

EFFECT OF CREDIT RISK MANAGEMENT ON BANK PERFORMANCE IN NIGERIA

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Abstract

This study examines the effect of sales credit risk management on bank performance (a study of selected DMBs) from 2009-2018, The study adopted the secondary method of acquiring data which was sourced from financial statements of the banks. Simple Regression Analysis was employed in the analysis of the data collected with the use of electronic views. The results revealed that there exists a positive and significant relationship between loan advances and return on asset while a negative and significant relationship between loan loss provision, non-performing; loan and return on asset. Consequently, it is recommended that company Banks should ensure that they deploy a well-established credit risk management framework. Banks practice prudent risk management and safeguarding the assets of the banks and protect the investors' interests.

Keywords: credit risk management, bank performance, Nigeria.

INTRODUCTION

Banks are germane to economic development through the financial services they provide. Their intermediation role can be said to be a catalyst for economic growth. The efficient and effective performance of the banking industry over time is an index of financial stability in any nation. The extent to which a bank extends credit to the public for productive activities accelerates the pace of a nation's economic growth and its long-term sustainability.

The credit function of banks enhances the ability of investors to exploit desired profitable ventures. Credit creation is the main income generating activity of banks (Kargi, 2011). However, it exposes the banks to credit risk. The Basel Committee on Banking Supervision (2001) defined credit risk as the possibility of losing the outstanding loan partially or totally, due to credit events (default risk). Credit risk is an internal determinant of bank performance. The higher the exposure of a bank to credit risk, the higher the tendency of the banks to experience financial crisis and vice-versa.

Credit risk is a major concern for lenders worldwide as it is the most critical of all risks faced by a banking institution. The magnitude and the level of loss caused by credit risk compared to others are severe to cause bank failures (Seifollahi, 2011). Credit risk arises from the potential that an obligor is either unwilling to perform on an obligation or its ability to perform such obligation is impaired resulting in economic loss to the bank. In addition to direct accounting loss, credit risk should be viewed in the context of economic exposures. This encompasses opportunity costs, transaction costs and expenses associated with a non-performing asset over and above the accounting loss

But unarguably, financial institutions have faced difficulties over the years for a multitude of reasons, the major cause of serious banking problems continues to be directly related to lax credit standards for borrowers and counter parties, poor portfolio risk management, or a lack of attention to changes in economic or other circumstances that can lead to a deterioration in the credit standing of a bank's counter parties. This experience is common in both G-10 and non G-10 countries. Credit risk is one of great concern to most authorities and banking regulators. This is because credit risk is those risks that can easily and most likely prompts bank failure. Therefore, credit risk management needs to be a robust process that enables Financial Institutions to proactively manage facility portfolios in order to minimize losses and earn an acceptable level of return for shareholders Dandago (2006).

Credit risk management is a structured approach to managing uncertainties through risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources (Nnanna, 2004). The strategies include transferring to another party, avoiding the risk, reducing the consequences of a particular risk. The objective of risk management is to reduce the effects of different kinds of risks.

Risk management is the human activity which integrates recognition of risk, risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources, but credit risk is the risk of loss due to debtor's non-payment of a loan or other line of credit (either the principal or interest or both) (Campbell, 2007). A commercial bank is an institution that provides financial services, including issuing money in various forms, receiving deposits of money, lending money and processing transactions and the creating of credit (Campbell, 2007).

The important of credit risk management to banks cannot be overemphasis and it also for man integral part of the loan process. Credit risk management maximizes bank risk, adjusted risk rate of return by maintaining credit risk exposure with view to shielding the bank from the adverse effects of credit risk. It is expedient to then ask; what is the relationship between Credit risk management and bank performance (ROA) in Nigeria.

RESEARCH OBJECTIVE

This study is set to achieve the following objectives:

1. To examine the influence of Non-Performing Loan (NPL) on Return on asset (ROA)
2. To find out the extent to which loan advance (LA) affect Return on asset (ROA)
3. To establish the relationship between loan loss provision (LLP) and Return on asset (ROA)

HYPOTHESES

For the purpose of this study the following hypotheses will be tested:

- H₀1:** non-performing loan does not have any significant influence on return on asset
- H₀2:** loan advance does not have any impact influence on return on asset
- H₀3:** There is no significant relationship between loan loss provision and return on asset

LITERATURE REVIEW

Commercial banks are in the business of mobilizing deposits, lending money, investing funds and holding bonds and other securities. Performance of a commercial bank depends on balancing its striving for profit at the same time ensuring its liquidity with the least risk (Felix and Claudine, 2008).

Credit risk emanates from a bank's dealing with individuals, corporate, financial institutions or a sovereign. The bank is exposed to credit risk through its trading, lending and investing activities and in cases where it acts as an intermediary on behalf of customers or other third parties or it issues guarantees (Drigă, 2012). According to Basel Committee on Banking Supervision, credit risk is defined as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms (Safakli, 2007). Credit risk arises from uncertainty in counterparty's ability or willingness to meet its pre-committed contractual obligations (Njanike, 2009). It arises from non-performance by a borrower.

This can affect the lender holding the loan contract, as well as other lenders to the creditor. Therefore, the financial condition of the borrower as well as the current value of any underlying collateral is of considerable interest to its bank (Santomero and Mellon, 1996). Collateral is a form of security to a lender in case the borrower fails to repay a loan. It plays an important role in the financial sector, as it is a means of covering potential losses (Rufai, 2013).

Credit risk is the risk of loss caused by a debtor defaulting on a loan or line of credit. In a bank's portfolio, losses stem from outright default due to inability or unwillingness by customer or counter party to meet commitments in relation to lending, trading, settlement and other financial transactions. Alternatively, losses may result from reduction in portfolio value due to actual or perceived deterioration in credit quality. The real risk from credit is the

deviation of portfolio performance from its expected value (Rani, 2012).

Commercial banks and other financial institutions form opinions about a company's credit risk by comparing current and future debt-service requirements to estimate of the company's current and expected future cash flows (Hamadi and Abdelmoula, 2010). Counterparty may default because of bankruptcy or temporary financial problems. Risk plays an important role in debt contracting.

At loan inception, the lender estimates the expected credit risk that the borrower presents over the life of the loan. Absent provisions to control increases in credit risk, the lender prices the expected outcome in the interest rate of the loan. Both lender and borrower suffer when the expected credit risk of the borrower is high; the lender with increased risk over the life of the loan, and the borrower with a high interest rate. This suggests that both contracting parties benefit when provisions are included in the debt contract to control increases in credit risk (Demerjian and Ross, 2007). Credit risk management which refers to identification, analysis and assessment, monitoring and control of credit has direct implications on the amount of loans and advances extended to customers as well as on the level of non-performing loans (kithinji, 2010).

The main source of credit risk include, limited institutional capacity, inappropriate credit policies, volatile interest rates, poor management, inappropriate laws, low capital and liquidity levels, direct lending, massive licensing of banks, poor loan underwriting, laxity in credit assessment, poor lending practices, government interference and inadequate supervision by the central bank. An increase in bank credit risk gradually leads to liquidity and solvency problems. Credit risk may increase if the bank lends to borrowers it does not have adequate knowledge about (Funso et al., 2012).

Whenever a bank lends and for some reason finds that repayments and interest payments are not taking place, there is double impact on the bank's finances. One, bank will have to stop accruing interest on the doubtful loans and therefore there is an immediate income loss to the bank. Secondly, the bank will have to make provisions for then on-performing loans and this has to be made from the net interest income which the bank is currently earning, which implies that profit will be reduced. Increases in credit risk will raise the marginal cost of debt and equity, which in turn increases the cost of funds for the bank (Basel, 2000). The amount of credit risk exposure in this regard is represented by the carrying amounts of the loans and advances on the balance sheet (Drigă, 2012). This risk is determined by factor extraneous to the bank such as general unemployment levels, changing socio-economic conditions, debtors' attitudes and political issues.

While it is expected that banks would bear some bad loans and losses in their lending activities, one of the key objectives of the bank is to minimize such losses. Credit performance evaluates the risks associated with the bank's asset portfolio i.e. the quality of loans issued by the bank (Kithinji, 2010). Credit risk also includes the risk of a decline in the market value of investments that may arise from deterioration in the credit quality of counterparty. This is known as credit transition risk (Harvey and Merkowsky, 2008).

Sujewaa (2015) also examined the Impact of Credit Risk Management on the Performance of Commercial Banks in Sri Lanka. The aim of this study was to identify the impact of credit risk management on the performance of the money deposit banks in Sri Lanka. Primary and secondary data were collected during the course of the research hence, a regression model was used to establish the relationship between amounts of loan as well as non-performing loans and profitability during the period of study by using E-views software. The results from the analysis verify

the objective of the study that better credit risk management results in better bank performances. The researcher therefore recommended that the banks should ensure that they deploy a well-established credit risk management framework.

Uwalomwa, Uwuigbe & Oyewo (2015) researched on credit management and bank performance of listed banks in Nigeria covering the period from 2007-2011. The objectives of this work were to determine the relationship between non-performing loans and the performance of banks in Nigeria, examine the relationship between secured and unsecured loan and performance of banks in Nigeria and to determine the relationship between bad debt and performance of banks in Nigeria., the study adopted the use of both descriptive statistics and econometric analysis using the Panel linear regression methodology consisting of periodic and cross sectional data in the estimation of the regression equation. It was found that that ratio of non-performing loans and bad debt do have a significant negative effect on the performance of banks in Nigeria. Hence, the study concludes that banks management should establish sound lending policies, adequate credit administration procedure and an effective and efficient machinery to monitor lending function with established guidelines.

Adeusi, Akeke, Adebisi & Oladunjoye (2014) researched on risk management and financial performance of Banks in Nigeria. The objective of the study was to examine the effect of risks management on the financial performance of Nigerian banks. Secondary data was used i.e. data was gotten from annual reports and financial statements of Banks. A panel data estimation technique was used to analyse data hence, result showed a significant relationship between bank performance and risk management. It was therefore recommended that banks practice prudent risk management and safeguarding the assets of the banks and protect the investors' interests.

METHODOLOGY

The research was conducted by confirming and testing the relationship between variables is done by testing hypotheses using a well-structured equation. The data used in this study were obtained from annual report of UBA, ACCESS BANK, ZENITH, ECO BANK and GTB at a period from 2009 to 2018. Simple regression analysis was utilized in the study to analyze the relationship between credit risk management and bank performance. Materials explored were from published and unpublished works, reports, journals, reviews and magazine; as well as financial statements of the company. The model is specified below

$$ROA = \beta_0 + \beta_1 NPL + \mu \dots \dots \dots \text{Equation 1}$$

$$ROA = \beta_0 + \beta_1 LA + \mu \dots \dots \dots \text{Equation 2}$$

$$ROA = \beta_0 + \beta_1 LLP + \mu \dots \dots \dots \text{Equation 3}$$

Where; ROA= return on asset,

NPL= Non – performing loan

LA= Loan advance

LLP= Loan loss provision

LLR= Loan loss reserves

μ = Error Term

RESULT ANALYSIS AND FINIDNGS

Hypotheses

For the purpose of this study, three (3) Hypotheses were generated from the review of relevant literature. They are:

H₀₁: non-performing loan does not have any significant influence on return on asset

$$ROA = \beta_0 + \beta_1 NPL + \mu \dots \dots \dots \text{Equation 1}$$

Regression Result for Hypothesis One

Dependent Variable: ROA				
Method: Panel Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
NPLR	-0.043725	0.066263	-2.659869	0.0129
C	0.105238	0.040305	2.611028	0.0125
R-squared	0.434188	Mean dependent var		0.023162
Adjusted R-squared	0.413220	S.D. dependent var		0.014028
F-statistic	8.011556	Durbin-Watson stat		1.446171
Prob(F-statistic)	0.012852			

Source: Author’s Computation (2020) Using Eview 9

This hypothesis looks at the relationship between non-performing loan and return on asset. The result for the goodness of fit test as presented in table shows a coefficient of determination of R² = 0.434 (43.4%); this shows that 43.4% of the total variation in the dependent variable (return on asset) is explained by the independent variables (non-performing loan). The p-value of the F statistics is 0.0129 which is significant at 5% explaining that the null hypothesis should be rejected. Consequently, the F-test results as

depicted in table indicates clearly that the fairness and non-biasness of the model. It shows simultaneously that the independent variable is significantly associated with the dependent variable. Therefore, the model shows that non-performing loan have significant influence on return on asset.

H₀₂: loan advance does not have any impact influence on return on asset

$$ROA = \beta_0 + \beta_1 LA + \mu \dots \dots \dots \text{Equation 2}$$

Regression Result Hypothesis Two

Dependent Variable: ROA				
Method: Panel Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LA	0.017016	0.007868	2.162786	0.0363
C	0.080708	0.038453	2.098906	0.0419
R-squared	0.394699	Mean dependent var		0.023162
Adjusted R-squared	0.363816	S.D. dependent var		0.014028
F-statistic	7.912430	Durbin-Watson stat		1.812705
Prob(F-statistic)	0.036285			

Source: Author’s Computation (2020) Using Eview 9

This hypothesis looks at the relationship between loan advance and return on asset. The result for the goodness of fit test as presented in table shows a coefficient of determination of $R^2 = 0.395$ (39.5%); this shows that 39.5% of the total variation in the dependent variable (return on asset) is explained by the independent variable (loan advance). The p-value of the F statistics is 0.0363 which is significant at 5% explaining that the null hypothesis should be rejected. Consequently, the F-test results as depicted in table indicates clearly that the fairness and

non-biasness of the model. It shows simultaneously that the independent variable is significantly associated with the dependent variable. Therefore, the model shows that loan advance have impact influence on return on asset

H₀₃: There is no significant relationship between loan loss provision and return on asset

$$ROA = \beta_0 + \beta_1 LLP + \mu \dots \dots \dots \text{Equation 3}$$

Regression Result for Hypothesis Three

Dependent Variable: ROA				
Method: Panel Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LLP	-0.103909	0.149487	-2.695106	0.0008
C	0.083489	0.045423	1.838030	0.0731
R-squared	0.334937	Mean dependent var		0.023162
Adjusted R-squared	0.304093	S.D. dependent var		0.014028
F-statistic	7.021695	Durbin-Watson stat		1.582235
Prob(F-statistic)	0.000833			

Source: Author’s Computation (2020) Using Eview 9

This hypothesis looks at the relationship between loan loss provision and return on asset. The result for the goodness of fit test as presented in table shows a coefficient of determination of $R^2 = 0.335$ (33.5%); this shows that 33.5% of the total variation in the dependent variable (return on asset) is explained by the independent variable (loan loss provision). The p-value of the F statistics is 0.0008 which is significant at 5% explaining that the null hypothesis should be

rejected. Consequently, the F-test results as depicted in table indicates clearly that the fairness and non-biasness of the model. It shows simultaneously that the independent variable is significantly associated with the dependent variable. Therefore, the model shows that there is significant relationship between loan loss provision and return on asset

CONCLUSION AND RECOMMENDATION

This study aimed at analyzing the effect of credit risk management on bank performance, for the period from 2009 to 2018. The study reviewed various literature as well as empirical studies on credit risk management. The simple linear regression is used to find out whether there is a relationship between the variables measured (i.e. Non- performing loan, loan advance , loan loss provision and return on asset (ROA)) and also to find out if the relationship is significant or not. The study expressed a result that Non- performing loan, loan advance , loan loss provision significantly influenced return on asset (ROA). This result is consistent with the findings of Uwalomwa, Uwuigbe & Oyewo (2015) whose finding revealed that ratio of non-performing loans and bad debt do have a significant negative effect on the performance of banks in Nigeria

Based on the research findings, the following recommendations are made:

Banks should ensure that they deploy a well-established credit risk management framework. Banks practice prudent risk management and safeguarding the assets of the banks and protect the investors' interests Assessment and the continuous monitoring of counterparty and portfolio to know when loan is becoming non-performing

Loans to individuals should be accordingly secured e.g autos for car loans and private or income producing real estate should be secured by a mortgage over the relevant property. Borrowers should be adequately informed of the procedures involved in getting a loan and the penalties given for defaulters.

REFERENCES

Adeusi, Stephen Oluwafemi, Akeke, Niyi Israel, Adebisi, Obawale Simeon, & Oladunjoye, Olawale (2014), "*Risk Management and Financial Performance of Banks in Nigeria*" European Journal of

Business and Management ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol 2 No.31, 2014

Basel Committee on Banking Supervision, 2001. Risk management practices and regulatory capital: Cross-sectional comparison. Basel Committee on Banking Supervision. Available from www.bis.org

Campbell, A., 2007. Bank insolvency and the problem of non-performing loans. *Journal of Banking Regulation*, 9(1): 25–45.

Dandago, K.I. (2001): Simplified Financial Accounting. 2nd Edition, Adam Ijoju Publishers.

Drigă, I. (2012). Financial Risks Analysis for a Commercial Bank in the Romanian Banking System, *Annales Universitatis Apulensis Series Oeconomica*, 14(1), pp. 164-177.

Felix, A.T and Claudine, T.N (2008). Bank Performance and Credit Risk Management, Unpublished Masters Dissertation in Finance, University of Skovde.

Funso, Kolapo, T.; Kolade, Ayeni, R.(2012). Credit Risk and Commercial Banks' Performance in Nigeria: A Panel Model Approach, *Australian Journal of Business and Management Research*, vol.2, No.02, pp. 31-38

Kargi, H.S. (2011). Credit Risk and the Performance of Nigerian Banks, Ahmadu Bello University, Zaria

Kithinji, A. M. (2010). Credit Risk Management and Profitability of Commercial Banks in Kenya, School of Business, University of Nairobi-kenya. pp. 1-42. Accessed at: <http://www.aibuma.org/proceedings2011/aibuma2011-submission232.pdf>

Kolapo, T.F. Ayeni, R.K & Oke, M.O. (2012). Credit risk and commercial banks' performances in Nigeria: a panel model approach", *Australian journal of business and management research*, vol. 2, No.2. pp 31-38

- Nnanna, O.J.,etal. (2004): Finance, Investment and Growth in Nigeria. Central Bank of Nigeria, Corporate Headquarters, Abuja FCT
- Rufai, A. S. (2013). Efficacy of Credit Risk Management on the Performance of Banks in Nigeria: A Study of Union Bank PLC. *Global Journal of Management and Business Research Administration and Management, Volume 13; Issue 4*
- Safakli, Okan V. (2007). Credit Risk Assessment for the banking Sector of Northern Cyprus, *Banks and Bank Systems*, Vol. 2 Issue 1, pp. 21-31..
- Sujewaa (2015), "Impact of Credit Risk Management on the Performance of Money deposit banks in Sri Lanka" *International Journal of Scientific Research and Innovative Technology* ISSN: 2313-3759 Vol. 2 No. 7; July 2015
- Uwalomwa, Uwuigbe & Oyewo (2015), "Credit Management and Bank Performance of Listed Banks in Nigeria" *Journal of Economics and Sustainable Development* ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) Vol.6, No.2, 2015.