BOARD ATTRIBUTES AND CREDIT RISK EXPOSURE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA: THE MODERATING EFFECT OF RISK COMMITTEE SIZE

ABSTRACT

Aim: This study examined the moderating effect of Risk Committee Size on the relationship between board attributes and Credit Risk Exposure of listed Deposit Money Banks in Nigeria.
Study Design: This study adopted ex-post facto research design.
Place & Duration of Study: Department of Accounting and period 2009-2019.
Methodology: Panel regression technique was used, Stata 13 was adopted as tool for the data analysis. Secondary source of data was employed and were obtained from the annual reports and accounts of the banks over the period.
Results: The findings reveal that, board size has significant effect on credit risk exposure of banks before and after moderation. However, moderating board attributes revealed that board size and board diligence drive down the credit risk exposure of banks. Among the important policy implications is that the variables used suggest that there is continuous need by CBN to encourage and enforce the full application of corporate governance codes by banks in order to reap the full benefit of compliance.
Conclusion: Based on the findings, this study concludes that board size is associated with less credit risk exposure, while high number of board size do not guarantee reduction in credit risk exposure of banks.
Recommendation: It is therefore recommended amongst others that the number of board size should be increased alongside increase in the number of risk committee members to help reduce the risk exposure of banks in Nigeria.

Keywords: Board Attributes, Risk Committee Size, Credit Risk Exposure.

1.0 INTRODUCTION

"The typical profit and loss statement of any bank often indicates that a significant part of its total income is usually generated from interest on loans and advances granted to their various customers. In other words, bank profitability to a very large extent depends not only on the volume of its loan but also on the quality of such loans and advances. The major role of deposit money banks in the financial sector of the economy is that of acting as financial intermediaries. They mobilize and channel funds from surplus economic units to deficit ones to facilitate business transactions and economic development. As such many firms have run into trouble due to risk management failures. However, risk management failures are accompanied by corporate governance failures" (Adeshina & Jegede, 2018)

Therefore, credit risk management is still very much important and still being discussed in banking industry due to rising unstable economic environment. Risk according to Khan and Ahmed (2011), "is an unforeseen and unclear impending event that could affect the achievement of organizational objectives. Given the challenging role banks play in Nigeria's development, regulatory bodies such as Central Bank of Nigeria (CBN) and Nigeria Deposit Insurance Corporation (NDIC) are confronted with finding a way out in management of diverse risks banks are exposed to and their implication to the financial system stability". "Therefore, to ascertain the success or failure of any financial institution, their risk management strategy is a very vital tool to be considered. It is important for banks to design and formulate strategies that will not only minimize their risk but will also improve its profitability. Previous studies have identified various forms of risks the banking sector is exposed to which includes capital risk, liquidity risk, operational risk, market risk (interest rate risk and inflation risk), quality risk, compliance risk, political risk, regulatory risk, technological risk and reputational risk amongst others", (Khemakhem & Boujelbene, 2018).

"Corporate governance, as a mechanism, has been one of the topics of interest to many researchers in the bid to reduce conflicts of interest between management and investors. This mechanism aims to protect the owners of capital from opportunistic dispositions (Rouf, 2011) and ensure that managers perform their best to achieve the interests of the shareholder and stakeholders". "Therefore, internal governance mechanisms, have received given a considerable attention worldwide as they enhance economic proficiency to achieve the overall public benefits of the individual and organizational stakeholders" (Al-Matari, 2014).

"However, in order to achieve good governance practice, the involvement of various parties especially those within the organization, is very crucial. Among major internal mechanisms that contribute towards good

governance practice are board of directors (BOD) and its sub-committee including risk management committee. The Central Bank of Nigeria code on Corporate Governance (2014) clearly present the roles and responsibilities of the bank's board toward risk management framework". The code stated that for the board to have a system which effectively identifies, measures, monitors, controls and manages risks. This explains the crucial role risk management committee play in the Nigerian banking industry. Moreover. the International Corporate Governance Network (ICGN) has issued guidelines on responsibilities for the oversight and management of corporate risk (2010) which include that the oversight process should begin with the board and risk committee, management should develop and implement the company's strategic and routine operational risk management system within the strategy set by the board and subject to board oversight, assess the effectiveness of the board in overseeing risk.

"Risk can also be seen as an effect of uncertainty on objectives of the management to coordinated activities direct and control an organization with regards to the risk. At first glance, it may seem somewhat counterintuitive that financial institutions with stronger corporate governance mechanisms are associated with higher levels of systemic risk. However, consistent with traditional shareholder value maximization, well-governed financial institutions may have tried to improve their profitability to placate shareholders before the crisis by increasing the level of risk-taking" (Iqbal, Strobl & Vähämaa, 2015). "Empirical support for this view is provided, for instance, by Beltratti and Stulz (2012), who document that bank with more shareholder-friendly boards took more risk at the onset of the global financial crisis and performed significantly worse during the crisis. Effective management of risk requires an enterprise-wide approach rather than treating each business unit individually. It should be considered good practice to involve the board in both establishing and overseeing the risk structure of an organization".

The motivation for this study is due to the economic crisis that occurred in 2020 as a result of the COVID 19 outbreak and the global economic dislocation aftermath which has negatively affected financial institutions and other sectors of the economy. This further necessitated the Central bank of Nigeria (CBN) to design several policies and frameworks to guide the banks in Nigeria against the repeat of the 2008 global financial and economic meltdown through the banking reforms.

Most importantly, the 2018 CBN forensic audit report that led to the collapse of Skye Banks Plc has continued to raise concern to stakeholders in Nigeria (Apochi & Baffa, 2022). The liquidity challenge that initiated the merger of Access bank Plc and Diamond Bank Plc in 2019 emanated due to poor credit risk management. The issue of poor credit management persisted as First bank Plc was negatively affected. As a result, its market shares declined. These and some credit risk management issues in the listed DMBs has further necessitated the need for examining the mediating role of risk management committee on the relationship between credit risk and financial performance of DMBs in Nigeria.

Moderators are to explain more about real-life situations. Most cause-and-effect relations includes interactions with a third variable (Olugbola, 2017). Also, moderators are introduced to decide the disagreement between the variables in question. Olugbola (2017*)* have suggested that "moderator variable can be employed if there is an inconsistent relationship between standard and predictor variable. Owing to the inconsistent results among the studies on determinants of internal governance mechanism and credit risk exposure around the world, this study is utilized risk committee as a moderating variable".

"Owing to the inconsistent results among the studies on determinants of internal governance mechanism and credit risk exposure around the world, this study utilized risk committee as a moderating variable. It is therefore, based on the above background that, this research used deposit money banks (companies) because of their importance in the economic development of a country. Empirically, despite the continuous debate and mixed findings regarding the effect of board composition on performance (McGuinness, Vieito & Wang, 2017), prior studies argued that board attributes is still remain desirable as a result of the following reasons: first, it offers a means of improving organizational value, performance and minimize credit risk by providing board with new insights and perspectives" (Azmat & Rentschler, 2017). "As prior literature suggested, attributes of group membership increase discussion, the exchange of ideas and group performance; and offers a representation of the diverse stakeholders of the firm and a reflection of the structure of the society within which it exists, in line with the function of the board that is to protect the interests of stakeholders and society at large" (Shaukat, Qiu & Trojanowski, 2016). It was therefore important to conduct this research to show the desirability of board attribute in listed deposit money banks in Nigeria.

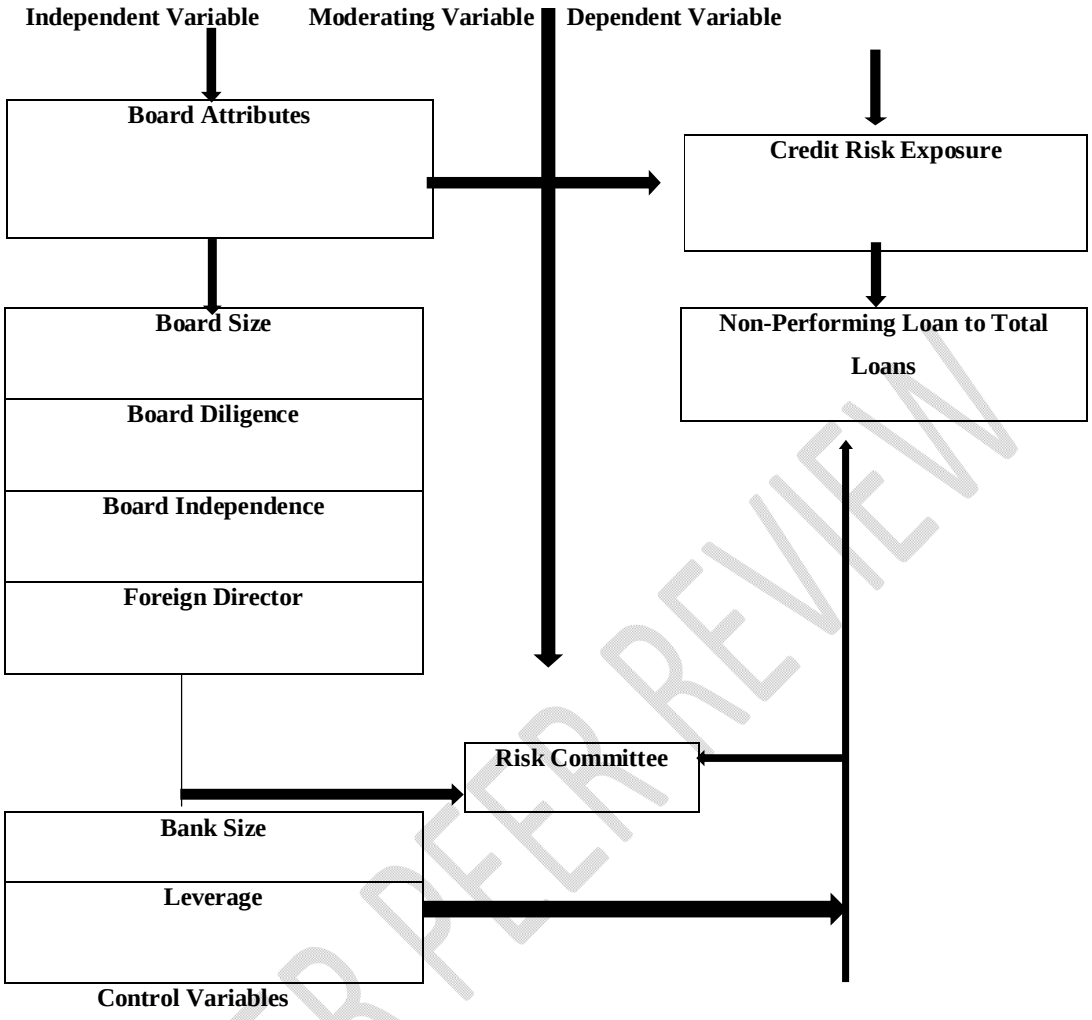
"In addition, most of the empirical research on board diversity was mainly carried out in developed countries, such as the U.S. (Gul et al. 2011), the U.K. (Brammer et al. 2007) and Australia" (Terjesen, Aguilera, & Lorenz, 2015). "Owing to the differences between the developed and the developing countries, in terms of their regulatory, cultural and economic environments, size of capital markets and effectiveness of governance mechanism (Al-Malkawi, & Pillai, 2018; Wang, Liu, Xiong & Song, 2019), more evidence should be drawn from the developing countries, in a way to contribute to the limited literature on board diversity in these countries, particularly in developing countries" (Katmon, Mohamad, Norwani, & Al Farooque, 2019). "Rather than relying on research results from other countries, researchers need to take national circumstances into account in examining board diversity, thus calling for more research works on this topic to be undertaken in different countries" (Newman, Nielsen, Smyth, Hirst & Kennedy, 2018). This study therefore adds to the existing body of literature on the aspect not widely covered by researchers as revealed by the reviewed literature. Against this backdrop, this study seeks to address the degree of new entry threats faced by moderating board structures and credit risk with risk management committee. This study will address the existing literature gap, especially in Nigeria and will provide a link between theories and practice. The result of the study will certainly support the position of past empirical research. Therefore, the broad objective of this study is to examine the moderating effect of risk committee on the relationship between board attributes and credit risk exposure.

2.0 LITERATURE REVIEW

Conceptual and Theoretical review

This section of the literature review provided conceptualization of board structures, credit risk exposure and also bank size and bank leverage as control variables. Risk committee size was also introduced as a moderator variable to establish its interactive effects on the relationship between board attributes and credit risk exposure. These relationships are diagrammatically represented in Figure 1.

Figure 1. Schematic Diagram with Moderating Variable



Board Attributes

Kroll & Muriithib (2020) asserts that, “board of directors is a body of elected or appointed members who jointly oversee the activities of a firm or company”. “Board of governors, board of managers, board of trustees, and board of visitors are the other names used for board of directors. It is often simply referred to as "the board". A board's activities are determined by the powers, duties, and responsibilities delegated to it or conferred on it by an authority outside itself. These matters are typically detailed in the bylaws of the organization. The bylaws commonly also specify the number of members of the board, how they are to be chosen, and when they are to meet. Research on women as board directors has focused on women’s under-representation on board of directors” (Bektur & Arzova, 2020).

The board of directors is the first level of supervision over the activities of the institution and its management. The size of the board constitutes another crucial aspect in governance as size does matter in quality of decisions and coordination. Malik, Wan Ahmad, Naseem and Rehman, (2014) studied the relationship between board size and business performance, to some listed banks in Pakistan for the period of four years. Their study concluded that the larger the board size the efficient and effective performance will be.Lin et al (2014) confirmed that board attendance decreases with multiple directorship meaning larger board size, however effective board monitoring is the most important factor to be considered, is that higher board attendance enhances higher firm performance. However, Feijoo and Cuesta (2016) pointed out that, in the case of banks, it is currently postulated that they should form the risk committees, Board committees, to increase efficiency and allow deeper focus in specific areas, may establish certain specialized board committees. The committees should be created and mandated by the full board. The number and nature of

committees depend on many factors, including the size of the bank and its board, the nature of the business areas of the bank, and its risk profile.

Corporate Risk

"Risk management is a process of identification as well as assessment of loss exposures faced by an entity and the adoption of best possible techniques and strategies to deal with these risk exposures" (Muhammad, Khan & Xu, 2018). "Risk management is characterized by identification, assessment as well as prioritization of risks in conjunction with the coordination and an economical application of available resources in order to minimize, control, and monitors the prospect or impact of unfortunate as well as unwanted events pertaining to a business" (Bagh, Asif-Khan & Razzaq, 2017). "Risk is often defined as a probability or threat of damage, injury, liability, loss, or any other negative occurrence that is caused by external or internal vulnerabilities, and that may be avoided through preemptive action" (Paulinus & Jones, 2017). Different types of risk surround an organization ranging from liquidity risk to credit risk, therefore managing risk becomes crucial to foster survival. Muriithi (2016) defined credit risk as a risk of default that may arise when a borrower is unable to make payments at maturity. It is usually expressed as ratio of non-performing loans /total loans. The appreciation of credit risk is certainly incontestable throughout financial services sector. Thus, a loan loss provision is an amount set aside for loans and credits that remain uncollected. It can be calculated as ratio of loan loss provision to total loans. Bank assets quality expectation can be assessed through the level of loan loss provision to total loans. In relation to loans, it refers to the probability that a borrower may not repay a loan. "Risk management is a rather elusive concept. Although there are several special definitions and classifications, there remains an absence of a widely accepted definition. The conceptualization of risk has evolved from a pre-modern view focusing on fate, superstition and sin, to being something considered calculable, quantifiable and therefore manageable" (Kyyrönen, 2017).

Empirical Review

This subsection of the literature provides a review of the existing literature as they relate to this study with the plan of providing empirical support of the topic under review so as to establish research gap.

Alhassan and Mavis (2021) examined "the influence of various corporate governance structures such as board size, board independence, board gender diversity and CEO duality on the financial performance of rural banks in Ghana. The study collected secondary data from the annual report of 30 rural banks from 2010 through 2019. Using regression analysis, results showed that there was a positive but statistically insignificant association between CEO duality and ROA and ROE". Similarly, Afriyie, Aidoo and Agboga (2021) examined "corporate governance and its impact on the financial performance of commercial banks in Ghana on a sample of twenty commercial banks. For a seven -year period. The empirical findings revealed that board composition, bank size, and net interest margin significantly impacted bank profitability".

Fariha, Hossain, and Ghosh (2021) analyzed "the effect of board characteristics and audit committee attributes on the firm performance of publicly listed commercial banks of Bangladesh. Thirty publicly listed commercial banks of Dhaka Stock Exchange (DSE) have been taken as sample for this study. Data have been collected from annual reports between 2011 and 2017 of the assessed banks. Pooled OLS model was used in running regression model for this study. Board independence was revealed to have a negative and significant relationship with ROA and Tobin's Q. However, board independence has a positive and significant relationship with Stock". Allen and Thomas (2021) focused on "mandatory executive retirements of listed firms and found that younger executive teams increase risk taking, as do board changes that result in a higher proportion of female executives".

Berna and İbrahim (2020) examined "board of directors' characteristics and its effect on risk level measured by non-performing loans and on bank performance in turkey using the Generalized Method of Moments (GMM) estimator. Data from nineteen deposit banks for the period 2012–2018 were used. The result of the study determined that the board size, foreign board members and the independent board members have a significant effect on both non-performing loans and the return on assets". Permatasari (2020) examined "the relationship between corporate governance and risk management of Indonesian banks. Implementation of good corporate governance is measured by good corporate governance composite rating, which is the result of bank's self-assessment. Bank risk managements are measured by market risk, credit risk, liquidity risk and operational risk. The study results showed that good corporate governance implementation in Indonesia was able to influence bank risk. There were differences in credit risk, liquidity risk and operational risk in banks with different governance ratings, but not at market risk".

"This study is anchored on the agency theory and resource dependence theory, it could be stated that the composition of the board of directors may affect firm's outcome in numerous ways. If female directors add new perspectives and qualities to the board there could be gender-related differences that may influence the level of risk taking the firm executes" (Faccio et al., 2014).

3.0 METHODOLOGY

This study adopted ex-post facto research design to analyse data empirically using starter statistical package because the study employed annual report and accounts of the quoted deposit money banks in Nigeria. This is in view of its relative importance to board attributes and credit risk in the listed deposit money banks in Nigeria. The study adopted the quantitative and the deductive approaches as the data for the variables are in figures. The study also aligned itself with the positivist paradigm because it is dependent on quantifiable observations that lead to statistical analysis through quantitative data collection and interpretation to establish "what is" without any form of human interaction within the study. The population of this study consisted of all the quoted deposit money banks listed on the Nigerian Stock Exchange as at 2021. The study covered a period of eleven years between 2009 and 2021. Table 1 contained the list of the entire banks quoted on the Nigerian Stock Exchange, and their years of listing.

Table 1: Population of Listed Deposit Money Banks

S/N	Bank Name	Year of Incorporation	Year of Listing
1	Access (Diamond)Bank	1989	1998
2	Eco Bank	1980	2006
3	FBN	1969	1971
4	FCMB	1982	2004
5	Fidelity Bank	1987	2005
6	GTB	1990	1996
7	JAIZ Bank	2004	2016
8	SKYE Bank	1989	2005
9	Stanbic IBTC	1989	2005
10	Sterling Bank	1960	1993
11	UBA	1961	1970
12	Union Bank	1969	1970
13	Unity Bank	1987	2005
14	Wema Bank	1969	1991
15	Zenith Bank	1990	2004

Source: Generated from the NSE Website 2021

Taking into consideration the nature of the population for the purpose of this study, a census sampling technique was adopted. The working population therefore consisted of the fourteen (14) banks that scaled the filter as presented in Table 1. In line with the aim of this study and based on the significance of the secondary data to the research topic, the study utilized secondary source of data. Data was obtained from the annual reports and accounts of all the deposit money banks listed on the Nigerian Stock Exchange covering the period of eleven years from 2011 to 2021. The variables of the study comprised dependent variables, independent variables, moderating variables and control variables and their measurements. The dependent variables are the credit risk exposure, the independent variables include the board size; board diligence, board independent and foreign director, while the moderating variables has board attributes which include (risk committee) control variables (Firms size and Leverage).

Table 2: Variables and Measurement Criteria

Variables	Measurement	Empirical support
Dependent variable		
Credit Risk Exposure	Non - performing loans / Total gross loan	Pagano & Sedunov, (2016).
Independent Variables		
Board Size	The total number of the board of directors	Batool & Javid, (2014),

Board Diligence	The total number of meetings	Demeh & Mohammed (2013),Kurawa& Ishaku (2014)
Board Independence	Proportion of non-executive directors to the total directors on the board	Maniagi et al (2013)
Foreign Director	Proportion of foreign nationals divided by the total number of board members	Farouk (2014)
Moderating Variable		
Risk Committee Size	Number of Risk committee members	Al-Shaer & Zaman, (2016).
Control Variables		
Firm Size	Natural log of total assets.	Wu, (2013), Toby (2014)
Leverage	Debt divided by total assets	Altman, 1968; Hillegeist et al., 2004).

Source: **Compiled by the Researcher, 2021**

Panel Least Square Technique was adopted for the study. One Steps Regression was used in assessing the effect of board attributes on credit risk exposure of listed deposit money banks in Nigeria. The Robust Ordinary Least Square and the Generalized Least Square were used which includes fixed effect and random effect models. The estimation was done using Stata 13 as a platform of analysis because this package is more informative, that is, it provides more variability, less collinearity and more degrees of freedom than the other package use for analysis (Farouk, 2014).

Therefore, the general model based on the variables of the study which is a modification of (Maniagi et al; Demeh & Mohammed 2013; and Kurawa & Ishaku 2014) is stated thus:

$CRSK_{it} = \beta_{0it} + \beta_1 BSIZ_{it} + \beta_2 BDIL_{it} + \beta_3 BIND_{it} + \beta_4 FDIR_{it} + \beta_5 SIZE_{it} + \beta_{5it} LEVR_{it} + \varepsilon it$ ……*model i*

$CRSK_{it} = \beta_{0it} + \beta_1 BSIZ_{it} * RICS + \beta_2 BDIL_{it} * RICS + \beta_3 BIND_{it} * RICS + \beta_4 FDIR_{it} * RICS + \beta_5 SIZE_{it} + \beta_{5it} LEVR_{it} + \varepsilon it$ ……*model ii*

Where:
CRSK stands for Credit Risk
BSIZ is Board Size
BDIL stands for Board Diligence
BIND is Board Independence
FDIR is Foreign Director
RICS stands for Risk Committee Size
SIZE is a stand for Firm Size.
LEVR is a stand as Firm Age
e is error term

4.0: RESULTS AND DISCUSSIONS

The descriptive statistics is presented in Table 3 showing the minimum, maximum, mean, standard deviation, skewness, kurtosis and Shapiro wilk of the study variables

Table 3: Descriptive Statistics

Variables	Min	Max	Mean	Std. Dev.	Sktest	Swilk

CRSK	0.58	69.15	8.331	11.76	0.0000	0.00000
BSIZ	7.00	21.0	14.10	2.810	0.0755	0.06909
BDIL	2.00	12.0	6.195	2.042	0.0052	0.00324
BIND	0.21	0.88	0.577	0.118	0.0379	0.00054
FDIR	0.00	0.42	0.044	0.107	0.0000	0.00000
RICS	4.00	8.00	4.503	0.710	0.0000	0.00000
LEVR	20.2	94.7	81.94	12.50	0.0000	0.00000
SIZE	18.4	22.3	20.47	0.944	0.0299	0.01217

Source: Descriptive Statistic Results Using STATA 13

Table 3 showed the minimum value for credit risk represented with non-performing loan to total loans is 0.58 implying that non-performing loan was about 58% of the total loan which is above average. But when compared with the highest level of credit risk, it depicts that non-performing loan was at its worst around 69% higher than the total loans for the banks within the study period. The mean value further substantiates the fact that non-performing loans in the banking sector within the study period was about 8% higher than the total loans. As such, this result may not reflect the true average for the banks as the value of the standard deviation is far higher than the mean value. The p-value for both skewness and kurtosis, from the Jacque bera result which is significant at 1%, shows that the data for credit risk was not normally distributed.

Board size had a minimum value of 7.00 and a maximum value of 21.0, implying that the lowest number of board members in banks is seven, while the highest number of board members maintained by the banks was twenty-one. On the whole, board size recorded a mean value of 14.10, implying that, on the average, most of the bank board size stood at about fourteen. The standard deviation implied that the mean value recorded was not the true average for the banks as it was high above the mean. The p-value of 1%, from the Jacque Bera Statistics for normality test which included both skewness and kurtosis, implied that the data was normally distributed. Board diligence had a minimum value of 2.0 and a maximum value of 12.00 implying that there was a bank whose board members met only two times in a year which is the least for the meetings held within the study period for board members. Meanwhile, the highest number of times meetings were held by the bank board was twelve (12) times within the period covered by the study. The mean value of about 6.195 implied that, on the average, bank boards met for at least six times within the period. The standard deviation for this variable implied that its mean is a well-representation of average as there was much deviation from the mean. The data for board diligence was not normally distributed based on the results from the kurtosis test and skewness test. This was further substantiated by the significant p-value from the Jacque bera test of 1%. Board independence and foreign directors presents mean and standard deviation of 0.51, 0.118 and 0.044, 0.017 respectively. The minimum and maximum values for board independence of 0.21 and 0.88 implies that listed deposit money banks in Nigeria has at least two non-executive directors serving on their board and a maximum of eight. For foreign directors, an average of four foreign directors were recorded. Board independence presents a relatively lower standard deviation indicating a lower spread of the data. The cumulative R^2 of 0.4445 which was the multiple coefficient of determination gave the proportion of the total variation in the dependent variable as explained by the independent variable jointly. Hence, it signified that 44.45% of the total variation in credit risk exposure of listed deposit money banks in Nigeria is accounted for by the proportion of size of the bank's board, board diligence which represent the number of times meetings were held, board independence which represent the percentage of non-executive directors on board, foreign director who serves on the board of banks, moderated board size, moderated board diligence, moderated board independence, moderated foreign directors with board risk committee size, leverage and the quantum of investment in total assets used as control variable in the study.

Post Estimation Tests

This section presented the post estimation tests results conducted. The post estimation tests include: multicolinearity test, heteroscedascticity test and normality test of error term.

Multicolinearity Test: This was conducted to check whether there was a correlation between the exogenous variables of the study or not. The variance inflation factor (VIF) and the Tolerance values estimated was used to test for multicolinearity in the regression. The variance inflation factor and tolerance estimated were found to be consistently smaller than ten and one (Table 4). To further substantiate this claim, the mean VIF of 1.12 which is smaller than ten (10) indicated that multicolinearity was not a threat to the validity and inferences to be made from the regressions (Tobachnick & Fidell, 1996).

Table 4: Multicolinearity Test

Variable	VIF	1/VIF
Fdir	1.19	0.843278
Bind	1.16	0.860018
Size	1.16	0.860325
Bdil	1.10	0.913027
Bsiz	1.10	0.972883
Mean VIF	1.12	

Heteroscedasticity Test: Result obtained from the heteroscedasticity tests conducted for the regression showed chi-square value of 5.87 which is large as its probability value was less than 5% as presented in Table 5. This indicated that heteroskedasticity was present in the panel. This made the interpretation of Ordinary Least Square (OLS) not suitable because of the violation of the one of the classical assumptions of OLS. However, steps were taken to correct it by estimating a robust standard error and conducting a normality of the error term.

Table 5: Breusch-Pagan/Cook Weisberg Test for Heteroskeasticity

Parameter	**Values**
Chi2(1)	5.87
Prob>chi2	0.0154

Normality of the Error Term (Kernel Density): Normality of the error term was conducted using the kernel density estimate. It was found that most of the residual of the error term showed that they were tolerably mild. As such, high levels of normality of the error term were attained. Despite this, the study still proceeded with the conducted fixed and random effect estimates. After this, the study decided to interpret the robust Ordinary Least Square regression.

Table 6: Skewness/Kurtosis Tests for Normality

Variable	Obs	Pr (Skewness)	Pr (Kurtosis)	Adj chi2 (2)	Prob>chi2
Crsk	143	0.0000	0.0000	0.0000	-
Bsiz	143	0.0325	0.4280	5.17	0.0755
Bdil	143	0.0007	0.3799	10.51	0.0052
Bind	143	0.0202	0.2137	6.55	0.0379
Fdir	143	0.0000	0.0001	51.08	0.0000
Rics	143	0.0000	0.0001	37.68	0.0000
levr	143	0.0000	0.0000	68.87	0.0000
Size	143	0.2058	0.0147.	7.02	0.0299

Table 7: Summary of Regression Result (Robust OLS)

Variables	Coefficient	T-Statistics	Prob. Value	Cumulative Results
Constant	-1.00471	-6.02	0.000	
BSIZ	0.04621	3.96	0.000	
BDIL	-0.01127	-0.56	0.576	
BIND	-0.70520	-2.77	0.006	
FDIR	1.45094	1.75	0.083	

RICS	0.5138	0.14	0.887		
BSIZ*RICS	-0.00689	-2.69	0.008		
BDIL*RICS	-0.00042	-0.09	0.925		
BIND*RICS	0.16769	3.09	0.002		
FDIR*RICS	-0.30532	-1.82	0.072		
SIZE	0.04799	-5.62	0.000		
R^2					0.4445
F-Statistics					16.77
Probability					0.0000
Test of Significance Difference (F)				11.67	
Probability F					0.0000

Source: Result output from STATA 13

The cumulative R^2 of 0.4445 which was the multiple co-efficient of determination gave the proportion of the total variation in the dependent variable as explained by the independent variable jointly. Hence, it signified that 44.45% of the total variation in credit risk exposure of listed deposit money banks in Nigeria is accounted for by the proportion of size of the bank's board, board diligence which represent the number of times meetings were held, board independence which represent the percentage of non-executive directors on board, foreign director who serves on the board of banks, moderated board size, moderated board diligence, moderated board independence, moderated foreign directors with board risk committee size, leverage and the quantum of investment in total assets used as control variable in the study.

From Table 6, it was observed that the t-value for board size (BSIZ) was 3.96 while the coefficient value was 0.04621 with a significant value of 0.000. This signified that board size has a significant and positive effect on credit risk exposure of banks. This implies that for every increase in the size of the board members of banks, exposure to credit risk increase by the coefficient value. This may be as a result of the fact that when board size increases, communication and coordination problems increase. As a result, banks' operations become more difficult and subsequently the long-term survival of the banks will be put to question. All these have negative effect on the credit risk of the banks. The study therefore rejects the null hypotheses one of the study which state that board size has no significant effect on credit risk exposure of banks in Nigeria. However, the above findings is in line with the results of (Kajola & Adelowotan 2017, Saini & Singhania, 2018) whose results indicated a significant positive relationship exist between board size and firm performance but at variance with the findings of Mishra and Mohanty, 2014). Board diligence enters the regression with a t-value of -0.56 and a coefficient value of -0.01127 which is insignificant at all levels. This indicated that board diligence has a negative but insignificant effect on credit risk exposure of banks. This implies that more meetings board members hold meeting in a year minimizes their credit risk exposure level insignificantly by the coefficient value. This may be as a result of the fact that frequent meeting is not crucial for minimizing credit risk exposure of the sample banks. This study therefore failed to reject the null hypotheses two of the study which stated that board diligence has no significant effect on credit risk exposure of banks in Nigeria.

Board independence appears negative with credit risk exposure (non-performing loans) with a coefficient of significant at all levels. The economic implication of this finding is that the presence of more non-executive directors serving on the board of listed DMBs in Nigeria does not deter non-performing loans. This could be explained as a result of their non-participation due to insignificant stakes in the banks. Findings contradicts the pronouncements of agency theory as the independence of these directors are expected to foster monitoring, hence minimize non- performing loans. Foreign directors enters the regression positive and significant before moderation while negative and significant after moderation. The implication of this finding is that risk committee size is a good moderator such that the foreign directors due to distance, may not monitor the banks closely. However, the presence of a risk committee improves upon their role and minimizes credit risk exposure.

Among all the four moderated variables, board size, board independence and foreign director have significant effect on credit risk exposure. Meanwhile, only board diligence moderated with risk committee has no effect on credit risk. Same applies when unmoderated. Furthermore, amongst the un-moderated variables, only board diligence and board independence had negative effect on credit risk exposure. This implies that these helped reduce the chances of high loan defaults in the banks. Though, only foreign directors is significant amongst the variables that have positive effect on credit risk exposure of banks implying that the foreign directors variables drives high credit risk exposure of banks which may be attributed to their less participation due to distance. For the moderated variables, board size and foreign

directors were found to have a significant negative effect on credit risk exposure of banks. This implies that the diverse expertise of more directors and foreign directors with the presence of risk management committee tends to curtail credit risk exposure of listed deposit money banks in Nigeria.

Conclusions

This study seeks to examine the moderating effect of risk committee on the relationship between board attributes and credit risk exposure. Conclusively, board size when moderated with risk committee does play a joint significant role in reducing the level of possible loan defaults in banks. This implies that the committee was able to checkmate the activities of the board through their numbers in the risk committee of the banks. High number of meetings by board members is a driver to decreased rate of credit risk exposure of listed deposit money banks in Nigeria. Based on the findings of this paper, management should consider increasing board size alongside increase in the number of risk committee size in order to improve the management of credit risk exposure of banks through improved monitoring and supervision. This will minimise the amount of non-performing loans within their banks in Nigeria. The management of banks should also reduce the level of credit risk exposure of banks through frequent meetings to review the progress of loan repayment, do possible loan restructure for easy payment by creditors. The management of banks should continually work with the risk committee, empower them and make sure they represent what they are set up for in order to salvage the financial crises of the banks and to avoid what is detrimental to the banks' corporate survival.

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