# Impact of Corporate Governance On Credit Risk Exposure Management of Listed Deposit Money Banks in Nigeria

Mohammed Abbas Ardo, Saidu Babale and Mohammed Ibrahim Gana

Department of Accountancy
The Federal Polytechnic Damaturu

Corresponding author: mohammedardo8@gmail.com, 08067262191

**Abstract**

This study examines the Impact of Corporate Governance on Credit Risk Exposure Management of listed Deposit Money Banks in Nigeria. The study adopted the ex-post facto research design as it is the design that best explains research on the effects of two or more historical data. The population of the study is the fifteen listed deposit money banks in Nigeria as of 2024. The census approach was adopted as all the banks were used in the analysis. The secondary source of data collection was employed and data were obtained from published annual accounts and reports of the banks. The Multiple Regression Technique was used, and Stata 13 was employed as the tool for data analysis. The study revealed that all the explanatory variables (board size, board independence, and foreign directors not moderated) were significant in explaining the level of credit risk exposure of listed deposit money banks in Nigeria. In line with the findings, the study concludes that having a high number of board members on bank boards is associated with increased credit risk exposure. In line with the conclusion, the study recommended that on the board size of the banks, the management should consider increasing the number alongside an increase in the number of risk committee members to improve the management of credit risk exposure of banks and thus reduce the amount of non-performing loans within their banks in Nigeria.

**Keywords:** *Corporate governance, Risk management, Risk exposure*

## 1. INTRODUCTION

One major area in the aftermath of the global financial crisis is risk management among corporate institution. Risk Management is the identification, assessment and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events (Adedoyin, O. and Sobodun, U. N. 2017). It is neither a concept for complete risk avoidance nor its elimination. The essential functions of risk management are to identify measure and more importantly monitor the profile of the bank. While for example, non-performing assets are the legacy of the past in the present, risk management system is the pro-active action in the present for the future. Managing risk is nothing but managing the change before the risk manages (Raghavan, 2013).

Ozturk (2014), defines risk management as the process by which managers satisfy their risk taking needs by identifying key risks, obtaining consistent, understandable, operational risk measures, choosing which risks to reduce, which to increase, by what means and establishing procedures to monitor the risk position. According to Raghavan (2022), Risk management refers to the practice of identifying potential risks in advance, analyzing them and taking precautionary steps to reduce the risk. Risk simply implies a possibility of unexpected outcome. It creates the notion that future events may have some degree of uncertainty, thereby exposing an institution to adversity.

According to Pandey (2016), the key to effective risk management is not to do away totally with the various inherent risks. For example, lending operations of banks have the inherent risks of possible loan losses (credit risk) but by taking the risk, banks are able to charge a premium for their risk taking activities and earn profits. Risks are therefore, a source of profits to the bankers. Nzotta (2002) defined risk as the exposure of loss arising from variation between the expected and actual outcome of investment activities. According Hanssson, (2013) risk can be seen as An unwanted event which may or may not occur; The cause of unwanted event which may or may not occur; The probability of an unwanted event which may or may not occur; The statistical expectation value of unwanted events which may or may not occur; The fact that a decision is made under conditions of known probabilities (decision risk).

However, the various ways of solving these conflicts are the concerns of both corporate governance and risk management. Nevertheless, within the context of banks the motivation to adapt these concepts is necessarily due to the agency problem, because of the underlying attribute of the separation between ownership and management, especially in developing economics. Owner-managers of such enterprises are not expected to be altruistic and so they do not manage the affairs of the business to best of their abilities to meet both their expectations as well as those of other stakeholders. Thus, this study seeks to examine the effect of corporate governance on credit risk management in Nigerian listed banks.

One of the major challenges facing the adherence to the code of conduct of corporate governance in the banking industry is the non-compliance and/or enforcement to the conduct of corporate governance by the banks in Nigeria; which are weaken corporate structure for the effectiveness of performance of banks in Nigeria by the establishment of the regulatory agencies in Nigeria like the Central Bank of Nigeria (CBN), Securities Exchange Commission (SEC) and so on. The Securities and Exchange Commission (SEC) set up the Committee on corporate governance in public companies. The Bankers' Committee also set up a sub-committee on corporate governance for banks and other financial institutions in Nigeria. This is in recognition of the critical role of corporate governance in the success or failure of companies (Ejoh, Ndifon Ojong,

Okpa, Inah Bassey, Egbe, Aneozeng Awo (2014).

Practically, the recent accounts on company failures, corporate scandals and frauds are among the reasons for companies to effectively implement risk management programs. These companies' failures have been blamed on poor risk management and corporate governance. It has been recognized that risk develops gradually and immediately causing potential damage in banks financial performance. The problem faced by several banks when there is ineffectiveness of risk management generally affects confidence in their corporate governance. This study is motivated by the interest surrounding the appropriateness of reforms instituted by the corporate governance code in Nigeria in response to corporate failures, global best practice, and their implied efficacy in the face of significant implementation.

**Objectives of the Study**

The main aim of this study is to examine the impact of corporate governance on the credit risk exposure management of deposit money banks in Nigeria.

Other specific objectives are to assess the effect of;

i. To explore the relationship between Board Size and Credit risk management of Deposit Money Banks.
ii. Board composition on credit risk management of deposit money banks in Nigeria.
iii. Board meeting on credit risk management of deposit money banks in Nigeria.
iv. Audit committee size on credit risk management of deposit money banks in Nigeria.

Based on the above objectives, the following null hypotheses ($H_0$) were formulated.

i. $H_{01}$: Board size has no significant impact on credit risk management in the Nigerian deposit money banks.
ii. $H_{02}$: Board composition has no significant impact on credit risk management in the Nigerian deposit money banks.
iii. $H_{03}$: Board meeting has no significant impact on credit risk management in the Nigerian deposit money banks.
iv. $H_{04}$: Audit committee size has no significant impact on credit risk management in the Nigerian deposit money banks.

## 2. LITERATURE REVIEW

### The Concept of Corporate Governance

Over the last two decades, corporate governance has attracted a great deal of public interest because of its apparent importance in the economic health of corporations and society in general. Corporate governance is an essential ingredient for financial stability and long-term performance of the economy. Falling stock markets, corporate failures, dubious accounting practices, abuses of corporate power, fraud, criminal investigations, mismanagement, and excessive executive compensation indicate that the entire economic system upon which investment returns have depended is showing signs of stress that have undermined investors' confidence. (Eduardus, Hermeindito, Putu, & Supriyanta 2022).

Corporations play a vital role in any society. They are the main engines that drive a nation's economy and its capital market to long-term sustainable prosperity. Corporations and their financial information contribute to the safety, integrity, and efficiency of capital markets. The failure of large listed corporate organizations in recent times brought in its wake the lack of public confidence in financial reporting and auditing. It was believed that directors and other management staff who are entrusted with the day to day running of the business enterprise see accounting standards as a set of rules to be

circumvented by putting auditors under increasing commercial pressure such that creative accounting becomes the order of the day (Takang, & Ntui, C. 2018).

**Corporate Governance Mechanisms**

There are many factors or variables that may constitute yardsticks by which corporate governance can be measured in an organization. Some of these mechanisms are briefly discussed below.

**Board Size**

Limiting board size to a particular level is generally believed to improve the performance of a firm because the benefits of larger boards of increased monitoring are outweighed by the poorer communication and decision-making of larger groups. Empirical studies on board size seem to provide the same conclusion: a fairly clear negative relationship appears to exist between board size and firm value. Too big a board is likely to be less effective in substantive discussion of major issues among directors in their supervision of management. Lipton and Lorsch (2021) argue that large boards are less effective and are easier for the CEO to control. When a board gets too big, it becomes difficult to coordinate and for it to process and tackle the strategic problems of the organization.

**Board Composition**

Enhanced director independence, according to Hayes, Rachel, Hamid Mehran, and Scott Schaefer, 2004 is intuitively appealing because a director with ties to a firm or its CEO would find it more difficult to turn down an excessive pay packet, challenge the rationale behind a proposed merger or bring to bear the skepticism necessary for effective monitoring. The proponents of agency theory say that corporate governance should lead to higher stock prices or better long-term performance because managers are better supervised and agency costs are decreased.

**Audit Committee**

Klein (2018) reports a negative correlation between earnings management and audit committee independence. Anderson, Mansi, and Reeb (2016) find that entirely independent audit committees have lower debt financing costs.

**CEO Status**

Several studies have examined the separation of the CEO and chairman of the board, positing that agency problems are higher when the same person occupies the two positions. Using a sample of 452 firms in the annual Forbes Magazine rankings of the 500 largest USA public firms between 1984 and 2015, Yermack (2016) shows that firms are more valuable when the CEO and the chairman of the board positions are occupied by different persons.

**The Concepts of Risk Management**

The etymology of the word ''Risk'' can be traced to the Latin word ''Resume'' meaning Risk at sea or that which cuts. Risk is the threat or possibility that an action or event will beneficially affect an organization's ability to achieve its objectives (Higher Education Funding Council 2020). Risk is the probability of failure or loss associated with a particular cause of action (French 2021). Risk is defined as a hazard change of loss or change of bad consequences. It simply means that one important feature of risk is its close association with uncertainty (Irukwu 2017)

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**Empirical Review on Corporate Governance**

Tandelilin, Kaaro, and Mahadwartha (2020) investigated the relationships among Corporate Governance, Risk Management, and bank performance in the Indonesian banking sector using the generalized methods of moments. Both primary and secondary data were used in the analyses. The study found that the relationships between Corporate Governance and Risk Management and between Corporate Governance and bank Performance were sensitive to the type of bank ownership. However, ownership structure showed partial support as a key determinant of Corporate Governance. Foreign-owned banks had better implemented good Corporate Governance than joint venture-owned banks, state-owned banks, and private domestic-owned banks. Foreign-owned banks also depicted a significant relationship between Corporate Governance and Risk Management. They also found that state-owned banks underperformed the other types of bank ownership in implementing good Corporate Governance. The study further found an interrelationship between Risk Management and bank performance.

Amira, Imene, and Christophe (2011) examined the Earnings Management, Risk and Corporate Governance in US Companies. The study focused on 222 U.S. firms and covers the 1994-2001 period. The results of the study of U.S. companies indicated that earnings management is positively correlated with the risk, whatever its type, which means that good governance practices tend to decrease the risk. Nevertheless, good practices may differ according to the type of risk, the study also found that good practices have a negative impact on earnings management while all types of risk have a positive impact on earnings management.

Aebi, Sabato and Schmid (2017) investigated the association between Risk Management and Corporate Governance mechanisms with bank performance during the financial crisis of 2007/2008. The study used a sample of 372 USA banks. Bank performance was measured using buy-and-hold returns and ROE, while Corporate Governance variables included CEO ownership, board size, and board independence. The findings of the study were that banks in which the CRO directly reported to the board of directors and not to the CEO demonstrated significantly higher stock returns and ROE. On the contrary, Corporate Governance variables were mostly insignificant or even negatively related to bank performance. The study found a significant relationship between Risk Management and bank Financial Performance, whereas Corporate Governance insignificantly or negatively affected bank Performance during the 2007/2008 financial crisis.

Seyram, Yakubu and Bawuah (2014) examined the Corporate Governance and Risk Management in the Banking Sector of Ghana. A modified questionnaire, divided into two parts, was developed and administered to the selected banks' board of directors, senior risk management officers, and selected staff. The result of the study indicated that the board of Directors, senior staff, and not all staff are actively involved in risk management, and the most important types of risk facing the sampled banks are credit risk, operating risk, solvency risk, interest rate risk, and liquidity risk. The study also found that the sampled banks are efficient in managing risk.

Abate (2014) analysed the impact of Corporate Governance on the credit and liquidity risks of commercial banks in Ethiopia. The study employed a panel multiple regression model. Ordinary Least Squares (OLS) with random effects and pooled OLS estimation procedure were applied to a panel data set of 9 banks over the period 2005 through 2011. The study found as follows; that Central Bank regulations negatively affected both measures of risks but management capacity was found to have positively impacted on both risks; board meeting frequency negatively impacted on both measures of risks; bank size and inflation both had significant impact on credit risk with a negative and positive coefficients respectively, but insignificant for liquidity.

Ahmed, Tarek, and Ehab (2016) examined the relationship between corporate governance and risk management in GCC banks. Using a sample of 900 observations from banks in the Gulf countries, nonparametric regression, Quintile, and panel data analysis have been used to test the hypotheses and the proposed model. The study used data from financial institutions in the Gulf countries over the period from 2003 to 2012. The findings suggested that role duality and board size are negatively associated with risk management. On the other hand, the percentage of non-executive members on the board was found to be insignificant

Moreover, findings indicated a positive significant relationship between governmental ownership and risk management.

**Theoretical Framework**

**Agency Theory**

Agency theory suggests that the firm can be viewed as a nexus of contracts between resource holders. An agency relationship arises whenever one or more individuals, called principals, hire one or more other individuals, called agents, to perform some service and then delegate decision-making authority to the agents. The primary agency relationships in business are those between stockholders and managers and between debt holders and stockholders. These relationships are not necessarily harmonious; indeed, agency theory is concerned with agency conflicts, or conflicts of interest between agents and principals (Fosberg, R. 2014).

One particularly important agency issue is the conflict between the interests of shareholders and debt holders. In particular, following a riskier but higher return strategy benefits the shareholders to the detriment of the debt holders. It can easily be seen why debt holders lose out: a more risky strategy increases the risk of default on debt, but debt holders, being entitled to a fixed return, will not benefit from higher returns. Shareholders will benefit from the higher returns (if they do improve), however if the risk goes bad, shareholders will, thanks to limited liability, share a sufficiently bad loss with debt holders.

**3. METHODOLOGY**

The design used in this research is the ex-post facto research design as the study entails the use of annual reports and accounts of deposit money banks listed on the Nigerian Stock Exchange (NSE).

The population of the study consists of the entire 15 Banks listed by the NSE as at December, 2023.

**Table 3.1 Population of the study**

| S/N | Names of Banks | Year of Listing |
|---|---|---|
| 01 | Access Bank Nigeria Plc | 1998 |
| 02 | Jaiz Bank Nigeria Plc | 2020 |
| 03 | Ecobank Nigeria Plc | 2006 |
| 04 | Fidelity Bank Plc | 2005 |
| 05 | First Bank of Nigeria Plc | 1979 |
| 06 | First City Monument Bank Plc | 2004 |
| 07 | Guaranty Trust Bank Plc | 1996 |
| 08 | Polaris Bank Plc | 2018 |
| 09 | Stanbic - IBTC Bank Plc | 2005 |
| 10 | Sterling Bank Plc | 1992 |
| 11 | Union Bank of Nigeria Plc | 1971 |
| 12 | United Bank For Africa Plc | 1970 |
| 13 | Unity Bank Plc | 1980 |
| 14 | Wema Bank Plc | 1990 |
| 15 | Zenith Bank Plc | 2004 |

Source: NSE official website as at 2024 (www.nse.com.ng)

Out of the population, a sample size of 8 banks were randomly selected, which gives each element of the population an equal chance of being selected. The sample size is determined using Taro Yamane formula for determining finite population. Thus, out of the population of 15 deposit money banks, 8 of them are used as the sample of the study.

**Model Specification**

This study tried to capture specifically the impact of corporate governance on credit risk management. The model is a system of equation which relates the risk management techniques effectiveness. The argument is that effective corporate governance of banks as reflected will determine deposit mobilization, credit packaging and granting of loan. The model is therefore seen below as;

$RM = f(CG)$…….. (1)

$NPL = \beta_0 + \beta_1 BS + \beta_2 BC + \beta_3 BM + \beta_4 AS + \varepsilon$ ……. (2)

Where RM = Risk management
CG = Corporate governance
NPL = Non-performing loan
BS = Board size
BC = Board composition
BM = Board meeting
ACS = Audit committee size

**Table 3.3: 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 | The proportion of foreign nationals divided by the total number of board members | Farouk (2014) |
| **Moderating Variable** | | |
| Risk committee | Number of Risk committee members | Al-Shaer & Zaman, (2016). |
| **Control Variables** | | |
| Firms Size | Natural log of total assets. | Wu, (2013), Toby (2014) |
| Leverage | Debt divided by total assets | Altman, 1968; Hillegeist et al., 2004). |

**Source:** Compile by the researcher 2024

**3.7 Technique of Data Analysis**

Given the objective of the study and following the works of Hwang, Kim, Park and Soo (2013); Ajanthan, (2013); Obradovich, John and Gill, (2013); Nasrum, (2013); Wu, (2013); Daradkah and Ajlouni, (2013); Maniagi, et al. (2013); Dameh, and Mohammed, (2013); Batool and Javid (2014); and Kurawa and Isyaku, (2014). Panel data analysis was be employed as it will help to explore both cross-sectional and time series data simultaneously. Stata Version12.0 was used for the analysis. This is consistent with the study of Kurawa and Isyaku, (2014). More also descriptive statistics and correlation was be used as a preliminary analysis on the data.

## DATA PRESENTATION, ANALYSIS AND DISCUSSION

### Descriptive Statistics

The descriptive statistics is presented in Table 4.1 showing the minimum, maximum, mean, standard deviation, skewness, kurtosis and Shapiro wilk of the study variables.

**Table 4.1: 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 4.1 shows the minimum value for credit risk represented with non-performing loan to total loans is 0.58, implying that the 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 loans were 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 were 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.

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 where held by the bank board was twelve times within the period covered by the study.

Board independence recorded a minimum value of 0.21 and a maximum value of 0.88. This implies that the percentage of non-executive directors to a total number of board members for the banks was twenty-one percent within the study period, while the maximum percentage for non-executive directors of banks stood at 88%. However, on average, the ratio of non-executive directors' percentage to the total number of board members was about fifty-seven percent for all the banks.

Risk committee size has a minimum of four members and a maximum of eight in the listed deposit money banks within the period covered by the study. The average value for all the banks listed stood at five members of the risk committee. The standard deviation value which is far and above the mean value, shows the mean value estimated for the variable within the banking sector represents the true average. However, the Jacque Bera and Shapiro Wilk estimation probability portrays that the data were not normally distributed as they were significant at 1% level.

**Correlation Analysis**

**Table 4.2: Correlation Matrix**

| | CRSK | BSIZ | BDIL | BIND | FDIR | RICS | LEVR | SIZE |
|---|---|---|---|---|---|---|---|---|
| CRSK | 1 | | | | | | | |
| BSIZ | -.0705 | 1 | | | | | | |
| BDIL | -.1726* | .1531 | 1 | | | | | |
| BIND | -.2288* | -.0957 | -.1395 | 1 | | | | |
| FDIR | -.0917 | -.1576 | -.1167 | .3674* | 1 | | | |
| RICS | -.0627 | -.0534 | .1433 | -.0773 | .0216 | 1 | | |
| LEVR | -.3343* | -.0417 | .0556 | .0329 | -.02354 | .0451 | 1 | |
| SIZE | -.1590* | .2356 | .2605* | -.1962* | -.1982* | -.1614 | 0.0564 | 1 |

**Source: Correlation Matrix Results Using STATA 13**

*. Correlation is significant at 0.01 or 0.05 level (2-tailed)

Table 4.2 shows that credit risk is negatively correlated with the size of the board to the tune of 7%. This implies that board size has an inverse correlation with credit risk. Board diligence is found to have a negative and significant relationship with credit risk to the tune of about 17%, implying also an indirect correlation between the two variables. Board independence recorded a negative and significant relationship with credit risk at a magnitude of 22%. This shows a correlation between the two variables in a different direction.

Generally, the relationships among the independent variables of the study were mostly found to be insignificant. Therefore, according to Cassey & Anderson (1999), to establish the presence of multicolinearity in the correlation matrix on the overall variables, the Variance Inflation Factor (VIF) and tolerance values were used and are found to be consistently smaller than ten and one respectively, indicating an absence of multicollinearity. To further substantiate this position, the mean VIF of 1.12 was used, and it indicates that multicollinearity is not a problem.

**Table 4.3: 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 |
| 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 |
| LEVR | 0.00001 | 0.04 | 0.972 |
| 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 is 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 times meetings are 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.

The F-Statistics, which represents the Fisher Exact test, recorded a value of 16.77, which is significant at one percent. This indicates that board attributes, risk committee, and credit risk model is fit. It implies that for any change in board attributes and risk committee of the listed deposit money banks in Nigeria; their credit risk exposure will be affected directly. The P-value of F-statistics, which is significant at a level of 0.0000 (1%) implies that there is 99.9 percent probability that the relationship among the variables were not due to mere chance. As such, the results from the regression can be relied upon. In addition, it implies that the independent variables reliably predict the dependent variable of the study.

**Summary of Hypothesis Test Results**.

Below represent the summary test results of the hypothesis stated from chapter one of this study.

i. **Board Size and Credit Risk Exposure**

**$Ho_1$:** Board size has no significant effect on credit risk exposure of listed deposit money banks in Nigeria

From Table 4.3, 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 signifies that board size has a significant and positive effect on the credit risk exposure of banks. This implies that for every increase in the size of the board members of banks, exposure to credit risk increases by the coefficient value. This may be as a result of the fact that when the amount of non-

performing loan increases, it exposes the bank and weakens the financial capability of the banks as operations of the banks become difficult and subsequently the long term survival of the banks will be put to question. All these have negative effects on the financial performance of the banks.

However, the above findings are in line with the results of (Kajola & Adelowotan 2017, Saini & Singhania, 2018).) whose results indicate a significant positive relationship exists between board size and firm performance but in contravention with the findings of Mishra and Mohanty (2014).

**Summary Test Result of Hypothesis Two**

**ii. Board Diligence and Credit Risk Exposure**

**$Ho_2$:** There is no effect of board diligence on credit risk exposure of listed deposit money banks in Nigeria.

The regression results revealed that board diligence, as depicted in Table 4.3, have a t-value of -0.56 and a coefficient value of -0.01127 which is neither significant at 1%, 5% nor at 10%. This indicates that board diligence has a negative but insignificant effect on credit risk exposure of banks. This implies that for every increase in the number of times board members holds meeting in a year, their credit risk exposure level decreases insignificantly by the coefficient value. This may be as a result of the fact that frequent meeting will allow the banks board do an overview of their performance, which includes the loans given out and the ones whose chances are slim. This gives the board ample opportunity to restructure the debt and make a huge recovery, which will eventually reduce the level of defaults from creditors.

Following on the findings above which shows that board diligence has no significant effect on credit risk exposure of banks. The study, therefore, failed to reject the null hypotheses of two of the studies, which state that board diligence has no significant effect on the credit risk exposure of banks in Nigeria.

Therefore, the above findings are in agreement with the results of (Zhang, Li, Ullrich, and van 2015) but in contravention with the findings of Muravyev, Talavera, and Weir 2014) as their result indicates a positive and significant relationship between Board Diligence and firm financial performance.

**Summary Test Result of Hypothesis Three**

**iii. Board Independence and Credit Risk Exposure**

**$Ho_3$:** Board independence has no significant effect on the credit risk exposure of listed deposit money banks in Nigeria.

From the regression Table above, the Board independence variable has a t-value of -2.77 and a coefficient value of -0.70520, which is significant at a 1% level. This shows that the independence of the board of banks has a significant and negative effect on credit risk exposure. This connotes that an increase in the percentage of non-executive directors decreases the level of credit risk exposure significantly. This may be a result of the fact that the non-executive directors who do not participate in the day-to-day activities of the banks are expected to review, monitor, and curtail the excesses of the managers to avoid possible financial crises that may consume the banks. Therefore, their monitoring role on the board is expected to help reduce the level of credit risk exposure of banks, as empirically proven by the outcome of this study on the variable.

Based on the findings above, which show that board independence has a significant effect on credit risk exposure of banks. The study, therefore, rejects the null hypotheses of three of the studies, which state that board diligence has no significant effect on the credit risk exposure of banks in Nigeria.

This finding is in line with the result of (Kakanda, Salim & Chandren, 2017) that

conducted a study on the relationship between Corporate Governance (CG), risk management, and firm performance, their result shown that board characteristics (board size, board composition, board meeting, and board expertise) and risk management disclosure have positive relationship with firm performance. However, the study result contradicts that of Andrew 2012), whose findings suggest otherwise.

**Summary Test Result of Hypothesis Five**

**$Ho_4$:** Risk Committee has no significant effect on the relationship between and credit risk exposure of listed deposit money banks in Nigeria

**vi. Board Diligence and Risk Committee**

The output from the regression in respect of moderated board diligence records a t-value of -0.09 and a coefficient value of -0.00042, with an insignificant value of 0.925. This indicates that board diligence moderated with the size of the risk committee has a negative but insignificant effect on the credit risk exposure of listed deposit money banks. This implies that for every increase in the number of meetings held by the board of directors of banks and several risk committee sizes, their credit risk exposure decreases insignificantly by the coefficient value. The findings can be argued to support the fact that when the board members increase the number of times meetings are held and also encourage high number of risk committee number who should help review the loan obligations between the banks and her creditors; this is expected to help reduce to a minimal level the possibility of defaults in loans. The above findings is in agreement with the result of (Mishra & Mohanty 2014) but contradict the findings of (Machold, Huse, Minichilli & Nordqvist 2011).

**Summary of findings**

From the results, analysis, interpretation, and discussions, the following were the summary of findings:

i. Board size has a significant effect on the credit risk exposure of listed deposit money banks in Nigeria
ii. There is a significant effect of board diligence on credit risk exposure of listed deposit money banks in Nigeria
iii. Board independence has a significant effect on the credit risk exposure of listed deposit money banks in Nigeria
iv. Risk Committee has no significant effect on the relationship between and credit risk exposure of listed deposit money banks in Nigeria

## CONCLUSION AND RECOMMENDATIONS

### CONCLUSION

From the results, analysis, interpretation, and discussions, the study concludes as follows:

Having a high number of board members on bank boards is associated with increased credit risk exposure. In addition, moderating board size with the risk committee does play a significant joint role in reducing the level of possible loan defaults in banks, which 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 bank in Nigeria. Also, a commiserate increase in both number of times meetings are held by board and also increase in the number of risk committee reduces the rate of non-performing loans recorded by the banks though insignificantly.

### 5.3 Recommendations

Following the findings and conclusions listed above, the study came up with the following recommendations in order to enhance the management of credit risk of listed deposit money banks in Nigeria.

i. On the board size of the banks, the management should consider increasing the number alongside an increase in the number of risk

committee members in order to improve the management of credit risk exposure of banks and thus reduce the amount of non-performing loans within their banks in Nigeria.

ii. 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 and do possible loan restructure for easy payment by creditors. In addition, the number of risk committees should also be increased in order to increase the level of monitoring and supervision by the committee members which further could assist in mitigating possible loan defaults.

iii. On board independence, the percentage of non-executive directors to the total number of board members on the board of banks should be peg at least ratio 60:40 as the number of risk committee should be put at an average of five (5) members which financial expertise and majority should have accounting, finance and economic background.

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