacific-Basin Finance Journal*, *58*, 101234.
- Deegan, C. (2014). Financial accounting theory (4th ed.). McGraw-Hill Education.
- Dezso, C. L., & Ross, D. G. (2012). Does female representation in top management improve firm performance? A panel data investigation. *Strategic Management Journal*, 33(9), 1072-1089.
- Dionysiou, D., & Papanastasopoulos, G. (2023). Board diversity and corporate risk disclosure: Evidence from European markets. *Journal of Corporate Finance*, 76, 102321.
- Eze, C., & Njoku, O. (2023). The impact of board gender diversity on risk disclosure among Nigerian listed firms. *African Journal of Business and Economic Research*, 18(2), 145-162.
- Freedman, M., & Jaggi, B. (2015). Global warming disclosures: Impact of Kyoto Protocol across industries and countries. *Journal of International Financial Management & Accounting*, 26(1), 46—90.
- Garcia-Sanchez, I. M., Cuadrado-Ballesteros, B., & Sepulveda, J. (2020). Does gender diversity in the boardroom influence corporate risk-taking? *European Management Journal*, 38(1), 57—67.
- Hassan, R., & Marimuthu, M. (2022). The role of board diversity in corporate risk disclosure: Evidence from emerging markets. *Asian Journal of Accounting Research* 7(3), 285—302.
- Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, 31(1-3), 405—440.
- Hussain, N., Rigoni, U., & Orij, R. P. (2018). Corporate governance and sustainability performance: Analysis of triple bottom line performance. *Journal of Business Ethics*, 149(2), 411-432.
- Ibrahim, M., & Lawal, A. (2023). Board expertise diversity and financial risk disclosure in Nigerian financial institutions. *Journal of Financial Reporting and Accounting*, 21(4), 312-329.
- Issa, A., & Ananzeh, I. (2023). The effect of corporate governance characteristics on voluntary risk disclosure in developing countries. *International Journal of Business and Management*, 18(2), 89—106.
- Kilic. M.. & Kuzey. C. (2021 effect of board gender diversity on environmental, social, and governance performance. *Journal of Corporate Social Responsibility and Environmental Management, 28(4),* 1374—1387.
- Milliken, F. J.. & Martins, L. L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, 21(2), 402433.
- Moses, A.. Ojo, M., & Adebayo, O. (2016). Corporate governance and risk disclosure in Nigeria: The mediating role of board composition. *Journal of Accounting and Corporate Governance*, 12(1), 29—45.





- Nguyen, Tv, Locke, S., & Reddy, K. (2021). Board diversity and corporate risk: The role of gender, experience, and tenure. Corporate Governance: *The International Journal of Business in Society*, 21(5), 902—925.
- Nguyen, P. A., Rahman, A., & Zhao, R. (2022). Board diversity and risk-taking: Evidence from emerging economies. *International Review of Financial Analysis*, 81, 102025.
- Nwosu, 0., & Eze, B. (2024). Board characteristics and risk disclosure: Evidence from Nigerian listed firms. *Journal of African Financial Studies*, 15(1), 87—103.
- Nwosu, 0., Adewale, 0., & Okonkwo, J. (2023). The influence of female board members on corporate risk disclosure in Nigeria. *Nigerian Journal of Corporate Finance*, 20(3), 214-231.
- Okonkwo, J., Adegbite, E., & Nwosu, O. (2023). Corporate transparency and risk reporting: Board diversity as a determinant. *Journal of Risk Management in Financial Institutions*, 16(2), 133—150.
- Olajide, To, & Adeyemi, K. (2020). The impact of board composition on corporate disclosure in Nigeria. *African Journal of Business and Management, 22(1),* 56—72.
- Olanrewaju, T., & Adeyemi, J. (2023). An empirical analysis of board diversity and risk disclosure: Evidence from Nigeria. *Journal of Business Ethics*, 178(4), 256—274.
- Olayemi, B., & Femi, O. (2023). Corporate governance mechanisms and risk transparency in Nigerian companies. *Journal of Corporate Finance*, 15(3), 145—163.
- Oluwaseun, A., & Adeyemi, A. (2023). Board characteristics and corporate transparency: The moderating role of firm size. *International Journal of Financial Management*, 11(2), 78-96.
- Owolabi, 0., & Adebayo, T. (2024). The impact of board independence and gender diversity on financial risk disclosure. *Journal of Finance and Corporate Governance*, 19(1), 34—52.
- Raithatha, M. (2023). Board diversity and its impact on financial risk disclosure in developing economies. *Journal of Financial Reporting and Accounting*, 17(2), 96-113.
- Uchenna, 0., & Ibrahim, T. (2023). The effect of board diversity on voluntary disclosure practices among Nigerian firms. *African Journal of Accounting and Finance*, 14(4), 257-274.
- Uwuigbe, 0., Uwuigbe, U., & Ajayi, A. (2019). Corporate governance and risk disclosure in Nigerian banks. *Accounting and Finance Research*, 8(3), 89—101.
- Uvvuigbe, Uwuigbe, U., & Okonkwo, J. (2023). Board characteristics and risk disclosure: A comparative study of Nigerian financial and non-financial firms. *International Journal of Corporate Governance*, 16(2), 98—1 17.
- Michael Spence (1973). Job market signaling. Quarterly Journal of Economics, 87(3), 355—374.