

## CORPORATE GOVERNANCE MECHANISMS AND RISK MANAGEMENT OF LISTED DEPOSITS MONEY BANKS IN NIGERIA

Dahiru, H. L.<sup>1</sup>, Teru, S. P PhD<sup>2</sup>, Usman, A. S<sup>3</sup>, Lenge, D. S.<sup>4</sup>

<sup>1</sup> Rectory Department, Audit Unit, Federal Polytechnic, Bali, Taraba State

<sup>2, 3, 4</sup> Department of Accounting Faculty of Management Sciences, Taraba State University

Email: [laraidahiru@gmail.com](mailto:laraidahiru@gmail.com)

### Abstract

*This research examines the impact of corporate governance mechanism on risk management of listed deposits money banks in Nigeria for the period 2011-2021. The research adopted ex-post facto research design to entails the use of annual report and accounts of the quoted deposits money Banks under research. Panel data analysis was employed to adopt the Random-effect GLS regression technique to analyze data which were in time series simultaneously, the hypotheses were analyzed and tested using Stata Version 12. The result reveals that board independence has positive impact on credit risk and liquidity risk as well as a negative significant to the capital risk in Nigeria. Regarding gender diversity, the research found that there is a positive relationship of GDP with capital risk, credit risk, and also positively significant to liquidity risk. Further findings equally suggest that there is a positive and significant impact on GDP with capital risk, credit risk, and also positively significant to liquidity risk. In line with the findings, it is concluded that companies must also be individually involved in risk management responsibilities otherwise; banks may have a low reputation, low profits, and low resources. Further study was recommended on the board size so that the banks can maintain relatively small board size dominated by outside directors within the provisions of the code of corporate governance for banks.*

**Key words:** Corporate Governance Mechanism, Risk Management, capital risk, Liquidity risk, Deposit money, Bank, Board size

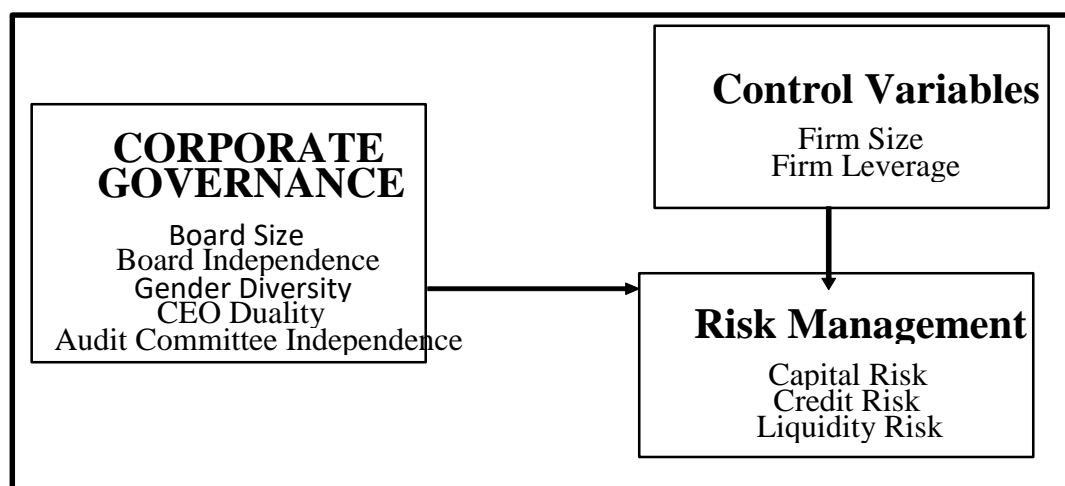
### 1. Introduction

The research is on the corporate governance mechanism and risk management of listed deposit banks in Nigeria. It is obvious that the aftermath of the global financial crisis is widely argued by politicians, banking supervisors, and other authorities that the crisis can be at least to some extent attribute to flaws in the corporate governance practices of deposits money Banks (Kirkpatrick, 2009). These allegations seem reasonable given that corporate governance can be broadly considered as the set of mechanisms for addressing agency problems and controlling risk within the firm. In general, strong corporate governance practices, and especially, effective board oversight are supposed to encourage the firm's top management to act in the best interest of shareholders and other stakeholders (Shleifer & Vishny, 2012). In order to achieve good governance practice, the involvement of various parties especially those inside organization is very crucial. Among major corporate mechanisms that contribute towards good governance practice are board of directors (BOD) and its sub-committee including risk management committee. Risk management disclosures are intended to provide information on how firms will meet the increasing challenges and reduce the possibility of failure (Solomon *et al.*, 2000). RMD are likely to be of higher concern after the recent financial crisis due to the increasing risk levels (Cornett *et al.*, 2010). In many cases, risk was not managed on an enterprise basis and not adjusted to corporate strategy. Risk managers were often separated from management and not regarded as an essential part of implementing the company's strategy. Most importantly

there are numerous cases where the boards are ignorant of the risk facing the company. Some studies have reported that companies with good corporate governance mechanism were less affected in the time of the crisis (Suvankulov & Ogucu, 2012). This study is therefore, an attempt to complement the gap left by other previous studies by examine the impact of corporate governance mechanisms on risk management of deposits money banks in Nigeria and also to determine the impact of board size on credit risk management of listed deposit money banks in Nigeria as well as the impact of board independence on liquidity risk management of listed deposit money banks in Nigeria.

## 2. Literature Review

This section, the review literature discussed the key concepts with respect to the key variables of the study. The review of related literature provides conceptualization of internal governance mechanism, and its types and components such as (Board size, Board Independence, Gender diversity, Audit committee independence) and credit risk management such as Capital risk, Liquidity risk, credit Risk) and also bank size and firm leverage as control variables. However the conceptual relationships between the key variables are diagrammatically represented below.



**Figure 2.1: Conceptual**

### 2.1 The Concept of corporate governance mechanism

Corporate Governance Mechanism involves the guidelines and regulations which are necessary to run the firm on shareholders' goals. Also, identify the rights of directors and managers and helps understand the actions taken by owners to influence the firm's decisions. (Gulzar *et al.*, 2011). However, there are a wide range of definitions of corporate governance. Corporate governance has gained popularity as a result of the increase in high profile collapses of companies. (Iqbal, Strobl, & Vähämaa, 2015) define corporate governance as the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment. However, the conflicts of interests in organisation, management recklessness and greed, corporate dishonesty and ethical breakdowns, weak corporate control and poor risk assessments are some of the factors that have caused corporate failures and have been the herald of corporate government discourse.

### 2.2 Board size

According to Akintoye (2010), the board of directors is the first level of supervision over the activities of the institution and its management. The board is ultimately responsible for the activities and results of the bank, for the maintenance of stability and financial soundness. The

powers and rules of the board are specified in the law and the statute of a bank. The mode of operation should be specified in the rules of procedure of the board. Furthermore, board size consist of total board members both executives and non-executives.

### **2.3 Board Independence**

Another matter of corporate governance, of essential importance, is the membership of the independent persons in the council. The Polish good practice recommends that at least two members of the supervisory board meet the criteria of independence (whatever the overall size of the board). Their participation in the board is to objectify its work, to provide care to the board in the first instance of the fortunes of the company (and not just its owners), as well as a balance between the interests of the dominant shareholders and minority shareholders (Marcinkowska 2012).

### **2.4 Concept of Risk Management**

According to International Federation of Accountants' (IFAC, 1999) report defines risk as an uncertain future event, which can influence the achievement of an organization's strategic, operational and financial objectives. The International Accounting Standards Board (IASB, 2015) presents a strong definition of risk in its professional report and defines risk as "... uncertainty as the amount of benefit. The concept of risk management remains an absence of a widely accepted definition in finance, risk management is understood in terms of volatility in expected outcomes, negatively and positively (Power 2004).

### **2.5 Liquidity Risk Management**

Liquidity risk management system is the proceed aim of effectively identifying, measuring, monitoring and controlling liquidity risk at the institution and the group level, including that of branches, subsidiaries and business lines, thus ensuring that liquidity demand is met in a timely manner and at a reasonable cost (Matz and Neu, 2007).

### **2.5 Empirical Review**

Several studies have investigated on the corporate governance and banks performance in Nigeria, and in different part of the world with diverse techniques and opinions. The outcomes of the investigations however, have shown that there are many conflicting empirical findings, some with positive findings, others with negative findings while others with neutral findings. Venturini and Verbano (2013) studied the impact of stakeholders of Ghanaian banks on the management of bank capital risk, credit risk and liquidity risk is investigated. Bank stakeholders include the board of directors, shareholders, depositors and regulators. Other explanatory variables of bank financial risks include management efficiency, total assets, inflation and central bank lending rate. Three fixed effects (least squares dummy variables) regression coefficients were estimated for each of the three risks, using an unbalanced panel of 23 banks covering 2005-2011. It was concluded that there is no statistical difference between the strengths of bank boards in Ghana, and that board strength does not have significant impact on capital risk, credit risk nor liquidity risk.

## **3. Methodology**

Considering that the study is on cause and effect, the study adopted ex-post facto research design as it examines the cause and effect of because the study entails the use of annual report and accounts of the quoted deposits money Banks under study; this is in view of its relative importance to governance mechanism and risk management in the Nigerian listed deposits money Banks.

### **3.1 Population of the Study**

The population of this study consists of all the quoted deposits money Banks in the Nigerian stock exchange as at 2021. The study will cover a period of ten years between 2011 and 2021.

Table one contained the list of all the banks deposits money Banks quoted on the Nigerian Stock Exchange, and their years of listing.

However, with respect to the sample size, the table below shows the adequate sampling frame

**Table 3.1: Sampling Frame of the population**

S/N	DMBs	Year of Listing	Financial Report Year
1	Fidelity Bank Plc	1992	31 <sup>st</sup> December 2021
2	Access Bank Plc,	2004	31 <sup>st</sup> December 2021
3	First Bank of Nigeria Plc	1971	31 <sup>st</sup> December 2021
4	UBA Bank plc.	2004	31 <sup>st</sup> December 2021
5	Unity Bank plc	2005	31 <sup>st</sup> December 2021
6	Standard Chartered Bank	1996	31 <sup>st</sup> December 2021
7	Eco Bank Plc	2016	31 <sup>st</sup> December 2021
8	Guaranty Trust Bank Plc	2005	31 <sup>st</sup> December 2021
10	Zenith Bank Plc	1993	31 <sup>st</sup> December 2021
11	Stanbic Ibt Bank Plc	1970	31 <sup>st</sup> December 2021
12	Wema Bank Plc	1991	31 <sup>st</sup> December 2021
13	Keystone Bank Limited	2004	31 <sup>st</sup> December 2021
14	Union Bank Plc,	1991	31 <sup>st</sup> December 2021

**Source:** the NSE Fact Book 2022

### 3.2 Sample Size of the Study

This represents the portion of the population to be studied in order to make conclusions on the population. According to Asika (1991), the best sample is the complete population itself, because every element of the population is represented in it.

### 3.3 Sources and Method of Data Collection

In line with the aim of this study and the relevant of the secondary data to the research, the study utilize the secondary source of data. Data will be obtaining from the annual reports and accounts of all the deposits money Banks quoted in the Nigerian stock exchange covering the period of ten years from 2011 to 2021.

### 3.4 Variables of the Study

The variables of the study comprise of dependent variables, independent variables, and control variables and their measurements. The dependent variable is risk management, the independent variables includes the Board Size (BS); Board Independent (BI); Board meetings, while the control variables includes the firm size which is measured as the Natural logarithm of the total asset of the firm (SIZE), Age and Leverage.

### 3.5 The Variables and its Measurement

**Table 2 Variables and Measurement Criteria**

Variables	Measurement
<b>Dependent variable</b>	
Credit risk	<u>Non - performing loans</u> Total gross loan
Liquidity risk	<u>Cash</u> Total deposits
Capital risk	<u>Tier 1 Capital + Tier 2 Capital</u> Risk Weighted Assets
<b>Independent Variables</b>	
Board size	The total number of the board of directors
Board Independence	Proportion of non-executive directors to the total directors on the board
Board meeting	Frequency board meeting within a financial year
<b>Control variables</b>	
Firm size	Logarithm of total assets
Firm age	Number of years passed since listed
Leverage	<u>Total debt</u> Total equity

### 3.6 Technique of Data Analysis and Model Specification

Given the objective of the study and following the works of Liu, Uchida, and Yang (2012) Therefore, the general model based on the variables of the study which is a modification of (Kurawa and Ishaku, 2014) is stated thus: STATA was utilized to analyze the data.

$$CR_{it} = \beta_{0it} + \beta_{1it}BS + \beta_{2it}BI + \beta_{3it}BM + \beta_{4it}SIZE + \beta_{5it}AGE + \beta_{6it}LEV + \varepsilon_{it}.....1$$

$$LR_{it} = \beta_{0it} + \beta_{1it}BS + \beta_{2it}BI + \beta_{3it}BM + \beta_{4it}SIZE + \beta_{5it}AGE + \beta_{6it}LEV + \varepsilon_{it}.....2$$

Where:

- CR: Stands for credit risk
- LR: Stands for liquidity risk
- BS: Is Board Size
- BI is Board Independence
- SIZE: is a stand for firm size.
- AGE: is a stand as firm age
- $\varepsilon$  is error term

## 4. Results and Discussion

This part of the paper, presents the results of the analysis conducted on the secondary data generated from the annual financial report and accounts of the Nigerian deposits money banks quoted on the Nigerian stock exchange from 2011-2021. However, the descriptive statistics, correlation, regression and t-test results are presented in the subsequent sub sections of this part.

### 4.1 Post Estimation Tests

This section presents the post estimation tests results conducted. The post estimation tests include: multicollinearity test, heteroscedasticity test and normality test of error term.

### 4.2 Multicollinearity Test

This was conducted to check whether there was a correlation between the exogenous variables of the study. The Variance Inflation Factor (VIF) and the Tolerance values estimated was used



to test for multicollinearity in the regression. The variance inflation factor and tolerance estimated were found to be consistently smaller than ten and one (See Appendix). To further substantiate this claim, the mean VIF of 1.12 which is smaller than ten (10) is indicative that multicollinearity was not a threat to the validity and inferences to be made from the regressions (Tandelilin, Mahadwatha, and Surpriyatna, 2007).

### 4.3 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%. This indicates that heteroskedasticity was present in the panel. This makes 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.

### 4.4 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 (See Appendix B). Despite this, the study still proceeded with the conducted of fixed and random effect estimates. After this, the study decided to interpret the robust Ordinary Least Square regression.

### 4.5 Regression Results

#### Fixed Effect Model of Credit Risk with Corporate Governance variables

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.107238	0.409281	2.705326	0.0075
BS	0.123164	0.109042	1.129508	0.2602
BI	0.130154	0.120821	1.077247	0.2829
GDB	0.239346	0.203491	1.176199	0.2411
CEOT	-0.02016	0.021643	-0.93159	0.3528
ACI	-0.33246	0.124246	-2.67579	0.0082
FS	-0.05249	0.02094	-2.50649	0.0131
LEV	-0.02955	0.011517	-2.56563	0.0111
R-squared	0.317919	F-statistic		3.101366
Adjusted R-squared	0.21541	Prob(F-statistic)		0.000005

#### Fixed Effect Model of Credit Risk with Corporate Governance index

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.168394	0.370887	3.150269	0.0019
CORPORATE GOVERNANCE	-0.08888	0.099157	-0.89634	0.3713
FS	-0.04934	0.019914	-2.47773	0.0142
LEV	-0.02973	0.011636	-2.55533	0.0114
R-squared	0.282919	F-statistic		3.174268

Adjusted R-squared 0.19379 Prob(F-statistic) 0.000011

These results are obtained by the average of Corporate Governance dimensions, which concluded that Corporate Governance is negatively insignificant to the credit risk. Control variables also inversely related to the capital risk in this result (Sajjad Nawaz Khan, Yaseen, et al., 2019).

#### Fixed Effect Model of liquidity Risk with Corporate Governance variables

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.05101	0.201441	-0.25323	0.8004
BS	0.022409	0.053669	0.417546	0.6768
BI	0.052162	0.059466	0.87717	0.3816
GDB	0.05159	0.100155	0.515104	0.6071
CEOT	-0.00629	0.010652	-0.59086	0.5554
ACI	-0.13063	0.061152	-2.13613	0.0341
FS	0.004751	0.010306	0.460967	0.6454
LEV	0.104163	0.005668	18.37612	0
R-squared	0.693163	F-statistic		36.62309
Adjusted R-squared	0.681976	Prob(F-statistic)		0

The r-square is 0.84625 and the adjusted r-square is 0.823143. It means that approximately 84.62% of the change in the dependent variable that is liquidity risk is because of the considered independent variables. The results of the regression fixed-effect model for Pakistan's listed banks among Corporate Governance variables and LiR show that ACI is negatively and highly significantly related to credit risk. By significance, it means that the p-value is less than 5%. The sign is also negative and that is very much relevant to the made hypothesis in this study. According to the hypothesis there exist a negative relation between ACI and LiR. Hence H5 is accepted, the same results are also concluded by (Brown and Laylor, 2006) "corporate government and firm valuation" journal of accounting and public policy, 25(4),409-432

These are the results of the fixed effect model as stated by the likelihood test ratio. The control factors FS and LEV are negatively and highly significantly related to LiR (Ltifi and Hichri, 2021).

#### Random Effect Model of Liquidity Risk with CORPORATE GOVERNANCE index

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.05665	0.1804	-0.31402	0.7539
Corporate Governance	-0.03394	0.04823	-0.7037	0.4825
FS	0.00463	0.009686	0.477988	0.6332
LEV	0.104232	0.00566	18.41629	0
R-squared	0.684508	F-statistic		42.91919
Adjusted R-squared	0.679679	Prob(F-statistic)		0

## 4.6 Conclusions

From the above regression result, it shows that both board size and board independence has coefficients of 0.0001 and 0.000115 for the two values which are both statistically significant less than 1%. These results provide evidence of rejection of the hypothesis ( $H_{01}$ ) which states board has no significant impact on Credit risk Management of listed deposits money Banks in Nigeria. Also the results provide evidence for the rejection of hypothesis ( $H_{02}$ ) which states that there is no significant impact of board independence on Liquidity risk management of listed deposits money Banks in Nigeria. However, based on the above findings, this paper concludes that:

1. Corporate governance as proxied by board size has significant impact on Credit Risk Management of listed deposits money Banks in Nigeria. Also
2. That there is a significant impact of corporate governance as proxied by board independent on Liquidity risk management of listed deposits money Banks in Nigeria.

#### 4.7 Recommendation

The financial reporting council of Nigeria and corporate managers should have entrenched these board attributes as it has proven to have significant impact on risk management.

#### References

- Akintoye, I. R. (8<sup>th</sup> march, 2010). Corporate governance reporting being paper presented at ICAN interactive session for accountant in education, Lagos.
- Asika, N. (1991). *Research methodology in the behavioural sciences*. Lagos: Longman Nigeria Plc, 90-96.
- Brown, L. & Laylor, M. (2006). Corporate government and firm valuation, *Journal of Accounting and Public Policy*, 25(4), 409-432.
- Cornett, M. M., McNutt, J. J., & Tehranian, H. (2010). Financial crisis, internal governance, and the performance of publicly traded US bank holding companies. *Social Science Research Network (SSRN)*, 1476969).
- Gulzar, U., Khan, S. N., Biag, F. J., Ansari, M. A. A., Akram, R. & Kamram. M. (2021). *The impact of corporate governance on risk management: Evidence from Bank sector of Pakistan*. *Bulletin of Business and Economics*, 10 (30), 196-207
- IFAC, (1999) Building Strong and Sustainable organization, Financing Market and Economics.
- Iqbal, J., strobl, S. & Vahanaa, S. (2015), Corporate governance and the systemic risk of financial institutions. *Journal of Economics and Business*, 829(3), 42-61.
- Kirkpatrick, G. (2009). The corporate governance lessons from the financial crisis. *OECD Journal of Financial Market Trends*, 2009(1), 61-87.
- Kurawa, J., & Ishaku, A. (2014). The Effect of Corporate Governance on Dividend Policy of Listed Banks in Nigeria: A Panel Data Analysis. *Research Journal of Finance*, 2 (8), 12.
- Kyere, M., & Ausloos, M. (2021). Corporate governance and firms financial performance in the United Kingdom. *International Journal of Finance Economics*, 26(2), 1871-1885.
- Ltifi, M., & Hichri, A. (2021). The effects of corporate governance on the customer's recommendations: A study of the banking sector at the time of COVID-19. *Journal of Knowledge Management*.



- Liu, C., Uchida, K. & Yang, Y. (2012). *Corporate governance and firm value during the global financial crisis: Evidence from china international review of financing analysis*, 21(1), 70-80.
- Lofti, S. and Malgharni, A. M. (2013). Analysis of the relationship between Board of Directors composition and Risk Management in the firms' listed in Tehran stock exchange interdisciplinary. *Journal of Contemporary Research Institute*, 5(1).
- Marcinkowska, (2012). *Corporate governance in bank: problems and remedies*. France: Banking and Insurance Institute, University of Lodz,
- Matz, L. & neu, P. (2007). *Liquidity Risk measurement and management: Practitioner's guide to global best practice*. Chichester: John Wiley & Son.
- Power, M. (2004). The Risk Management, *Journal of Risk Finance*, 5(3), 58-65.
- Rezaee, Z. (2008). High quality financial report (the six –legged stool). Strategic fiance  
pandic:pmc2390549.
- Shleifer, A. & Vishny, R. W. (2012). Survey of corporate governance. *Journal of Finance*, 52(2), 737-783.
- Solomon, D. A., keller, M. B., Leon, A.C., Mueller, T. I., Shea, M. T., Coryell, W., Turvey, C., Maser, J. D., & Endicott, J. (February, 2001). Multiple Recurrences of major depressive disorder. *AMJ psychiatry*, 157(20), 229-233.Doi:10.1176/appi.ajp.157.2.229.
- Suvankulov, F. & Ogucu, F. (2012). Have firms with better corporate governance fared better during the recent financial crisis in Russia. *Applied Economics letter*, 19(8), 769-773.
- Tandelilin, E., Karro, H. Mahadwatha, P. A., & Surpriyatna, S. (2007). Corporate Governance, Risk management and Bank performance in type of ownership matter. *EADN Individual Research Grant project*, 34, 115-118.
- Venturini, K. & Verbano, C. (2013). Management Risk in SMEs: Literature Review and Research Agenda. *Journal of Technology and Innovation*, 8, 186-197.  
<http://doi.org/10.4067/50718-27242013000400017>.