



# Financial Risk Management And Corporate Performance Of Deposit Money Banks In Nigeria

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## ABSTRACT

Effective risk management system will minimize the complexities involved in planning, executing and controlling overall running of a business which is critical to success and this maximizes profitability in a business. This study examined the effect of financial risk management on the corporate performance of deposit money banks in Nigeria. In order to achieve the objective of the study, data were extracted from annual reports and accounts of fifteen (15) deposit money banks quoted on the Nigerian stock exchange, the period covered in the study is 2012-2016. Data for financial risk management proxied by bank size was extracted and corporate performance was represented by return on equity. In testing the research hypothesis, the study adopted both descriptive statistics and simple regression techniques analyzed with the aid of Statistical Package for Social Sciences (SPSS) version 20. The findings revealed that bank size have insignificant effect on the return on equity of deposit money banks in Nigeria during the year under review. Consequent upon this study, it was recommended that the CBN and other regulators should endeavor to enforce risk identification, assessment, measurement and control mechanism, in line with best global practices in other to avoid financial crisis and also improve on banks' performances.

**Keywords:** Financial risk, bank size, returns of equity, financial performance

## INTRODUCTION

The complexity of business operation in the modern world is not as simple; because financial institutions are faced with various types of risk that threatened their existence and the mismanagement or the poor management of risk has a greater influence on the financial performance of any financial institution (Olalere & Wan 2016). As a developing country, many banks has failed in Nigeria since the inception of banking and financial institutions, and the main problem in the sector has been identified as poor risk management practices. As a result of this, the integration of risk management into the commercial bank systems, processes and culture is of crucial importance.

Banks that manage their risks have a competitive advantage. They take risks consciously, anticipate adverse changes and protect themselves from such changes. According to the Basel committee on banking supervision (2001), risk management comes with setting appropriate risk environment to protect the banks from adverse outcome or risk exposure. These can be achieved through, the identification of events into one or more broad categories of market, credit, operational and other risks, assessment of risks using data and risk model, monitoring and reporting of the risk assessments on a timely basis and the control of these risks by senior management. Therefore, risk is the chance of something or an event happening that will have

an effect upon set goals that is unexpected and unforeseen. Put differently risk is the possibility of deviation from a planned outcome or goal (Olalere & Wan 2016). However, financial institutions that embed risk management practices into business planning and performance management are more likely to achieve strategic and operational objectives. Conducting an enterprise risk assessment can help to prioritize and identify opportunities for improvement.

Banks and other financial intermediaries are at the heart of the world's recent financial crisis. The deterioration of their asset portfolios, largely due to distorted credit management, was one of the main structural sources of the crisis (Fries, Neven and Seabright, 2002; Kashif, 2008 and Sanusi, 2010) as quoted by Uwuigbe (2011). To a large extent, this problem was the result of poor corporate governance in countries' banking institutions and industrial groups. Quoting Schjoedt (2000) in (Uwuigbe 2011) observed that this poor corporate governance, in turn, was very much attributable to the relationships among the government, banks and big businesses as well as the organizational structure of businesses.

Banking crisis in Nigeria has shown that not only do banks often take excessive risks, but also the risks differ across banks (Joel 2013). Al-Tamimi and Al-Mazrooei (2007) notes that in today's dynamic environment, all banks are exposed to a large number of risks such as credit, liquidity risk, foreign exchange risk, market risk and interest rate risk, among others- the risk which may create some source of threat for a bank's survival and success. Against this background, the pertinent research question is, what level of effect does financial risk have on the corporate performance of deposit money banks in Nigeria? It is the aim of this study to provide an answer to this research question.

## LITERATURE REVIEW

### Conceptual Framework

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. Risk is a function of the likelihood of something happening and the degree of losing which arises from a situation or activity. Losses can be direct or indirect. For example, an earthquake can cause the direct loss of buildings. Indirect losses include lost reputation, lost customer confidence, and increased operational costs during recovery. The chance of something happening will impact the achievement of objectives (Basel Committee on Banking Supervision 2005).

Risk management is simply a practice of systematically selecting cost effective approaches for minimizing the effect of threat realization to the organization. All risks can be never fully avoided or mitigated simply because of financial and practical limitations (Moteff, 2005). Risk management is defined as 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 or to maximize the realization of opportunities Risks can come from uncertainty in financial markets, project failures, legal liabilities, credit risk, accidents, natural causes and disasters as well as deliberate attacks from an adversary. The strategies to manage risk include transferring the risk to another party, avoiding the risk, reducing the negative effect of the risk, and accepting some or all of the consequences of a particular risk (Hubbard, 2009).

Effective risk management system will minimize the complexities involved in planning, executing and controlling overall running of a business which is critical to success and this maximizes profitability in a business. A customer is happy and secure when he/she invests in a risk free business and wants to be equally happy on each further occasion. Therefore, risk

management and profitability are closely related aspects and need to be handled with extra emphasis if a business is to hit high profitability over a given period (Gizycki, 2001).

Generally, the financial system is more than just institutions that facilitate payments and extend credit. It encompasses all functions that direct real resources to their ultimate user. It is the central nervous system of a market economy and contains a number of separate, yet co-dependent, components all of which are essential to its effective and efficient functioning. These components include financial intermediaries such as banks and insurance companies which act as principal agents for assuming liabilities and acquiring claims. The second component is the markets in which financial assets are exchanged, while the third is the infrastructural component, which is necessary for the effective interaction of intermediaries and markets. The three components are inextricably intertwined (Adeoye & Amupitan 2015).

Increasing shareholders' return epitomizing bank performance is one major objective of bank management. The objective often comes at the cost of increasing risk. Bank faces various risks such as interest risk, market risk, credit risk, off balance risk, technology and operational risk, foreign exchange risk, country risk, liquidity risk, and insolvency risk (Tandelilin, Kaaro, Mahadwartha, & Supriyatna, 2007). The bank's motivation for risk management comes from those risks which can lead to bank underperformance. Issues of risk management in banking sector have greater impact not only on the bank but also on the economic growth (Tandelilin et al, 2007).

Tai (2004) concludes that some empirical evidence indicates that the past return shocks emanating from banking sector have significant impact not only on the volatilities of foreign exchange and aggregate stock markets, but also on their prices, suggesting that bank can be a major source of contagion during the crisis. Banks which better implement the risk management may have some advantages: (i) It is in line with obedience function toward the rule; (ii) It increases their reputation and opportunity to attract more wide customers in building their portfolio of fund resources; (iii) It increases their efficiency and profitability. Cebenoyan and Strahan (2004) find evidence that banks which have advanced in risk management have greater credit availability, rather than reduced risk in the banking system. The greater credit availability leads to the opportunity to increase the productive assets and bank's profit.

### ***Risk Management Process***

The banking industry is no doubt a regulated sector as a result of the riskiness of its operation. Consequently, risk management in banks is fast becoming a discipline that every participants and players in the industry need to align with. Risk management process as noted by Soyemi, Ogunleye and Ashogbon (2014) involves:

- i. Risk identification: In order to properly manage risks, an institution must recognize and understand risks that may arise from both existing and new business initiatives; for example, risks inherent in lending activity include credit, liquidity, interest rate and operational risks. Risk identification should be a continuing process, and should be understood at both the transaction and portfolio levels.
- ii. Risk Measurement: Once risks have been identified, they should be measured in order to determine their impact on the banking institution's profitability and capital. This can be done using various techniques ranging from simple to sophisticated models. Accurate and timely measurement of risk is essential to effective risk management systems. An institution that does not have a risk measurement system has limited ability to control or monitor risk levels. Banking institutions should periodically test

their risk measurement tools to make sure they are accurate. Good risk measurement systems assess the risks of both individual transactions and portfolios.

- iii. Risk Monitoring: Institutions should put in place an effective management information system (MIS) to monitor risk levels and facilitate timely review of risk positions and exceptions. Monitoring reports should be frequent, timely, accurate, and informative and should be distributed to appropriate individuals to ensure action, when needed.
- iv. Risk Control: After measuring risk, an institution should establish and communicate risk limits through policies, standards, and procedures that define responsibility and authority. These limits should serve as a means to control exposure to various risks associated with the banking institution's activities. Institutions may also apply various mitigating tools in minimizing exposure to various risks. Institutions should have a process to authorize and document exceptions or changes to risk limits when warranted.

### **Banking Risks**

Basel II is the second of the Basel Accords, recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision. In accordance with Basel II, the following are types of risks (alongside their measurement and management techniques) usually found in the banking organization. They include:

- a) Credit risks: Also known as default risk, is one of the oldest. It is the most vital forms of risk faced by banks as financial intermediaries (Broll, Pausch, & Welzel, 2002). It is the potential loss arising from the failure of a borrower to meet its obligations in accordance with agreed terms.
- b) Market risks: It is risk in volatility in the market that affects the bank's return. It is the risk of loss from adverse movement in financial market rates (interest and exchange rate) and bond, equity or commodity prices. A bank's market risk exposure is determined by both the volatility of underlying risk factors and the sensitivity of the bank's portfolio to movements in those risk factors (Hendricks & Hirtle, 1997 in Zahangir & Masukujj, 2011).
- c) Operational risk: Is the potential financial loss as a result of breakdown in day to day operational processes. It can arise from failure to comply with policies, laws and regulations, from fraud or forgery (Njogo, 2012). These include direct and indirect laws resulting from inadequate of fail internal processes, people and systems or from external event (note operational risk in relation to the control environment is accesses within the relevant control sections).

Other risks that is consequent upon the second pillar of the Basel II and which provides a framework for dealing with all the other risks. According to Njogo, 2012, these risks among others include liquidity risk (is the ability of a bank to fund increases in assets and meet obligation as they come due, without incurring unacceptable losses. The fundamental role of banks in the maturity transformation of short-term deposit into long-term loans makes banks inherently vulnerable to liquidity risk. Effective liquidity risk management helps ensure cash flow obligations, which are uncertain as they affected by external events and other agents behavior.), interest rate risk (risk borne by an interest -bearing asset, such as a loan or a bond, due to variability of interest rates), legal risk (arises from the potential that enforceable contact, lawsuits, or adverse judgments can disrupts or otherwise negatively affect the operations or condition of a banking organization), and reputational risk (any risk that is likely to destroy shareholder value and attracts negative publicity, examples are loss of revenue, litigation, loss of clients and partners, exit of key employees, share price decline, difficulty in recruiting talent).

## **Theoretical Framework**

Financial risk is one among many factors with a substantial influence on the stability of a banking system. It is important to measure and control the determinants of the financial risk, especially at the aggregated level (Misker, 2015). Generally, macroeconomic, banking sector and also microeconomic level variables are the most important for analysis of financial risk. Hence the following theories;

### ***Commercial Loan Theory***

The oldest theory of banking is the commercial loan theory, also called the real bills doctrine. The commercial loan theory holds that banks should lend only on short term, self-liquidating, commercial paper. According to Hosna and Manzura, (2009), the commercial loan theory is geared to influence persuasively both the bank lending and the general economic activities. Strict adoption of this theory will reveal that it is expected to serve as a monetary supply to changes in aggregate economic activity. The popularity of this doctrine among Deposit-Money Banks (DMBs) in Nigeria is evident. Nigerian bankers believe that since their resources were repayable at short notice, such depositors' monies should be employed accordingly in short-term loans. Kargi,(2011) posited that the strong tie to this conception is rather orthodox if consideration is given to the fact that at the time of the supremacy of the theory, there were little or no secondary reserve assets, which could have served as a liquidity buffer for the bank.

More so, this theory fails to consider the credit needs of Nigeria's developing economy. It has not encouraged banks to fund the purchases of plants, equipment, land, and home-ownership. For a theory to maintain that all loans should be liquidated in the normal course of business shows its failure to recognize the relative stability of bank deposits. Whereas, demand deposits are on demand, all depositors are not likely to demand payment at the same time. Thus, stability of deposits enables a bank to extend funds for a reasonable long period without danger of illiquidity. Though, with its flaws, the commercial loan theory, or real bills doctrine has been a persistent theory of banking. Vestiges of it still remain in the structure of bank regulatory agencies, bank examination procedures and the thinking of many bankers. One cannot understand contemporary banking without an understanding of our banking history, and cannot understand banking history without an understanding of the commercial loan theory.

### ***Credit Risk Theory***

Credit risk according to Anderson, and Salas & Saurina, (2002) refers to the risk that a borrower will default on any type of debt by failing to make required payments. The risk is primarily that of the lender and includes lost principal and interest, disrupt loss may be complete or partial and can arise in a number of circumstances, such as an insolvent bank unable to return funds to a depositor. To reduce the lenders risk, the lender may perform a credit check on the prospective borrower, may require the borrower to take appropriate insurance, such as mortgage insurance or seek security or guarantees of third parties. In general, the higher the risk, the higher will be the interest rate that the debtors will be asked to pay on the debt. (Owojori, Akintoye & Adidu, (2011).

## **Empirical Review**

Adeusi, Akeke, Adebisi and Oladunjoye (2013) conducted a study which focuses on the association of risk management practices and bank financial performance in Nigeria. Using a panel of secondary data for 10 banks and for four years reported an inverse relationship between financial performance of banks and doubt loans, capital asset ratio was found to be positive and significant. Similarly it suggests that the higher the managed funds by banks, the

higher the performance. The study concludes a significant relationship between banks performance and risk management. Hence, the need for banks to practice prudent risks management in order to protect the interests of investors.

Moti, Masinde, and Mugenda, (2012) investigated the impact of bank's specific risk characteristics, and the overall banking environment on the performance of 43 commercial banks operating in 6 of the Gulf Co-operation Council (GCC) countries over the period 1998-2008. Using regression analysis, he observed that bad debts or credit risks, liquidity risk and capital risk are the major factors that affect bank performance when profitability is measured by return on assets while the only risk that affects profitability when measured by return on equity is liquidity risk.

Boland (2012) in their work examined bank performance in the presence of risk for Costa-Rican banking industry during 1998-2007 using regression analysis. The result of their study showed that performance improvements follow regulatory changes and that risk explains differences in banks and non-performing loans negatively affect efficiency and return on assets (ROA) while the capital adequacy ratio has a positive impact on the net interest margin.

Furthermore, Chen and Pan (2012) in their work examined the credit risk efficiency of 34 Taiwanese Commercial banks over the period 2005- 2008. Their study used financial ratios to assess the credit risk and was analyzed using Data Envelopment Analysis (DEA). The result of their study indicated that only one bank is efficient in all types of efficiencies over the evaluated periods.

Alshatti, (2015) revealed that the variables of credit risk management influenced banks' profitability. This research improves on some of the existing studies, in that it investigates the sub-total and overall effect of credit risk management and its indicators on the lending ability of Nigerian deposit money banks by combining certain credit risk management indicators and other financial indicators to determine which variables influence bank profitability and loan creation in broader scope.

## METHODOLOGY

Data for this study was secondary in nature and was gathered mainly from the annual reports and accounts of the selected fifteen (15) quoted deposit money banks (see appendix I). Banks financial risk was proxied using the Bank size, are gotten through appropriate ratio computation using figures as contained in the financial statements for the period 2012 to 2016. This serves as the guide of conducting the content analysis. This is contrary to studies that uses questionnaire which is distributed to target respondents as the means of gathering practices of risk management (Ariffin & Kassim, 2009). In addition, the financial performance was represented by Return on Equity (ROE) of selected banks.

Beside the use of descriptive statistics, to among others include simple average, median and standard deviation, to describe the variables, regression analysis is also adopted to test for the relationship between the independent variable of financial risk management practices and dependent variable corporate performance.

The econometric form for the model is specified as:

$$ROE = a_0 + a_2BS + u_{it}$$

Where:

ROE = Return on Equity

BS = Bank Size

$a_0$  = constant

$u_{it}$  = error term

### TEST OF HYPOTHESIS

**H<sub>0</sub>:** Financial Risk, proxy by bank size does not significantly affect the return on Equity of Deposit Money Banks in Nigeria

**Table 4.1.1 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.215 <sup>a</sup>	.046	.012	.4884731

a. Predictors: (Constant), TA

**Source: Researcher's Computation using SPSS version 20 software, 2017**

**Table 4.1.2 ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.323	1	.323	1.355	.254 <sup>b</sup>
Residual	6.681	28	.239		
Total	7.004	29			

a. Dependent Variable: ROE

b. Predictors: (Constant), TA

**Source: Researcher's Computation using SPSS version 20 software, 2017**

**Table 4.1.3 Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-2.111	1.963		-1.076	.291
TA	2.967	2.549	.215	1.164	.254

a. Dependent Variable: ROE

**Source: Researcher's Computation using SPSS version 20 software, 2017**

The result obtained from table 4.1.1 above shows the model summary results which sought to establish the explanatory power of the independent variable (bank size) for explaining and predicting the dependent variable (return on equity). R, the correlation coefficients, (i.e. the linear correlation between the observed and model predicted values of the dependent variable) showed a value of 0.215. R square, the coefficient of determination (i.e. the squared value of the correlation coefficients) showed a value of 0.046 or 4.6% of the variation in the dependent variable (return on equity) is explained by the model. This means that the total variation in return on equity is explained by 4.6 in BS.

The result of the analysis of variance (ANOVA) and ordinary least square regression analysis showed in table 4.1.2 and 4.1.3 respectively to evaluate the level of significance of the influence of bank size on return on equity revealed that return on equity is explained by -2.111 constant factor and 2.967 of the bank size as demonstrated in the regression model used to test the level of effect that bank size has on return on equity as shown below;

$$ROE = -2.111 + (2.967) BS$$

This means that every unit change in bank size will lead to 2.967 changes on return on equity. This shows a positive relationship and signifies that bank size has a positive impact on return on equity. The P-value from the ANOVA and coefficient table was used to determine the significance of the influence that the bank size has on return on equity. The contribution of bank size to the model is insignificant because p- value (0.254) is greater than the alpha value of 0.05. Hence, we accept the null hypothesis which states that bank size does not significantly affect the return on equity of deposit money banks in Nigeria.

### CONCLUSION

This paper examines financial risk management practices among deposit money banks in Nigeria with a view to relating these practices to their financial performance for 2012 to 2016 financial year. The year is peculiar to banks in Nigeria, as it is the year that signifies the beginning of the post adoption and implementation of IFRS in their annual report and financial reporting, alongside with other significant public entities. This trend has predominately improves on the content of such reports. The annual accounts are now bulky containing relevant and timely information including management discussions on usage of estimates and risk management profiles. This practice is in compliance with the second pillar of the Basel II, which empowers banks to review, monitor, manage and report their risk management system (including risk appetites and strategy) in other to achieve the desired objectives.

Risk management in banking designates the entire set of risk management processes and models allowing banks to implement risk-based policies and practices. They cover all techniques and management tools required for measuring, monitoring and controlling risks. The CBN and other regulators should endeavor to enforce risk identification, assessment, measurement and control mechanism, in line with best global practices in other to avoid financial crisis and also improve on commercial banks' performances.

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**APPENDIX I**

**List of Deposit Money Banks quoted in the Nigerian Stock Exchange**

Zenith Bank  
First Bank  
Guaranty Trust Bank  
UBA Bank  
Diamond Bank  
Access Bank  
Fidelity Bank  
FCMB  
Union Bank  
Wema Bank  
Unity Bank  
Skye Bank  
Sterling Bank  
Eco Bank  
Stanbic IBTC Bank

**Source: Nigerian Stock Exchange (2017)**