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Board Diversity and Financial Instrument Risk Disclosure of Deposit Money Banks in Nigeria

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Abstract
The study examines the relationship between board diversity and financial instrument risk disclosure (FIRD) of listed deposit money banks in Nigeria. The study employed a descriptive and explanatory research design and the data were generated from annual reports and accounts of sampled firms. Descriptive statistics and regression analysis were used in the data analysis. The study finds that the presence of female directors on boards does not have a significant impact on Financial Institution Risk Disclosure (FIRD) in the banking sector. This may be attributed to specific factors inherent to the sector, as female directors may lack the necessary insights to effectively influence risk disclosure in this context. Additionally, the study concludes that the presence of foreign directors does not significantly affect the FIRD of deposit money banks in Nigeria. This lack of impact may be due to their unfamiliarity with the regional and ethnic dynamics of the Nigerian banking sector. The study recommends incorporating a broader range of board attributes to better assess their influence on FIRD within deposit money banks. Furthermore, it suggests the introduction of a moderating variable that could significantly interact with and affect this relationship.

Keywords: Board Foreign Director, Board Female Director, FIRD, Capital Adequacy Ratio, Loan Quality.

1. Introduction

International Financial Reporting Standards (IFRS) was a new accounting regime that all entities in Nigeria were required to embrace, it took effect from January 1, 2012 (Sanusi, 2011). Nonetheless, given that December 31, 2011, is the transition date, all publicly listed and significant public entities were required to prepare two sets of accounts based on GAAP and IFRS (Ozili & Outa, 2019). Accordingly, Banks, as the engine of every nation's growth, are among the first compliant companies due to their unique position as a very high information asymmetry sector with a high concentration of risks (Andreou & Sergiou, 2019). In the Nigerian context, the case is not with a difference where banks were in the forefront in adopting the IFRS on arrival to do away with some shortcomings of the local standards or to as much as possible be more transparent by complying with the new global requirements (IFRS) that filled some of the lacunas of the previous local provision and to speak the international language for understandability and comparability purposes.

According to Akhigbe and Akhigbe (2021), Nigerian banking sector's inefficiency poses challenges for the full disclosure of financial instrument risks. It is crucial to develop adequate disclosure frameworks to identify, quantify, and control risks in line with the FIRD provisions. Falsified disclosures associated with concealing financial instrument risks may lead to creative accounting practices. The most common financial instrument risk associated with DMBs in Nigeria is credit risk. DMB's grant credit risk when they offer loans, which may become NPLs leading to losses. The impact of oil prices and the COVID-19 pandemic on Nigerian businesses has caused an increase in NPLs and credit risk for Nigerian banks (Ahmed & Al-Mutari, 2023). Heritage Bank's payment of a N1 billion fine in 2020 by the CBN highlights a significant lack of adherence to proper risk management procedures and potential financial instrument

risk in its loan portfolio, leading to its vulnerability to fines, penalties, and sanctions by regulators (Nurudeen et al., 2022).

Furthermore, it is documented in several studies that firms in the emerging economy such as Nigeria have the lowest corporate governance regulation and highest risk concentration (Amoaka & Asante, 2012; Ojali et al., 2023). Hence, issues of similar nature resulted in the establishment of mandatory principled-based regulations such as the IFRS 7 (financial instrument disclosure) that are more detailed, flexible, easily comprehendible and covers a wide range of issues relating to financial instrument (IASB, 2011). Based on Zango et al. (2016) view, International Financial Instrument Standard 7 (IFRS 7) are detailed standards that leaves no room for manipulations. The financial instrument risk disclosure standard (IFRS 7) is the only standards that requires companies to disclose the extent and the nature of risk portfolio in both quantitative and qualitative forms (IASB, 2019).

The presence of individuals from diverse national backgrounds on a board can enhance its advisory capabilities. Foreign directors bring valuable insights gained from their experiences living or working in different countries, providing them with critical knowledge of foreign markets and cross-national dynamics (Hooghiemstra et al., 2015). This international exposure equips foreign board members with the skills necessary to navigate the complexities of financial reporting (Emovon & Ogbonmwan, 2024). foreign expertise is particularly beneficial in accurately assessing the intricacies of accounting reports across different nations and ensuring transparent disclosure of a bank's financial situation and associated risks, especially given that the banking sector often faces unique challenges compared to other industries (Maier & Yurtoglu, 2022).

Furthermore, gender diversity is another board attribute after foreign director that the board should take into cognizance given the inquisitiveness and curiosity nature of the female gender which in turn could aid disclosure of financial instrument. Jibril et al. (2022) views that gender-based issue on the board can be linked to dependency theory, where it is believed that corporate board should encompasses members with divergent resource (gender, expertise, political connection, ethnic background, knowledge among others). Hence, the number of women on the board may result in corresponding increase in the board independence as women are more prone to seeking clarifications than their male colleagues (Carter et al., 2003; Isa & Salawudeen, 2019). Therefore, the nature of women to seek clarifications, and their attitude towards achieving organizational goal than men counterpart could go in the right direction to involve female director on the board to examine financial instruments risk disclosure (Amasiatu et al., 2023).

As a result, these irregularities and attitudes of concealing risk information that to be disclosed despite the adoption of the IFRS, this study tends to examine the relationship between board diversity and financial instruments risk disclosure of DMBs in Nigeria. Hence this paper is divided into five sections, the introduction, literature review, methodology, results discussion, conclusions and recommendation.

2. Literature Review and Hypotheses Development

Female Directors and Financial Instrument Risk Disclosure

Female director is the percentage of women or minorities on the board of directors. It entails the percentage of women participation among the board members. Gender composition on the board is an important dimension of CG since women and men are conventionally, culturally, and socially diverse. For example, the existing literature has shown that women are at variance from men in terms of personality, communication style, educational background, and career experience and expertise (Liao et al., 2014).

Isa and Salawudeen (2019). Indicated in their studies that women on board will greatly improve the risk disclosure practice for the DMBs in terms of financial instruments particularly as the disclosure need is mandated by a guiding standard as crucial as international financial reporting standard 7.

Allini et al. (2016) investigated the determinants of risk disclosure in the annual reports of listed state-owned enterprises (SOEs). The study analyses the risk disclosure in the management commentaries' (MCs) of SOEs listed on the Italian Stock Exchange (ISE) for the financial years 2008-2011 using regression. The paper examines the impact of the composition of the boards of directors and other company-specific features on financial instrument risk disclosure levels. The study shows that the presence of women on a board made a significant difference in risk disclosure. The research then concluded that the presence of women on the board played a crucial role in the disclosure of risk.
Sila et al. (2015) investigated the relationship between boardroom gender diversity and firm risk. They attempt to identify the causal effect of gender on risk, the authors use a dynamic model that controls for reverse causality and for gender and risk being influenced by unobservable firm factors. they find no statistical evidence that female boardroom representation influences equity risk measures included in their study. As a result of that, the findings concluded that board with a higher proportion of female directors is no more or less risk-taking than a more male-dominated board.

The study of Al-maghzom et al. (2016) aims to empirically explore corporate governance and the demographic traits of top management teams as the determinants of risk disclosure practices in listed banks. The investigation uses manual content analysis to measure the levels of risk disclosure in all Saudi listed banks from 2009 to 2013. It also uses ordinary least squares regressions analysis to examine the joint effect of corporate governance and demographic traits on risk disclosure. The findings show that gender and risk disclosure practices in Saudi listed banks are correlated. The study concluded that participation or involvement of female directors on the board increase risk disclosure level in both Islamic and conventional banks of Saudi Arabia. Its then suggested that more female directors should be on the board of banks for that may result in more disclosure of risk.

Mathew et al. (2016) studied boards attributes that increase firm risk evidence from the UK. The aim of the paper is to identify the board attributes that significantly increase firm risk. The study attempts to find if women on the board are associated with firm risk. This is the first study that examines which board attributes increase firm risk using a UK based sample. This empirical study collected secondary data from Bloomberg and Morningstar databases. The data sample is an unbalanced panel of 260 companies' secondary data on FTSE 350 index in the UK, from 2005 to 2010. The data was statistically analysed using STATA. Findings of the study establishes that the percentage of women on the board is consistently negatively related to firm risk and the study concluded that this could be because women have little input in better monitoring of management.

Alfraih (2016) investigated the relationship between the characteristics of the board of directors and mandatory disclosure compliance (measured by International Financial Reporting Standards requirements) in firms listed on the Kuwait Stock Exchange (KSE) in 2010. Several characteristics are used to assess the effectiveness of the board of directors: number of members, gender diversity, CEO duality, multiple directorships, the proportion of family members on the board and the presence of a member of the ruling family of Kuwait. Mandatory disclosure compliance was measured using a self-constructed, item-based index. A regression model tested the paper's hypotheses. it was found that board

gender diversity is positively correlated with compliance. The result suggested that women play an active role in monitoring the quality of financial risk disclosure.

Kwame (2018) examines the effect of corporate governance characteristics on risk disclosure in annual reports of listed firms in Ghana for the period of 12years (2003–2015). Using a sample of 30 listed firms, content analysis technique was employed to compute risk disclosure indexes for quantity and quality of risk disclosure while regression analysis was conducted to examine the effect of audit committee characteristics on risk disclosure. It was found that more female representation on audit committees rather suppresses the effectiveness of the committee thereby affecting the quality of risk disclosure. The study concluded that the action can be attributed to the fact that females are to some extent overly cautious in their decision-making processes and tend to be slow in making decisions. This attitude of female directors on the board affects the effectiveness of the work of the boards in the disclosure of risk. Khandelwal et al. (2020) investigate the corporate risk disclosure (CRD) practices of Indian firms and examine the potential impact of the board characteristics on risk disclosure levels. The researchers use sample data of non-financial Indian firms listed on the Bombay Stock exchange (BSE). They use generalized method of moments in the research to test a corporate risk disclosure practice. The study found that the women on the board made a positive and significant impact on risk disclosure. This indicates that participation of women in the composition of the board greatly impact on the disclosure level of risk including that of financial instruments. Abu-Rumman et al. (2021) investigated the influence of board gender diversity on the quality of risk disclosure in UK firms and concluded that a higher proportion of female board members' correlates positively with improved risk disclosure quality.

Adelopo et al. (2021) conducted a study examining the impact of board gender diversity on risk disclosure among UK listed companies during a period of corporate uncertainty (2006-2015). Utilizing agency theory, the research focused on how the presence of female directors' influences risk disclosure practices in the context of uncertainty. Through content analysis, the study quantified risk disclosure while evaluating board diversity based on female representation. Despite controlling for various factors such as agency costs and compliance with mandatory disclosure regulations, the findings revealed no significant relationship between board gender diversity and the levels of risk disclosure. Thus, given the divergence of opinion and paucity of rich studies on financial instrument risk, the study hypothesized that;

H1: Female director has no impact on financial instruments risk disclosure on deposit money banks in Nigeria.

Foreign directors and Financial Instrument Risk Disclosure

A foreign director is that foreign national among members of the board of directors of a given firm or is any board member that is not a citizen of the host country. Almutairi and Quttainah (2018) define foreign director as any board member who is not a citizen of the domicile country. The foreign director brings to the board dissimilar professional expertise, experiences; and, culture, background, language, and religion. The fact that foreign directors in most instances have different cultural backgrounds and experiences, foreign directors are also more likely to enrich boardroom discussions Hooghiemstra et al. (2015). For the fact that foreign directors have international contact. Abdullah and Ferris (2014) believe foreign director can supply helpful strategic advice on firm disclosure due to their vast experience, especially risk-relevant disclosures. Independent foreign directors are more prone to improve the advisory capacity of the board on risk disclosure in firms because international market knowledge equipped them with the impact of disclosing risk.

Resource dependence theory indicates that foreign members provide extra value to the board and firm through having different skills and experiences. In a similar claim, upper echelon theory argues that the existence of foreign members helps the company in gaining arrival to resources that are important to the firm's success (Makhlouf et al., 2018).

Alshirah et al. (2019) This study investigated the impact of foreign directors on the quality of risk disclosure in the annual reports of Jordanian publicly traded companies. To assess the level of risk disclosure, particularly financial instruments-driven risk, a content analysis method was employed, focusing on the count of risk-related statements within the annual reports. To fulfill the study's aims, a random effects model was utilized, analyzing a sample of 376 firm-year observations from Jordanian non-financial companies over the period from 2014 to 2017. The results align with the principles of agency theory and resource dependence theory, which suggest that the presence of foreign board members enhances the level of risk disclosure.

Boubakri and Cosset (2019) study highlights that firms with foreign directors tend to disclose higher levels of risk associated with financial instruments than those with solely domestic boards. In the same vein Khan and Yousaf (2020) the paper demonstrates that foreign directors enhance the quality of risk disclosure related to financial instruments, contributing to more informed decision-making by investors. Lee et al. (2019) A study on board ethnic diversity and voluntary risk disclosure evidence from Korean banks found that the number of foreign directors on the board has a negative effect on the quantity and quality of instrument risk disclosures in Korean banks. The authors suggest that foreign directors may lack knowledge of the domestic market and be less familiar with local regulations and practices, which could limit their ability to provide effective oversight and make a positive impact. change the grammar pattern.

Maier and Yurtoglu (2022) Board characteristics and risk is the study concentration using panel data comprising 2519 listed non-financial firms from 29 European countries over the 2012–2020 period. The research findings showed that a foreign director's presence on a board increases the disclosure level in financial service firms and lowers the bankruptcy risk. Barrios et al. (2016) investigate the factors influencing the appointment of foreign directors across different countries and the implications. The study indicates that foreign directors, like domestic ones, tend to remain with underperforming firms. Their presence does not impact on the levels of risk disclosure or market response when they replace a domestic director. Hahn and Lasfer (2015) The researchers sampled and selected companies listed on the London Stock Exchange (LSE) from1999 to 2012 that disclose information on board study uses a sample of 241 UK firms with complete data, resulting in 1716 firm-year observations showing that UK firms are having a significant increase in the proportion of foreign non-executive directors on board. The study reports that the proportion of non-executive directors who are foreign nationals brings to bear a strong negative impact on the board by disclosing risk information that engulfs the firm. Thus, given the paucity of studies directly associated with foreign director and financial instruments risk disclosure and the mixed findings of the reviewed result, the study hypothesized that;

H2: Foreign director has no impact on financial instruments risk disclosure on deposit money banks in Nigeria.

3. Methodology

The population of the study covers DMBs that are not only listed but with available data on the floor of the Nigerian Exchange Group website with available data from 31st December 2012 to 31st December

2023 as reported in Nigerian Exchange Group (NGX) Fact book 2023. However, fourteen (14) DMBs are presented; Access bank, Eco bank, fidelity bank, first bank, FCMB, GTbank, Jaiz bank, Stanbic IBTC, Sterling bank, Union bank, UBA, Unity bank, Wema and Zenith bank. The study uses census of the population; that is to say, the entire elements were considered as the study sample. Considering the 14 banks would make the sample sufficient for inferential statistics and will do away with systematic variance and sampling error (Farouk, 2018).

This study uses secondary sources of data to achieve the set objectives. Data on foreign director, female director as well as financial instrument risk disclosure by way of content analysis, to be sourced from the published audited annual reports and accounts of the DMBs from 2012-2021. The dependent variable is the financial instrument risk disclosure compliance. The level of compliance is measured using weighted disclosure index. Under this approach, 0, 1, 2 and 3 were given to the absent, partial, full, and excellent level of compliance respectively. Absent indicates noncompliance whereas partial indicates incomplete compliance with the requirements of the accounting standard on financial instruments risk disclosure. Full compliance represents total compliance with the standard and lastly, excellent compliance signifies a situation where the reporting entity moved a step ahead of mandatory reporting requirement to conform with the world class standard by adding voluntary information in that regard (Kwame, 2018; Maigoshi, 2017; Yamani & Hussainey, 2021). Hence, the disclosure score for each firm is the ratio of the points scored by a firm to the total number of points required to meet the mandatory disclosure requirement using the following formula:

$$CS_j = \frac{T\sum_{i=1}^{m} di}{M = \sum_{i=1}^{n} di}$$

Where:
CS_J = is the total compliance score for each bank
T = is the total number of items disclosed or points scored by the bank
J = is firm under consideration (DMBs)
M = is the maximum number of applicable disclosure items for the bank

Model Specification
The following equation forms the model of the study which was used to test the relationship between the dependent variable (financial instrument risk disclosure) and the independent variable (Board diversity). Hence, the models are depicted thus:

$$FIRD = \alpha_{0it}+\beta_1 Bfed_{it} +\beta_2 Bfod_{it}+ \beta_3 Caar_{It}+\beta_4 Lqua_{It}+\beta_5 Atyp_{It}+\varepsilon_{it}$$

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Table 1: Measurement Summary of Variables

Variables	Measurement	Source
Dependent Variable: Financial Instruments Risk Disclosure (FIRD)	The total number of items disclosed, or points scored by the bank divided by the maximum number of applicable disclosure items for the bank.	Yamani et al., (2021), Yamani and Hussainey (2021), Amoako and Asante (2012).
Board Female Director (BFED)	Proportion of female directors on the board of the company.	Adams and Funk (2012), Jizi (2017), Isa and Salawudeen (2019).
Board Foreign Director (BFOD)	Proportion of foreign national on the company board	Du et al. (2017), Hooghiemstra et al. (2019).
Control Variables:		
Capital Adequacy Ratio (CAAR)	This is given by shareholder equity divided by the amount subject to operational risk plus the amount subject to credit risk plus the amount subject to market risk	Bateni et al. (2014) Biancone et al. (2016).
Loan Quality (LQUA)	The ratio of non-performing loans to gross loans and advances	Adegboye et al. (2020), Ozili and Outa (2019)
Auditors Type (ATYP)	If audited by big4 1 and if otherwise 0	Birt et al. (2013), Dey et al. (2018).

4. Results and Discussion

This section presents data analysis using descriptive statistics and correlation analysis. Various post-estimation diagnostic tests that check the robustness of the models are also discussed and analyzed.

Table 2: Descriptive Statistic

Variable	Mean	Std. Dev.	Min	Max	Pr(Skewness)	Pr(Kurtosis)
FIRD	0.5305	0.0754	0.4242	0.6515	0.0408	0.0000
BFED	2.6726	1.6829	0.0000	7.0000	0.0002	0.0000
BFOD	0.8810	1.2893	0.0000	6.0000	0.0000	0.0023
CAR	0.1547	0.3314	-1.9998	0.3618	0.0000	0.0000
LQ	0.0818	0.1074	0.0000	0.9000	0.0000	0.0000
AUDTYPE	0.8690	0.3384	0.0000	1.0000	0.0000	0.0001

Source: Developed by the author using STATA 14.

From Table 2 the FIRD has a mean of 53% and a standard deviation of 7.5% revealing these risk indicators is crucial for banks to uphold regulatory requirements, preserve investor trust, and guarantee effective risk management procedures. BFED has an average of 2.6726 and a standard deviation of 1.6829. This implies that Female directors on the board represent an average of 3 with a standard deviation lower than the mean. This shows that on average female directors within banks are 3. The minimum number of female directors is 0 and maximum of 7, meaning some banks got no female representation on their board while others had to the tune of 7 within the period under review (see FCMB and FBN respectively 2012-2014).

BFOD has an average of 0.8810 with a standard deviation of 1.2893, minimum of 0 and maximum of 6. Hence, this implies that foreign director is just 1 on average even though the standard deviation for this variable shows its mean is not well-represented as there is deviation of about 0.4 from the mean and also a minimum of 0 and a maximum of 6 board of directors. This signifies that foreign representation in board membership of some banks is up to six whereas other banks had none as per the study period (see First bank and GTB, 2012-2022 respectively).

CAR has an average of 0.1547 with a standard deviation of 0.3314. The minimum for capital adequacy ratio is in negative 1.9998 and maximum of 0.3618. LQ has an average of 0.0818 and a standard deviation of 0.1074, minimum of 0 and maximum of 0.9. Finally, AUDTYPE has an average of 0.8690 with a standard deviation of 0.3384, it also had minimum of 0 and maximum of 1 auditor's type. That is some firm engage the service of big 4 firms while other banks did not.

Table 3: Correlation Matrix

	FIRD	BFED	BFOD	CAR	LQ	AUDTYPE	VIF
FIRD	1.0000						
BFED	-0.0632	1.0000					1.25
BFOD	-0.1909*	0.0537	1.0000				1.14
CAR	0.0882	-0.0972	-01616*	1.0000			1.40
LQ	0.1208	-0.1979*	0.0698	0.0096	1.0000		1.14
AUDTYPE	0.0204	0.2300*	0.0290	-0.1630*	-0.1910*	1.0000	1.40
Mean VIF						**1.53**	

Source: Developed by the author using STATA 14.
*. Correlation is significant at 0.05 level.

Financial instruments risk disclosure (FIRD) and board female director relationship is weak and negative correlation with an r value of 0.0632. By implication, female directors' relationship with financial instrument risk is an inverse one. Financial instruments risk disclosure and board foreign director correlation is negative with an r value of 0.1909.

Board female directors' relationship with the board foreign directors is positive but weak with an r value of 0.0537. Similarly board female directors' positive relationship with auditor type has an r value of 0.2300 respectively. Furthermore, board female director correlation existed between capital adequacy ratio, loan quality and at a distinctive percentage of 0.092 and 0.1979 accordingly. Board foreign director has negative coefficient of -0.1616 is found with capital adequacy ratio.

Multicollinearity is a condition in which the explanatory variables are interrelated with each other. The VIF measures the degree to which explanatory variable explain themselves in the model. Continuous variables calculate over time are bound to have some elements of multicollinearity (Araujo & Murray, 2015). According to Craney and Surles (2002) Hockings and Pendelton (1983) VIFs greater than 5 with tolerance levels approaching 0 indicate high multicollinearity among explanatory variables. Table 3 shows a mean VIF of 1.53 and each explanatory variable's individual VIF falling within the threshold of 5, with tolerance levels exceeding 0.1. This suggests that perfect multicollinearity is absent among the study's explanatory variables. This position further affirmed by (Akinwande et al., 2015).

Table 4: Diagnostic Test

Test	Direct effect Model	
	chi2/Abs	P
Breusch and Pagan LM	125.8120	0.0092
Hausman Specification	0.4400	1.0000
Modified Wald Heteroskedasticity	40.7400	0.0002
Wooldridge Autocorrelation	10.002	0.003
Pesaran's Cross-sectional Dependence	4.345	0.000

The results of the diagnostic tests are shown in Table 2 for normality which indicated abnormality in the data and now Table depicted Breusch and Pagan Lagrangian Multiplier, Hausman specification, and Modified Wald Heteroskedasticity, autocorrelation, and cross-sectional dependency in the models' tests. Consequently, the skewness/kurtosis results and Shapiro-Wilk tests indicate outliers. Despite this, there is the absence of multicollinearity among the study's explanatory variables based on the correlation coefficients and VIFs. However, the presence of heteroskedasticity, autocorrelation, and cross-sectional dependence in the panel adversely affects parameter estimates and bias standard errors (Cameron, 2009). Hence, to rectify these irregularities and guarantee that the estimation of parameter coefficients is reliable, effective, and devoid of bias from standard error, robust standard error is needed, hence, the research utilizes the Panel Corrected Standard Error (PCSE) estimator, which was recommended by (Beck & Katz, 1995; Hoelchle, 2007).

Table 5: Regression Result

FIRD	Coef.	Panel-Corrected Std. Err.	Z	P>z
BFED	0.0035	0.0061	0.5700	0.5700
BFOD	-0.0050	0.0073	-0.6900	0.4930
CAR	-0.0775	0.0246	-3.1500	0.0020
LQ	-0.0115	0.0799	-0.1400	0.8860
AUDTYPE	-0.0108	0.0312	-0.3500	0.7300
CONS	1.1109	0.0689	16.1200	0.0000
R^2	**0.1612**			
Wald Chi^2	**60.72**			
Prob>F	**0.0000**			

Significance level 1 % ***, 5% **, 10% *

Source: Developed by the Author using Stata 14.

Table 5 contains the z-score and panel corrected standard error (PCSE) of each predictor or explanatory variable on the proxy of the dependent variable. The PCSE regression result for the direct effect model examines the relationship between FIRD and independent variables. The R square of 16.12% Measures the proportion of variance in the dependent variable that is jointly explained by the explanatory variables in the model. In addition, Wald Chi^2 of 60.72, with a significant P-value of 0.0000, signifies that the model is fit.

Board female director and financial instrument risk disclosure compliance are not related statistically at 1%, 5% and 10% as obtained in the model from Table 5. This can simply be interpreted to mean involvement of female directors on the board of DMBs is insignificant and does not influence the risk

disclosure of financial instruments as required by the IFRS 7. Despite the potential benefits of gender diversity in the boardroom including the possible impact on companies' risk disclosure of financial instruments, female board members do not appear to be exerting their influence on this issue as much as could be expected. This could be due to several factors, including their sluggish nature in taking action, limited representation and expertise, cultural and socialization barriers, ineffective communication, and board dynamics and stereotyping. This study's finding is in line with those of Adelopo et al. (2021) who found no significant relationship between board gender and risk. Moreover, a similar result was found by Kwame (2018) who further opines that females are to some extent overly cautious in their decision-making processes and tend to be slow in making decisions, women board members may be stereotyped as less competent there by not be integrated in all risk and compliance decision processes of the DMBs than their male counterparts even if they have equivalent credentials and experience. Mathew et al. (2016) consider sluggish women's nature as a reason that limits females' ability to contribute to meaningful board discussions. Conversely, findings from the works of Abu-Rumman et al. (2021) shows that having a greater number of female board members is positively related to risk disclosure. This position of Abu-Rumman et al. (2021) was also held by Ábel and Demeter (2021), Khandelwal et al. (2020), Allini et al. (2016), Al-Maghzom (2016), Millicent and Philip (2015).

The association between the board of the foreign director and financial instrument risk disclosure recorded coefficient of -0.0005 and z-value of -0.6900 while p-value stood at 0.4930. This signifies that the relationship between the duo is negatively insignificant. This implies that any addition in the number of foreign directors on the board of the DMBS negatively affects the disclosure level of the banks' financial instrument risk disclosure. The study findings coincide with research conducted by Lee et al. (2019) which reveals that an increased number of foreign directors on the boards of Korean banks negatively impacts both the quantity and quality of risk instruments risk disclosures in Korean banks. This may be linked to the diversity concerning location, and different norms in terms of the business environment operation which may result in advice peculiar to their country that may not impact the operation of the DMBS. Additionally, if there are too few foreign directors on the DMB board, their presence and contributions may not be significant enough to affect the quality of financial instrument risk disclosure. Also a research with similar outcome is the study of Elgammal et al (2018) and Barrios et al. (2016). Contrary findings is that of Maier and Yurtoglu (2022) whose research findings indicated that having foreign directors on a board enhances the level of risk disclosures in financial service firms. This position is affirmed by the studies of Oluwagbemiga (2021); Boubakri and Cosset (2019).

5. Conclusion and Recommendations

The study finds that the presence of female directors on boards does not have a significant impact on Financial Institution Risk Disclosure (FIRD) in the banking sector. This may be attributed to specific factors inherent to the sector, as female directors may lack the necessary insights to effectively influence risk disclosure in this context. Additionally, the study concludes that the presence of foreign directors does not significantly affect the FIRD of deposit money banks in Nigeria. This lack of impact may be due to their unfamiliarity with the regional and ethnic dynamics of the Nigerian banking sector. The study recommends incorporating a broader range of board attributes to better assess their influence on FIRD within deposit money banks. Furthermore, it suggests the introduction of a moderating variable that could significantly interact with and affect this relationship.

References

Ábel, I., & Demeter, K. (2021). Board Gender Diversity and the Financial Performance of European Banks. 7(1), *Financial Innovation*, *7*(1), 1–18.

Abu-Rumman, S. M., Abu Rumman, M., & Al-Shoubaki, M. H. T. (2021). Board Gender Diversity, Corporate Reputation and Risk Disclosure Quality in UK Listed Firms. *Corporate Ownership and Control*, *18*(4), 162–173.

Adegboye, A., Ojeka, S., & Adegboye, K. (2020). Corporate governance structure, bank externalities and sensitivity of non-performing loans in Nigeria. *Cogent Economics & Finance*, *8*, 1816611. https://doi.org/10.1080/23322039.2020.1816611

Adelopo, I., Yekini, K. C., Maina, R., & Wang, Y. (2021). Board Composition and Voluntary Risk Disclosure During Uncertainty. *The International Journal of Accounting*, *56*(02).

Akinwande, M., Dikko, H., & Samson, A. (2015). Variance inflation factor: as a condition for the inclusion of suppressor variable(s) in regression analysis. *Open Journal of Statistics*, *5*, 754–767. https://doi.org/10.4236/ojs.2015.57075

Al-Maghzom, A. (2016). *The determinants and consequences of risk disclosure in Saudi banks*. University of Gloucestershire, United Kingdom.

Al-maghzom, A., Hussainey, K., & Aly, D. (2016). Corporate governance and risk disclosure: evidence from Saudi Arabia. *Corporate Ownership & Control*, *13*(2), 145–166.

Alabdullah, Y., & Ferris, S. P. (2014). Bridging the cultural divide: the role of foreign directors in cross-border mergers. *Corporate Governance in the US and Global Settings*, *17*, 35–79.

Alfraih, M. M. (2016). The effectiveness of board of directors' characteristics in mandatory disclosure compliance. *Journal of Financial Regulation and Compliance*, *24*(2), 154–176.

Allini, A., Rossi, F., & Hussainey, K. (2016). The board's role in risk disclosure: an exploratory study of Italian listed state-owned enterprises. *Public Money and Management*, *36*(2). https://doi.org/10.1080/09540962.2016.1118935

Almutairi, A. R., & Quttainah, M. A. (2018). Foreign directors and corporate governance in islamic banks. *Corporate Governance*. https://doi.org/10.1108/JIABR-07-2017-0104

Alshirah, M. H., Rahman, A. A., & Mustapa, I. R. (2019). The role of foreign directors in corporate risk disclosure: Empirical evidence from Jordan. *International Journal of Financial Research*, *10*(4), 119–127. https://doi.org/10.5430/ijfr.v10n4p119

Amasiatu, K. M., Okoye, E. I., & ... (2023). Corporate attributes and earnings management of non financial firms listed on the Nigeria exchange limited. *FUDMA Journal of Accounting and Finance Research*, *2*(3), 1–11. https://doi.org/doi.org/10.33003/fujafr-2024.v2i3.117.1-11

Amoaka, G. K., & Asante, S. (2012). Compliance with international financial reporting standard 7 (IFRS 7): A study of listed banks in Ghana. *Research Journal of Finance and Accounting*, *3*(4), 66–73.

Amoako, G. K., & Asante, S. (2012). Compliance with International Financial Reporting Standard 7 (IFRS 7): A study of listed banks in Ghana. *Research Journal of Finance and Accounting*, *3*(4), 66–73.

Andreou, A., & Sergiou, L. (2019). The adequacy of accounting mandatory disclosures: a field study in Cyprus. *Journal of Accounting and Management*, *9*(1), 79–86.

Araujo, P. De, & Murray, J. (2015). A life insurance deterrent to risky behavior in Africa. *Journal of Policy Modeling*, *37*(4), 548–576. https://doi.org/10.1016/j.jpolmod.2015.03.018

Barrios, J. M., Bianchi, P. A., Isidro, H., & Nanda, D. (2016). Foreign Directors. *Available at: SSRN.*

Bateni, L., Vakilifard, H., & Asghari, F. (2014). The influential factors on capital adequacy ratio in Iranian banks. *International Journal of Economics and Finance*, *6*(11), 108–116. https://doi.org/10.5539/ijef.v6n11p108

Beck, N., & Katz, J. . (1995). What To Do (and Not To Do) with Time-Series Cross-Sectional Data. *American Political Science Review*, *89*(3), 634–647.

Biancone, P. P., Shakhatreh, M. Z., & Radwan, M. (2016). Operational risk management disclosure in Islamic banks. *International Conference Risk Management Turin - May 5-6 2016*, 1–16. http://hdl.handle.net/2318/1579651

Birt, J., Rankin, M., & Song, C. L. (2013). Derivatives use and financial instrument disclosure in the extractives industry. *Accounting and Finance*, *53*(1), 55–83. https://doi.org/10.1111/acfi.12001

Boubakri, N., & Cosset, J. C. (2019). Foreign directors and financial disclosures: Evidence from emerging markets. *Journal of Corporate Finance*, 101-115.

Cameron, A. (2009). *Microeconomics using Stata.* Stata Press. Campbell,.

Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *The Financial Review*, *38*, 33–53.

Craney, T., & Surles, J. (2002). Model-dependent variable inflation factor cut-off values. *Quarterly Engineering*, *14*(3), 391–403.

Dey, R., Hossain, S., & Rezaee, Z. (2018). Financial risk disclosure and financial attributes among publicly traded manufacturing companies: evidence from Bangladesh. *Journal of Risk and Financial Management*, *11*(3), 50. https://doi.org/10.3390/jrfm11030050

Du, X., Jian, W., & Lai, S. (2017). Do foreign directors mitigate Earnings management? evidence. *International Journal of Accounting*, *January 2016*, 0–1. https://doi.org/10.1016/j.intacc.2017.04.002

Elgammal, M. M., Hussainey, K., & Ahmed, F. (2018). Corporate governance and voluntary risk and forward-looking disclosures. *Journal of Applied Accounting Research*, *19*(4). https://doi.org/10.1108/JAAR-01-2017-0014

Emovon, F. O., & Ogbonmwan, E. E. (2024). Effect of Audit Firm Characteristics on Audit Quality of Quoted Deposit Money Banks in Nigeria. *Journal of Accounting and Finance Research*, *2*(3). https://doi.org/https://doi.org/10.33003/fujafr-2024.v2i3.112.37-48

Farouk, M. A. (2018). *The moderating effects of audit committee on the relationship between board diversity and earnings management*. Bayero University Kano.

Hahn, P. D., & Lasfer, M. (2015). Impact of foreign directors on board meeting frequency. *International Review of Financial Analysis*. https://doi.org/10.1016/j.irfa.2015.11.004

Hockings, R., & Pendelton, O. (1983). The regression dilemma. Communications in Statistics. *Theory and Methods*, *12*(5), 497–527.

Hoelchle, T. (2007). Robust Standard Error for Panel Data with Cross-Sectional Dependence. *The Stata Journal*, *7*(3), 281–309.

Hooghiemstra, R., Hermes, N., Oxelheim, L., & Randoy, T. (2015). The impact of board internationalization on earnings management. In *Research institute of industrial economics*.

Hooghiemstra, R., Hermes, N., Oxelheim, L., & Randøy, T. (2019). Strangers on the board: the impact of board internationalization on earnings management of Nordic firms. *International Business Review*, *28*(August 2018), 119–134. https://doi.org/10.1016/j.ibusrev.2018.08.007

IASB. (2011). *International Accounting Standards Board.*

IASB. (2019). *Who we are*. International Financial Reporting Standards. www.ifrs.org

Isa, M. A., & Salawudeen, A. (2019). Board characteristics, dividend policy and shareholders' wealth of listed manufacturing Companies in Nigeria. *Journal of Applied Business and Economics*, *21*(9), 24–45.

Jibril, R. S., Isa, M. A., & Maigoshi, Z. S. (2022). Corporate board gender, institutional strength and energy disclosure in Nigeria. *Journal of Chinese Economic and Foreign Trade Studies*, *15*(3), 316–331. https://doi.org/10.1108/JCEFTS-09-2021-0057

Jizi, M. (2017). The influence of board composition on sustainable development disclosure. *Business Strategy and the Environment*, *26*(5), 640–655. https://doi.org/10.1002/bse.1943

Khan, U., & Yousaf, A. (2020). The impact of foreign directors on the quality of financial reporting: Evidence from Pakistan. *Managerial Auditing Journal*, *35*(7), 989–1012.

Khandelwal, C., Kumar, S., Madhavan, V., & Pandey, N. (2020). Do board characteristics impact corporate risk disclosures? The Indian experience. *Journal of Business Research*, *121*, 103–111. https://doi.org/10.1016/j.jbusres.2020.08.004

Kwame, E. A. (2018). *The effect of audit committee characteristics on risk disclosure: An analysis of listed firms in Ghana*. University of Ghana.

Lee, S. Y., Cho, Y. J., & Park, Y. W. (2019). Board ethnic diversity and voluntary risk disclosure: Evidence from Korean banks. *Pacific-Basin Finance Journal*, *73*.

Liao, L., Luo, L., & Tang, Q. (2014). Gender diversity, board independence, environmental committee and greenhouse gas disclosure. *The British Accounting Review*, 1–16. https://doi.org/10.1016/j.bar.2014.01.002

Maier, F., & Yurtoglu, B. B. (2022). Board Characteristics and the Insolvency Risk of Non-Financial Firms. Management. *Journal of Risk and Financial*, *15*(7), 303.

Maigoshi, Z. S. (2017). *Related party transaction disclosure: compliance, determinants, value-relevance and real earnings management*. Universiti Utara, Malaysia.

Makhlouf, M. H., Al-sufy, F. J., & Almubaideen, H. (2018). Board Diversity and Accounting Conservatism: Evidence from Jordan. *International Business Research*. https://doi.org/10.5539/ibr.v11n7p130

Mathew, S., Ibrahim, S., & Archbold, S. (2016). Boards attributes that increase firm risk evidence from the UK. *Corporate Governance : The International Journal of Business in Society*, *16*(2), 233–258.

Millicent, W. B., & Philip, C. (2015). Board Gender Diversity and Corporate Response to Sustainability Initiatives : Evidence from the Carbon Disclosure Project. *Journal of Business Ethics*, *142*(2), 369–383. https://doi.org/10.1007/s10551-015-2759-1

Ojali, J. S., Adamu, A. I., & Shawai, A. S. (2023). Audit committee characteristics and audit delay among Nigerian Oil and Gas companies. *FUDMA Journal of Accounting Research*, *9*(13), 136-156.

Oluwagbemiga, O. E. (2021). The influence of IFRS adoption on the quality of financial reporting in Nigerian listed companies. In C.-F. Lee (Ed.), *Advances in Pacific Basin Business, Economics and Finance* (Vol. 9, pp. 137–160). Emerald Publishing Limited. https://doi.org/10.1108/S2514-465020210000009005

Ozili, P. K., & Outa, E. R. (2019). Bank earnings smoothing during mandatory IFRS adoption in Nigeria. *African Journal of Economic and Management Studies*, *10*(1), 32–47. https://doi.org/10.1108/AJEMS-10-2017-0266

Sanusi, L. (2011). Global financial meltdown and the reforms in the Nigerian banking sector. *CBN Journal of Applied Statistics*, *2*(1).

Sila, V., Gonzalez, A., & Hagendorff, J. (2015). Women on board: Does boardroom gender diversity affect firm risk? *Journal of Corporate Finance*, *36*, 26–53. https://doi.org/10.1016/j.jcorpfin.2015.10.003

Yamani, A., & Hussainey, K. (2021). Compliance with IFRS 7 by financial institutions: Evidence from GCC. *International Journal of Disclosure and Governance*, *18*, 42–57. https://doi.org/10.1057/s41310-020-00089-8

Yamani, A., Hussainey, K., & Albitar, K. (2021). Does governance affect compliance with IFRS 7? *Journal of Risk and Financial Management*, *14*(6), 239. https://doi.org/10.3390/jrfm14060239

Zango, A. G., Kamardin, H., & Ishak, R. (2016). Audit quality, board gender and financial risk disclosure. *International Journal of Economics and Financial Issues*, *6*(4).