

CREDIT RISK MANAGEMENT PRACTICES, PROFITABILITY AND EFFICIENCY: EVIDENCE FROM NON-INTEREST LISTED DEPOSIT MONEY BANK IN NIGERIA

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ABSTRACT

Ineffective credit risk management has been identified as the major problem faced by the banking industry in Nigeria. This problem has negatively affected their performance. A number of measures have been put in place to eradicate these problems. Yet, the problem still persists and questionable to the effect it has on performance. Based on this, this study aimed at determining the effect of credit risk management practices on the profitability and efficiency of non-interest bank in Nigeria. Expo facto research design was chosen for this study and data was sourced from 2018 to 2023 using Jaiz Bank plc as population of the study. Independent variable of this study is the credit risk management while performance remained dependent variable. Ordinary least square regression was employed and used as a method of data analysis. Thus, result showed that there exist a positive linkage and significant influence between credit risk management and profitability while credit risk management has no statistical influence on efficiency. Thus, non-interest bank were recommended to build strong and effective credit risk management team so as to boost their profitability.

Keywords: *Credit Risk Management, Efficiency and Profitability.*

INTRODUCTION

Globally, Banking industries serve as an agent that develop the entire financial system and economy. This is informed of efficient and effective mobilization of fund from the surplus sector to the deficit sector (Ogege & Boloupremo, 2014; Alamro, 2025). This has helped in the creation of employment, sound and stable financial system before the collapse of Backhaus Herstatt in West Germany in 1974. This collapse had negative influence on the performance of banking industry (Basel Committee on Banking Supervision {BCBS}, 1988). Similarly, there are number of factors which had resulted in ineffective and inefficient performance of banking industry, important among these factors is the inability to manage their credit risk exposure in an effective and efficient way.

Poor credit risk management practices in the banking industry has been selected as the major issue that trouble banking industry in the world, and as well as in Nigeria (Nwafor & Nworie, 2025). This negative performance of banking industry has been as a result of ineffective in credit risk management. Also, credit risk management practices of these banks have been questionable to the nature of effect and influence they have on the profitability and efficiency of banking industry

more specifically non-interest-based bank in Nigeria. In addition, the variable that was used to measure credit risk management by previous studies were not good enough to capture it. This may serve as the main reason why previous studies did not reach the same conclusion in their findings. Moreover, previous studies did not provide measurement indicator for performance as a whole. Evidence on this could be seen from their work that most of the proxy used to measure performance were ROA, ROE. These indicators were used to measure financial performance, whereas non-financial performance remained undefined and not answered (Bassey & Moses, 2015; Alamro, 2025). Thus, this make performance not to be measured as a whole and under measured. The implication of this can cause performance not being in proper dimension with the credit risk management practice and poor measurement of performance in short run and long run. Thus, it will be difficult for banking industry to make accurate result for their performance in short and long run.

Based on this, this study determine the effect of credit risk management practices on the performance of banks that are not conventional and which are listed on the floor of exchange in Nigeria.

Research questions from this are; to what extent do credit risk management practices affect efficiency of non-interest-based bank in Nigeria? And what is the level of influence of credit risk management practices on profitability of non-interest based bank in Nigeria? Hypotheses formulated for this study include:

H0₁: Credit risk management practices has no influence on efficiency of non-interest bank in Nigeria

H0₂: Credit risk management practices has no linkage with profitability of non-interest bank in Nigeria

LITERATURE REVIEW

Conceptual Review

Credit Risk Management practices

Banks sees credit risk as part of financial risk. Thus, management of this risks are captured under financial risk management framework (Moustafa & Mohamed, 2016; Access Bank, 2018; Ecobank, 2017; Guaranty Trust Bank, 2018). Also, Paul and Musiega (2020) defined credit risk as the risk of loss on money lending and borrowing or defaulting risk. It is also the risk of counter party risk. Its management involves the process of monitoring credit risk exposure so as to ensure that banks are not exposed to unhealthy credit facilities. It is the process of taking care of non- performing loan, and making provision for bad debt and doubtful debt (Bassey & Moses, 2015; United Bank for Africa, 2018; Unity Bank, 2018; Wema Bank, 2019).

Credit Risk Management Regulatory Framework: An Overview of Basel Accord

This study makes use of the Basel accord framework. This was usually issued by the Basel Committee on Banking Supervision (BCBS). Basel Accords are classified into Basel I, II and III. Basel I as the first Basel was released in the year 1985 as a result of the inability of financial institutions to manage their credit risk exposure (BCBS, 1988). This accord mandated banks to set aside capital provision against risk. Weakness of this accord led to the release of Basel II. This was released in the year 2004 and it both captures financial and non-financial risks (BCBS, 2004). The shortcoming of this framework resulted in another Basel accord namely Basel III in 2010 which included how to manage liquidity risk of banks (Basel Committee on Banking Supervision {BCBS}, 2010). Based on this, this study used Basel accords capital provision to measure credit risk management in lieu with performance of non-interest listed deposit money banks in Nigeria.

Bank's Performance

Performance is the ability and capacity of an organization to achieve its objectives. It can also be viewed as achievement and success of the organization measured in money or non-monetary value. It can be classified in two parts; financial and non-financial performance. Financial performance is measured by these indicators; Return on Asset (ROA), Return on Earning (ROE), Return on Capital Employed (ROCE). While non-financial performance is proxied with these indicators: size of the business, growth and age (Ngumo, Collins & David, 2017).

Theoretical framework

Modern Portfolio theory

It was propounded by Markowitz in the year 1952 on the linkages between risk and return of an investment. This theory opined that risk can be reduced if there is proper diversification of securities of an investment. This theory assumed that an investor will take more of security with high return with same level of risk over other securities, and vice versa (Akinsulire, 2011; Omisore, Yusuf & Christopher, 2012). This theory described deposit money banks as investment firms that have both risk and return on their investment in financial market. The return of the bank is known as performance while risks affecting their performance is credit risk. The theory opined that these risks can be reduced if not totally eradicated through diversification. The relevancy of this theory is that it helps the bank to understand risk and return behavior. Credit risk can be reduced if a bank can give credit or loan to different sectors not focusing on a single sector or same geographical area, such that if one is not performing the other will be performing and a bank can use that to offset each other. Thus, proper credit risk management practices will reduce risk exposure and improve performance.

Empirical Review

Shieler, Emenike and Amu (2017) showed that credit risk management practices have a positive effect on the financial performance of microfinance institutions in Kampala, Uganda. Credit risk

management was independent variable and measured by credit risk identification, appeal, monitoring and mitigation. Financial performance was the dependence variable of this study and measured by return on earning. This work employed mixed method as primary and secondary data were used. Questionnaire was used as a means of collecting primary data. The secondary data was collected between 2011 to 2015. Pearson product correlation coefficient was used to analyze the data and result revealed that credit risk management is positive related with performance.

Also, Nwude and Okeke (2018) assessed the effect of credit risk management practices on the financial performance of selected deposit money banks. Credit risk management was the independent variable while dependent variable was financial performance. Credit risk management as independent variable is proxy by using non-performing loan while financial performance as dependent variable is proxy with return on asset, return on earning and logarithm of total advance and loan. Expo facto research design was employed in this course of study. Ordinary least square method of regression was used to analyze the data. This study showed that management of credit risk has positive effect on the financial performance and significantly related. Thus, good management of this risk will influence better result in their financial performance.

Moreover, Kule, Kamukama and Kijjambu (2020) established positive linkage using standard linear regression. This study determine the effects of credit management system on the financial performance of credit and saving cooperative in mid-western, Uganda. Credit management served as the independent variable and financial performance served as dependent variable. Cross-sectional research design was employed in this study. Questionnaires was employed and were designed on the five Likert point scale for both financial performance and credit management. Credit term and condition, credit approval, credit collection, credit risk control policy and credit granting decision were indicator used to proxy credit management system. The study found out positive relationship between variables.

In addition, Paul and Musiega (2020) determine the effect of management of credit risk and financial performance of micro finance institution in Nairobi, Kenya. Cross sectional research design was used. Credit risk management is the independent variable and was measured with credit risk control, credit reminder practices, credit risk grading practices and viability identification. Financial performance is the dependent variable. The method of data analyze is Multiple Linear regression in this study. Thus, result showed that credit risk management practices is significant and positive linked with financial performance.

Alamro (2025) revealed that there exist a positive relationship between management of credit risk and financial performance of Islamic bank in Jordan. In this work, credit risk management is the independent variable while financial performance is the dependent variable. The method of data analysis used for this study is structural equation model and result showed that credit risk management practices is positively linked to the financial performance of Jordan Islamic bank.

METHODOLOGY

This study used expo facto research design and data is sourced from annual report and financial statement of non interest listed banks between 2018 -2023 using Jaiz Bank plc as population of the

study. The credit risk management is the independent variable and measured with capital provision based on Basel framework. The dependent variables is performance and measured with profitability and efficiency. Profitability is proxy with return on capital employed while efficiency is proxy with asset turnover ratio. Ordinary least square method of regression is used as a method of data analysis in this study and this is preferred as it provides robust result (Gujarati, Porter, & Gunasekar, 2013). Nwudu and Okeke (2018) model was adapted and further modified. Thus, this regression model is stated below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e_t$$

$$\text{Asset turnover} = \beta_0 + \beta_1 \text{LNCRM} + e_t \dots\dots\dots (3.1)$$

$$\text{ROCE}_t = \beta_0 + \beta_1 \text{LNCRM} + e_t \dots\dots\dots (3.2)$$

RESULT AND DISCUSSIONS

Descriptive Statistics

The descriptive statistics of this study is presented below in table 1. The dependent variable includes efficiency and profitability. Efficiency was measured by using log of total asset turnover while profitability was measured by using ROCE. The independent variable is log of credit risk management practices. There are six (6) observations from this table, the mean of total asset, ROCE, and CRM. The mean value of this variables include 17.78553, 0.05986; 0.0201. Their standard deviation are as follows; 0.341859; 0.0043915; 0.0058961. It can be seen from this table that standard deviation is below one. This implies that there is low dispersion. Their minimum value are 17.54776; 0.0547809; 0.043604 and maximum value include 18.43291; 0.0650834; 0.0310785. Thus, the minimum and maximum values are less than 1 except in the case of LNCRM which has larger value. This could be as a result of their low variation and standard of deviation which can be traced to low dispersion that exist among variables of this study. This implies that there is low dispersion between variables of this study

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
LNCRM	6	17.78553	.341859	17.54776	18.43291
totalasset~r	6	.0598643	.0043915	.0547809	.0650834
ROCEPBITCa~d	6	.0201589	.0058961	.0143604	.0310785

Source: Author's computation, 2025

The result of multicollinearity, test of heteroscedasticity and serial correlation are showed in table 2, 3 and table 4. The test of multicollinearity was done using variance inflation factor, test of heteroscedasticity using Breusch-Pagan / Cook-Weisberg test for heteroscedasticity and test of serial correlation using Durbin-Watson d-statistic for Serial Correlation. From the Table 2 there is no multi collinearity as mean VIF is below 10. The rule of thumb states that, if VIF of a variable is less than 0.90, the variable do not violate the assumption of multicollinearity and there is no multicollinearity. Table 3 showed the test of heteroscedasticity which showed that there is absence

of heteroscedasticity, thus the data is homoscedasticity. P value is less than 0.5. Serial correlation was test and Table 4 showed that there is no serial correlation as the value is not up to 2.5 threshold.

Table 2: Multi-Collinearity Test – Variance Inflation Factors

Variable	VIF	1/VIF
LNERM	1.00	1.000000
Mean VIF	1.00	

Table 3: Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

chi2(1) = 0.24
Prob > chi2 = 0.6218

Table 4: Durbin-Watson d-statistic for Serial Correlation

Durbin	Watson d	statistic (2, 6) = 1.985255
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Discussion of Findings

Table 5a: Linear regression log of Credit Risk Management Practices and Total asset Turnover

Source	SS	df	MS	Number of obs = 6
				F(1, 4) = 1.79
Model	.000029791	1		.000029791 Prob > F = 0.2521
Residual	.000066634	4		.000016658 R-squared = 0.3090
			ADJ R-squared	= 0.1362
Total	.000096425	5		.000019285 Root MSE = .00408
			Coef.	Std. Err.
totalasset~r			t	P> t
Interval]				[95% Conf.
LNCRM			-0.0071402	.0053393 -1.34 0.252 -0.0219645
.0076841				
_cons			.1868564	.094977 1.97 0.121 -0.0768421
.450555				

Table 5b: Linear regression log of Credit Risk Management Practices and ROCE

Source	SS	df	MS	Number of obs = 6
				F(1, 4) = 8.02
Model	.000115958	1	.000115958	Prob > F = 0.0473
Residual	.000057863	4	.000014466	R-squared = 0.6671
				Adj R-squared = 0.5839

Total .000173821		5 .000034764		Root MSE		= .0038	
ROCEPBITCa~d	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]		
LNCRM	.014087	.0049755	2.83	0.047	.0002727	.0279012	
_cons	-.2303854	.0885058	-2.60	0.060	-.4761169	.0153461	

From Table 5a, the result of regression of credit risk management practices and efficiency measured by asset turnover is computed in this table. Credit risk management practices has a negative value and it is not statistically significant at 10% with its coefficient value -0.00714 at 0.252 probability value.

Moreover, the implication of this is that whatever changes happen to credit risk management practices of non-interest based bank, it will not have any significant change to the efficiency of this bank.

Contrary, table 5b revealed that there is a positive and significant linkage between credit risk management and profitability measured by ROCE. The coefficient of credit risk management in lieu with profitability is 0.14087 and significant at 10% with p- value of 0.04. The implication of this is that any changes to credit risk management will cause increase in the profitability of non-interest bank by 0.14087. The coefficient of variation measured by R-square revealed that credit risk management explained 66.71% of the profitability and with significant p-value at 0.0473 as against 10% level. The implication of this is that, credit risk management practices has a positive and significant effect on profitability but has no significant effect on efficiency. This result equal to the finding of Nwude and Okeke (2018) and Kule, *et al.*, (2020).

CONCLUSION AND RECOMMENDATIONS

The table 5a and b showed the result of credit risk management, profitability and efficiency, the null hypotheses was accepted for table 5a, which implies that credit risk management has no significant effect on the efficiency of non-interest bank. As for table 5b, null hypotheses was not accepted and alternative hypothesis was preferred over null. This implies that there exist a positive linkage and significantly influence between credit risk management practices and profitability of non-interest bank in Nigeria. Thus, the Non-interest deposit money bank is recommended to build effective and strong credit risk management team personnel so as to have good credit risk management system which in turn will boost their level of profitability.

REFERENCES

- Access bank. (2018). *Annual report*. Retrieved from: www.accessbankplc.com
- Ademola, O.J., Olamide, O.J., & Moses, O.I. (2016). Exchange Rate Volatility and Banks Performance: Evidence from Nigeria. *International Journal of Economic and Business management*, 2(4), 1–11. Retrieved from www.iiardpub.org
- Alamro, R.O. (2025). Financial Performance and Credit Risk Management of Islamic Banks. *Journal of Management World* 2025, 1, 647-653. DOI:10.53935/jomw.v2024i4.755© 2025by the author
- Akinsulire, O. (2011). *Financial management*. Lagos, Nigeria: Ceemol Nigeria ltd
- Basel Committee on Banking Supervision. (1988). *International Convergence of Capital measurement and Capital standard*. Retrieved from: [History of the Basel Committee \(bis.org\)](http://www.bis.org)
- Basel Committee on Banking Supervision. (2004). *International Convergence of Capital measurement and Capital standard*. Retrieved from: [History of the Basel Committee \(bis.org\)](http://www.bis.org)
- Basel Committee on Banking Supervision. (2010). *Basel III: International framework for liquidity risk measurement, standards and monitoring*. Retrieved from: [History of the Basel Committee \(bis.org\)](http://www.bis.org)
- Bassey, E.G., & Moses, E.C. (2015). Bank Profitability and Liquidity management: A case study of selected Nigerian Deposit money bank. *International Journal of Economics, commerce and management* ,3(4). Retrieved from ijecm.co.uk
- Central Bank of Nigeria. (2005). *CBN Briefs Series No.2004-5*. Retrieved from: www.cbn.gov.ng
- Central Bank of Nigeria. (2013). *Circular to all Banks and Discount Houses on the Implementation of basel ii/iii in Nigeria*. Retrieved from: www.cbn.gov.ng
- Central Bank of Nigeria. (2018). *Gentlemen of press*. Retrieved from: www.cbn.gov.ng
- Ecobank. (2017). *Annual report*. Retrieved from: [Ecobank.com](http://www.ecobank.com)
- Gujarati, N.D., Porter, C.D., & Gunasekar, S. (2013). *Basic Econometrics*. New York, USA: McGraw-Hill companies
- Guaranty Trust Bank. (2018). *Audited Group Financial statements*. Retrieved from: www.gtbank.com
- Kule, M.J.B., Kamukama, N., & Kijjambu, F.N. (2020). Credit Management Systems and Financial performance of Savings and Credit Cooperatives in Mid-western Uganda. *American Journal of Finance* ,5(1),43-53. Retrieved from <http://www.ajpojournals.org/>
- Moustafa, W., & Mohamed, H. (2016). Risk Management of Banking Sector. *American International Journal of Social Science*. 5(3), 159–168.
- Nwude, E. C., & Okeke, C. (2018). *Impact of Credit Risk Management on the Performance of Selected Nigerian Banks*. *International Journal of Economics and Financial Issues* 8(2), 287–297. Retrieved from: <http://www.econjournals.com>
- Nwafor, V. O., & Nworie, G. O. (2025). Risk management in Nigerian listed commercial banks: The significance of board composition (2013–2023). *International Journal of Financial, Accounting, and Management*, 6(4), 525-543.

- Omisore, I., Yusuf, M., & Christopher, I., N. (2012). The modern portfolio theory as an investment decision tool. *Journal of Accounting and Taxation* ,42,19-28. doi.org/10.5897/JAT11.036.
- Ogege, S., & Boloupremo, T. (2014). Deposit Money Banks and Economic Growth in Nigeria. *Financial Asset and Investing*,1(3). Retrieved from: <https://www.researchgate.net/publication/269652302>
- United Bank for Africa. (2018). *Consolidated and Separate Financial statement for the year ended 31st December 2018*. Retrieved from: www.ubagroup.com
- Paul, M.S., Musiega, M. (2020). Effect of Credit Risk Management Practices on Financial Performance Of Microfinance Institutions In Nairobi. *International Journal of Recent Research in Social Sciences and Humanities* ,7(3),22-39. Retrieved from www.paperpublications.org
- Unity Bank. (2018). *Audited Financial Statement for the year ended 31st Decmber 2018*. Retrieved from: www.unitybanking.com
- Wema bank. (2019). *2019 Annual report and Accounts*. Retrieved from: www.wemabank.com