

Impact of Credit Risk Management on Earnings per Share and Profit after Tax: The Case of Nigerian Listed Banks

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Abstract: *Efficient credit risk management of banks is germane not only because of the recurring financial distress and crises, but also a central factor which determines banks' survival, growth and profitability. However, credit extension which is at the core of banking operations is possibly the most significant of all risks in terms of quantum of potential losses. In a bid to address this concern, this study empirically examined the effects of credit risk management indicators represented by Interest Income (INTINC), Non-Performing Loans (NPL), Loan Loss Provision (LLP) and Loans and Advances (LA) on bank performance as measured by Earnings per Share (EPS) and Profit after Tax (PAT). Bank Size (BS) proxied by total assets and Equity Capital (EQCAP) are included as control variables. The study employed panel regression analysis on a sample of 14 deposit money banks (DMBs) listed on the Nigerian Stock Exchange (NSE) for the period, 2000 through 2013. Although, the study did not find any empirical evidence to support the hypotheses that credit risk management indicators significantly influence EPS, it showed that loans and advances, interest income, bank size and equity capital exert significant positive impact on PAT. In line with prior studies, the study also revealed a significant negative effect of loan loss provision and an insignificant positive influence on PAT. The findings suggest the need for Nigerian DMBs to increase the quantum of loans and advances and asset base in order to enhance interest income. The banks should also increase their equity capital since it improves their after tax profit. This should be done by increasing shareholders equity through retained earnings; if insufficient, then, new issue. Since, non-performing loans and loan loss provision do not enhance bank financial performance in Nigeria, boards and management of the banks should develop new strategies of managing loans as this is capable of reducing their exposure to credit risk.*

Keywords: *Credit Risk Management, Deposit Money Banks, Earnings per Share, Profit after Tax, Nigeria*

I. Introduction

Efficient credit risk management in banks is germane not only because of the recurring financial distress and crises, but also a central factor which determines banks' survival, growth and profitability. However, credit extension which is at the core of banking operation is possibly the most significant of all risks in terms of quantum of potential losses. For most banks, loans are the largest source of credit risk. Hence, the focus of banks' risk management is mainly on credit risk.

Nigeria witnessed credit expansion as a result of the increase in credit transactions and loans to customers in the nation's economy, signaling that banks deposit loan ratio increases daily as the economy grows (Kolapo, Ayeni and Oke, 2012). Credit is conventionally made available in accordance with borrower's financial status, business, sustainability, reputation and liquidity, but the unhinged situation of the Nigerian financial market makes it difficult for banks to rely on the aforementioned determinants. Hitherto, the magnitude of non-performing loans in the Nigerian banking system is a cause for concern to different stakeholders including bank management which granted the loans, depositors whose funds have been misappropriated and trapped and regulatory agencies whose major responsibility is to protect the system.

Furthermore, Nigerian banks have continued to invest huge sums of funds to credit risk management modeling with a view to maximizing returns and minimizing bank's risk exposure through provision for potential loan losses. Banks with high credit risk has high bankruptcy risk which ultimately puts the depositors in jeopardy. The excessive high level of non-performing loans in the banks can be attributed to poor corporate governance practices which negatively affect the banks and reduces their financial strength to meet their financial obligations as they fall due. The major causes of credit risks in banks are also related to low credit standards for borrowers and counterpart, poor management and lack of attention to changes in economic or other circumstances that can lead to decline in availability of funds for the banks.

In Nigeria, a good number of efforts and initiatives on promoting corporate best practices in the banking subsector include among others, the Banks and Other Financial Institutions Act (BOFIA) of 1991, 1999 and 2004; the issuance of the Code of Conduct for Bank Directors by the Bankers' Committee in 2001; the issuance of the Code of Corporate Governance for Banks and other Financial Institutions by the Central Bank of Nigeria (CBN) in 2003 with subsequent revisions in 2006 and 2014 and the establishment of risk management departments by the banks (Kolapo et al., 2012; CBN, 2014). However, despite these and other efforts, credit risk

management scholars have argued that the quantum of non-performing loans is as high as 35% (see e.g., Kolapo et al., 2012).

It is pertinent to submit that most studies especially the ones reviewed in this study focused mainly on credit risk management and bank performance using return on assets (ROA) and return on equity (ROE) as measures of bank performance. Most of these studies failed to capture such important measures of bank performance as earnings per share (EPS) and profit after tax (PAT) and credit risk management indicators such as interest income (INTINC), bank size (BS) and equity capital (EQCAP).

The increasing level of non-performing loans, loan loss provision, poor loan processing, undue interference in loan granting process, inadequate or absence of loan collaterals among others calls for banks, depositors, creditors, regulatory agencies and academics to find ways of reducing the incidences and averting potential ones in order to achieve superior performance. This study examines the influence of credit risk management indicators represented by Interest Income (INTINC), Non-Performing Loans (NPL), Loan Loss Provision (LLP) and Loans and Advances (LA) on bank performance as measured by Earnings per Share (EPS) and Profit after Tax (PAT). Bank Size (BS) proxied by total assets and Equity Capital (EQCAP) are included as control variables.

The study contributes to existing knowledge by capturing EPS and PAT as proxies for bank performance while interest income, bank size represented by total assets and equity capital are included as proxies for credit risk management in addition to non-performing loans, loan loss provision and loans and advances. The study is therefore undertaken to fill this gap.

To achieve the above objective, the study is divided into five sections. Section one is this brief introduction. Section two is literature review and theoretical framework. The third section dwells on data and methodology. The last two sections, four and five, are results and discussion, and conclusion and policy recommendations respectively.

II. Literature Review and Theoretical Framework

This section is divided into two – theoretical and empirical reviews. Whilst the former reviews the theory underpinning this study, the latter reviews scholarly studies on the impact of credit risk management on bank performance.

Theoretical Framework

Several theories have emerged in an attempt to highlight the objective of the firm and how it should manage its credits. Chief among the theories of liquidity and credit risk management are: liquid asset theory, anticipated income theory, commercial loan theory, shift-ability theory and liability management theory. The theoretical framework that serves as the basis for the study is the anticipated income theory.

Anticipated Income Theory

Anticipated income theory was propounded by Herbert Victor Prochanow in 1944 at the end of World War II as a result of the fact that the compositions of the earnings assets of commercial banks began to change as resources shifted from the government to the private sector. The spectacular rise in the loan demand of the immediate postwar years provided commercial banks with strong incentives to expand their loan portfolios and hence increase bank earnings. After the postwar, commercial banks began to make loans that were of longer maturity, covered a much wider variety of borrowers and extended to many more purposes than originally envisaged.

As a result, bank's management acquired more experience in meeting withdrawals and found that through prudent asset management, a mixture of very liquid and not-so-liquid assets could achieve the desired degree of overall liquidity. Thus, the loan portfolios of commercial banks in the postwar years included such items as intermediate and long-term loans to customers, home owners and business firms that would not qualify as liquid assets under the traditional theory of bank liquidity and would qualify only in part, if at all under the theory. However, loans of this type qualify under the anticipated income theory.

According to Ibe (2013), anticipated income theory holds that a bank's liquidity can be managed through the proper phasing and structuring of the loan commitments made by a bank to the customers. Here the liquidity can be planned if the scheduled loan repayments by a customer are based on the future cash flows of the borrower. The theory also emphasizes the earning potential and the credit worthiness of a borrower as the ultimate guarantee for ensuring adequate liquidity.

In addition, anticipated income theory of liquidity of commercial banks holds the view that banks liquidity can be estimated and met if scheduled payments are based on the income of the borrowers (Ngwu, 2006). It is worth noting that this theory does not deny the applicability of self-liquidating and suitability theories. It emphasizes relating loan repayment to income rather than relying heavily on collaterals. It also holds that, bank liquidity can be influenced by the maturity pattern of the loans and investment portfolios, short-term

business and customer installment loans which would have more liquidity than those secured by real estate. Thus, appropriate credit risk management policies of a bank will increase interest income and ultimately ensure adequate liquidity.

In conclusion, anticipated income theory serves as the theoretical underpinning of this study because it incorporates credit and liquidity management policies and equally analyzes borrowers' credit worthiness. The theory also provides the banks with the criteria for evaluating the potentials of a borrower to successful repayment of loan on time which ultimately affects the interest income which can be used to influence the liquidity position of a bank. Moreover, the theory holds the view that if credit were adequately managed, interest income will be influenced, which will affect the investment opportunities and ultimately increase the liquidity position of the bank.

Empirical Review

This subsection reviews empirical literature on the impact of credit risk management indicators on bank performance.

While examining the impact of credit risk on performance of 5 money deposit banks in Nigeria, Kolapo, Ayeni and Oke (2012) employed panel methodology and used the traditional theory of profit as a theoretical underpinning for a period of 11 years (2000-2010). Regressing the ratio of non-performing loans to loans and advances, ratio of total loans and advances to total deposits and the ratio of loan loss provision to classified loans as measures of credit risk on return on assets, the findings showed that the effect of credit risk on bank performance is cross-sectional invariant implying that such effect is similar across Nigerian banks. In specific terms, the study found that a 100% increase in non-performing loans reduces ROA by about 6.2 %, a finding that indicates a significant negative relationship. Similarly, loan loss provision also reduces profitability as measured by ROA. The study however reported a positive and significant influence of total loans and advances on bank financial performance, ROA. On the basis of these findings the study recommended the need for banks in Nigeria to enhance their capacity in credit analysis and loan administration and that the regulatory authorities should ensure strict adherence to relevant provisions.

Employing panel data analysis technique, Kaaya and Pastory (2013) examined credit risk and performance of Tanzanian commercial banks for the period, 2005 through 2011. The study revealed negative correlation between credit risk indicators (loan loss provision and non-performing loans) and bank performance as measured by return on assets. The study recommended that banks should improve their credit risk management techniques and also consider increasing their capital reserve to protect them from future losses.

Ogboi and Unuafé (2013) also used panel data analysis to examine the influence of credit risk management indicator represented by capital adequacy on financial performance of Nigerian listed banks over the period, 2004 to 2009. The result showed that sound credit risk management and capital adequacy impacted positively on bank financial performance with the exception of loans and advances which was found to have a negative impact on banks. The authors recommended that Nigerian banks should devise more efficient credit risk management strategies by conducting rigorous credit appraisal before loan disbursement and drawdown.

In an attempt to examine the effect of credit risk management on bank performance, Iwedi and Onuegbu (2014) used panel data regression on a sample of 5 Nigerian DMBs. Using judgmental sampling technique, the findings revealed a positive relationship between the ratio of non-performing loans to loans and advances and ratio of loans and advances to total deposits on bank performance. In line with the findings, the study recommended that management of Nigerian banks should enhance their capacity in credit analysis and loan administration.

In a similar context, Idowu and Awoyemi (2014) examined the impact of credit risk management on performance of DMBs in Nigeria over the period, 2005 to 2011 using panel regression model. The study revealed that credit risk management has a significant impact on profitability of DMBs in Nigeria. The study suggested the need for DMBs to establish sound credit risk management units which will be run by experts in credit risk management.

Similarly, Abiola and Olausi (2014) examined the impact of credit risk management on performance of commercial banks in Nigeria. Extracting data from financial report and accounts of 7 banking firms for 7 years (2005-2011), the study adopted panel regression model for analysis. Contrary to conventional wisdom, the findings reported highly significant positive impact of non-performing loans on bank performance represented by ROE and ROA and an insignificant positive effect of capital adequacy ratio on performance.

In a more recent study, Alshatti (2015) examined the effect of credit risk management on financial performance of 13 Jordanian commercial banks during the period 2005 to 2013. Using two mathematical models to measure the relationship, the empirical findings show positive effect of non-performing loans/gross loans ratio, a negative effect of leverage ratio and an insignificant effect of capital adequacy ratio and credit interest/credit facilities ratio on ROE and ROA. Based on these findings, the study recommends the need for Jordanian banks

to improve their credit risk management to achieve superior performance. Jordanian banks should also establish adequate credit risk management policies by imposing strict credit estimation before granting loans to customers.

Gizaw, Kebede and Selvaraj (2015) used secondary data collected from annual reports of a sample of 8 banks in Ethiopia for a 12 year period (2003-2014). The authors also employed panel data analysis technique to examine the impact of credit risk management indicators on performance. The ratio of non-performing loans to total loans and loan loss provision ratio were respectively found to have significant negative and positive impacts on ROA while capital adequacy is positive but not significant in explaining movements in this performance proxy. On the other hand, the study reported significant negative effects of credit risk management indicators used in this study on ROE. The authors suggested the need for Ethiopian banks to be more efficient in managing their loans so as to enhance returns.

A study by Ebenezer and Omar (2016) revealed a negative and significant influence of non-performing loan ratio; a negative and insignificant impact of debts to total assets ratio; and a positive and insignificant influence of debts to equity ratio on ROE. The authors employed panel data analysis to investigate the effect of credit risk on profitability of 8 commercial banks listed in Nigeria for the period, 2011-2014. In general, the results suggested that banks need to refocus on the effective management of their inherent risk which often affects their profitability and financial viability.

Considering the difficulties Albanian financial institutions face in managing loans, Islami and Ndoka (2016) contributed to empirical literature by examining the effect of credit risk management on profitability of Albanian commercial banks during the period 2005-2015. Using quarterly data from the 16 banks operating in the Albanian banking system, the authors regress non-performing loans ratio and capital adequacy ratio on return on equity and return on assets. The estimation produced a significant negative impact of non-performing loan ratio and capital adequacy ratio on ROA and a significant negative and insignificant positive effect of non-performing loan ratio and capital adequacy ratio on ROE respectively.

The conclusions from the previous empirical studies are ambiguous. These ambiguities may be due to differences in theoretical frameworks and estimation methods. In summary, most studies particularly those that are reviewed in this study could not adequately address the credit risk management problems of banks by making a thorough analysis of the interplay of credit risk management and bank performance using appropriate methodology to assess the effect of various influential factors on the subject matter. Hitherto, most of them did not include control for other factors like size and equity capital of the bank as these are factors known to affect performance and may blur the picture if not controlled.

III. Data and Methodology

This section covers the techniques employed in data collection and analysis. It details methods of data collection and analysis, sample and sampling procedure and model specification.

Data Issues

This study uses secondary data across 14 DMBs quoted on the NSE. Annual data extracted from the annual report and accounts of the sampled DMBs which covered a period of fourteen years (2000–2013) were used for the study. The study utilises Earnings per Share (EPS) and Profit after Tax (PAT) as compiled by the reporting institutions as dependent variables. The study also employed indicators of credit risk management in form of Interest Income (INTINC), Non-Performing Loans (NPL), Loan Loss Provision (LLP) and Loans and Advances (LA) as independent variables. Bank size (represented by total assets) and equity capital are included as control variables. It is a panel research design that seeks to examine empirical relationships among credit risk management indicators and performance of banks listed on the NSE.

Sample Size and Sampling Technique

This study adopts a purposive (non-probability) sampling technique as only banks that were present on the NSE throughout the study period and have the required data were selected. Thus, a sample of 14 out of an average population of 24 DMBs were covered.

Estimation Techniques and Procedures

The inferential panel regression analysis is conducted to examine the influence of credit risk management (interest income, non-performing loans, loan loss provision and loans and advances) on performance of Nigerian listed banks (EPS and PAT). The natural logarithm of all but EPS are used considering the quantum of these variables.

Following both the theoretical and empirical literature earlier reviewed, it is pertinent to submit that the relationship between credit risk management and bank performance can best be mathematically represented as:

$$Y_{i,t} = \alpha + \beta X_{i,t} + \gamma C_{i,t} + \mu_t \quad (1)$$

Where:

Y is the dependent variable (different measures of bank financial performance);

α is a constant, otherwise known as intercept;

X is a vector of explanatory variables which consists of interest income, non-performing loans, loan loss provision and loans and advances;

C is the vector of control variables – bank size and equity capital;

μ is the error term (assumed to have zero mean and independent across time periods);

β is the regression coefficient of the vector of the X explanatory variables;

γ is the coefficient of the vector of C explanatory variables;

Subscripts i and t are defined as bank i in year t , respectively.

From the generalised equation presented as (1), the specific forms of the estimated equations are detailed as follows:

The EPS equation therefore takes the form of:

$$EPS_{i,t} = \alpha_{i,t} + \beta LOGINTINC_{i,t} + \delta LOGNPL_{i,t} + \omega LOGLLP_{i,t} + \gamma LOGLA_{i,t} + \vartheta LOGBS_{i,t} + \lambda LOGEQCAP_{i,t} + \mu_t \quad (2)$$

Where EPS represents earnings per share, $LOGINTINC$ connotes logarithm of interest income, $LOGLLP$ denotes logarithm of loan loss provision, $LOGLA$ is logarithm of loans and advances, $LOGBS$ symbolizes logarithm of bank size, $LOGEQCAP$ signifies logarithm of equity capital, α , β , δ , ω , γ , ϑ and λ are the coefficients of their respective variables, μ and subscripts i and t are as defined under (1).

Similarly, the PAT equation takes the form:

$$LOGPAT_{i,t} = \alpha_{i,t} + \beta LOGINTINC_{i,t} + \delta LOGNPL_{i,t} + \omega LOGLLP_{i,t} + \gamma LOGLA_{i,t} + \vartheta LOGBS_{i,t} + \lambda LOGEQCAP_{i,t} + \mu_t \quad (3)$$

Where $LOGPAT$ indexes profit after tax in logarithm form, $LOGINTINC$, $LOGNPL$, $LOGLLP$, $LOGLA$, $LOGBS$, $LOGEQCAP$, α , β , δ , ω , γ , ϑ and λ are as defined under (2) and μ and subscripts i and t are as defined under (1).

Model Selection Test

To determine a more suitable model among the different approaches used for estimation in panel analysis, scholars have argued that the best method of selecting the most efficient between fixed and random effects models is the Hausman (1978) Chi-square test (See Tian & Zeitun, 2007). The Hausman (1978) specification test enables the determination of the level of correlation between the unobserved unit of the dependent variable and the regressors. If there is a significant correlation among the variables of interest, conclusion can be drawn on the suitability of fixed effects model otherwise the random effects model is considered and recognised as a more appropriate alternative. This is because if the correlation among the variables of interest is significant, random effects model is likely to be inconsistently estimated. Further, the decision criterion is that if the p -value for the test is less than 5.0% (i.e., $p < 0.05$) then the fixed effects specification is to be preferred otherwise the random effects model is the most appropriate.

IV. Results and Interpretation

Table 1 shows that all the three panel data models are not significant in explaining variations in EPS. The R^2 of the three models are also very low signifying that other variables not considered in this study are more influential in explaining variations in EPS. In a nutshell, the findings revealed insignificant influence of Interest Income, Non-Performing Loans, Loan Loss Provision, Loans and Advances, Bank Size and Equity Capital on Earnings per Share implying that the model is not statistically fit.

The result generated from using the Random Effects estimator is used to describe the impact of credit risk management on Profit after Tax of the banks used in this study. The presence of heterogeneity in the model also signals that the data cannot be pooled together. This therefore implies that the Pooled OLS method is inappropriate for the model. The Corr (u_i, Xb) value of -0.2120 produced from the Fixed Effects model also shows that there is a weak correlation among the variables of interest. A weak correlation usually indicates that Random Effects model is appropriate. Furthermore, the Hausman test gives a probability value of 0.103 implying that the probability value is not significant at 5%, therefore random effect is the most appropriate for the study. The R^2 of the RE model gives a value of 0.8958 implying that the independent variables

capture 89.58% variations in PAT of the sampled DMBs. Furthermore, the Prob>Chi² gives a value of 0.0000 indicating that the model is statistically significant at 5%.

Table 1: Estimated Results of the Impact of Credit Management on EPS and PAT

Regressors	EPS			PAT		
	POLS	RE	FE	POLS	RE	FE
<i>Constant</i>	(19.025)	(4.22)	(-20.54)	(-2.7184)	(-2.5913)	(-1.9406)
<i>LOGINTINC</i>	(0.9829)	(1.2496)	(1.4185)	(0.0392)	(0.0290)**	(0.0194)
<i>LOGNPL</i>	(-0.3956)	(-0.4197)	(-0.2799)	(0.0679)	(0.0712)	(0.0695)
<i>LOGLLP</i>	(-1.4282)	(-1.3878)	(-1.1102)	(0.0703)	(-0.0701)*	(0.0071)
<i>LOGLA</i>	(2.5414)	(2.018)	(2.3458)	(0.6061)*	(0.6169)*	(0.6070)*
<i>LOGBS</i>	(0.6829)	(1.6496)	-1.6185	(0.6971)*	(8.5216)*	(3.4215)*
<i>LOGEQCAP</i>	(-0.5956)	(-0.7197)	(-0.6799)	(0.5278)*	(9.2617)*	(6.1257)*
		(Corr(u _i , X))*	(Corr(u _i , Xb))		Corr(u _i , X)	(Corr(u _i , Xb))
<i>Prob>Chi2</i>	0.2846	0.4952	0.2722	0.0000	0.0000	0.0000
<i>R²</i>	0.0561	0.0241	0.0005	0.8965	0.8958	0.8937
<i>Rho</i>		0.2272	0.4086		0.1211	0.2153
<i>Sigma_u</i>		11.704	15.707		0.3970	0.5462
<i>Sigma_e</i>		18.896	18.896		1.0425	1.0425
<i>Prob. (X²)</i>					0.1030	

Note: POLS = Pooled Ordinary Least Squares, FE = Fixed Effects, RE = Random Effects, *, ** & *** = Significance at 1.0, 5.0 & 10.0 per cents respectively, numbers in parentheses are coefficients of their respective variables & X² = Hausman Chi-Square Test

The results show evidence of a significant positive influence of Interest Income, Loans and Advances, Bank Size and Equity Capital on net profit of the sampled banks signifying that increases in these variables are associated with higher after tax profit and vice-versa. There is a tendency for Profit after Tax to increase as Non-Performing Loans increase but such influence is insignificant. Loan Loss Provision is however negatively related to this important bank financial performance, PAT. Consequently, higher LLP is detrimental to profit after tax of Nigerian DMBs. The estimate of *Rho* gives a value of 12.11% signifying that 12.11% of the variance in PAT is due to differences across the banks.

Discussion of Findings

Unlike the EPS Equation, the results of the PAT Equation are very robust. Accordingly, the positive and significant influence of Interest Income, Loans and Advances, Bank Size and Equity Capital on Profit after Tax supports the view that increase in loans and advances, bank size and shareholders’ funds help improve interest income and hence higher after tax profit. Put slightly differently, as Interest Income, Loans and Advances, Bank Size and Equity Capital increase, Profit after Tax follows suit and the reverse also holds. Moreover, these findings support the studies conducted by Kolapo et al. (2012), Abiola and Olausi (2014), Alshatti (2015) and Gizaw et al. (2015). Thus, the findings suggest the need for the banks used in this study to grant more loans and advances in order to enhance interest income. The banks should diversify their capital structure such that there will be high equity-to-debt ratio as this improves the banks’ profit after tax. This should be done by increasing shareholders equity through retained earnings; if this is insufficient, they should do so through new issue.

On the other hand, the findings revealed a significant negative impact of Loan Loss Provision on PAT signifying an inverse relationship. Thus, the more Nigerian DMBs provide for bad loans the worse their net profit. This finding corroborates the findings of Kolapo et al. (2012) and Kaaya and Pastory (2013) who found evidence to support the hypothesis that loan loss provision have negative and significant influence on bank performance.

However, consistent with the empirical findings of other credit risk management scholars, the findings revealed an insignificant impact of Interest Income, Non-Performing Loans, Loan Loss Provision, Loans and Advances, Bank Size and Equity Capital on EPS (see Gizaw et al., 2015; Islami & Ndoka, 2016). The implication of this finding on the sampled banks is that in making decisions on how to enhance performance, relevant variables other than the ones used in this study should be considered in boosting EPS.

V. Conclusion and Policy Recommendations

Conclusion

In line with the theory of anticipated income and earlier studies, this study found interest income, loans and advances, the size of the bank and equity capital to have significant positive influence on bank performance (PAT). In tandem with conventional practice, Loan Loss Provision is significant and negatively related to PAT connoting that higher loan loss provision is harmful to PAT. This is further supported by the insignificant relationship recorded between Non-Performing Loans and PAT in this study. When Equation 2 was estimated, it became pragmatic that none of the explanatory variables is significant in explaining movements in EPS.

The study therefore concludes that credit risk management indicators significantly influence PAT but do not have any considerable consequence on EPS of the banks sampled in this study.

Policy Recommendations

The findings suggest the need for the banks used in this study to grant more loans and advances in order to enhance interest income and PAT. The banks should diversify their capital structure such that there will be high equity-to-debt ratio as this improves the banks' profit after tax. This should be done by increasing shareholders equity through retained earnings; if this proves insufficient, they should do so through new issue.

Since, non-performing loans and loan loss provision do not enhance bank financial performance in Nigeria, boards and management of the banks should develop new strategies of managing loans in order to reduce their exposure to credit risk. Moreover, to enhance bank profitability, the funds provided for bad loans should be invested in viable and profitable ventures.

References

- [1] Kolapo, T. F., Ayeni, R. K. & Oke. M. O. (2012). Credit Risk and Commercial Banks' Performance in Nigeria: A Panel Model Approach. *Australian Journal of Business & Management Research*, 2(2): 31-38.
- [2] Central Bank of Nigeria, CBN (2014). *Code of Corporate Governance for Banks and Discount Houses in Nigeria and Guidelines for Whistle Blowing in the Nigerian Banking Sector*.
- [3] Ibe, S. O. (2013). The Impact of Liquidity Management on the Profitability of Banks in Nigeria. *Journal of Finance and Bank Management*, 1(1): 37-48.
- [4] Ngwu, T. C. (2006). *Bank Management*. Owerri: Bob Publishers.
- [5] Kaaya, I. & Pastory, D. (2013). Credit Risk and Commercial Banks Performance in Tanzania: A Panel Data Analysis. *Research Journal of Finance and Accounting*, 4(16), 55-62.
- [6] Ogboi, C. & Unuafé, O. K. (2013). Impact of Credit Risk Management and Capital Adequacy on the Financial Performance of Commercial Banks in Nigeria. *Journal of Emerging Issues in Economics, Finance & Banking*, 2(3): 703-717.
- [7] Iwedi, M. & Onuegbu, O. (2014). Credit Risk and Performance of Selected Deposits Money Banks in Nigeria: An Empirical Investigation. *European Journal of Humanities & Social Sciences*, 31(1): 1684-1694.
- [8] Idowu, A. & Awoyemi, S. O. (2014). The Impact of Credit Risk Management on the Commercial Banks Performance in Nigeria. *International Journal of Management & Sustainability*, 3(15): 295-306.
- [9] Abiola, I. & Olausi, A. S. (2014). The Impact of Credit Risk Management on the Commercial Banks Performance in Nigeria. *International Journal of Management and Sustainability*, 3(5), 295-306.
- [10] Alshatti, A. S. (2015). The Effect of the Liquidity Management on Profitability in the Jordanian Commercial Banks. *International Journal of Business & Management*, 10(1): 62-72.
- [11] Gizaw, M., Kebede, M. & Selvaraj, S. (2015). The Impact of Credit Risk Management on Profitability Performance of Commercial Banks in Ethiopia. *African Journal of Business Management*, 9(2), 59-66.
- [12] Ebenezer, O. O. & Omar, W. A. W (2016). The Empirical Effectsof Credit Risk on Profitability of Commercial Banks: Evidence from Nigeria. *International Journal of Science and Research*, 5(8), 1645-1650.
- [13] Islami, M. & Ndoka, S. (2016). The Impact of Credit Risk Management in the Profitability of Albanian Commercial Banks During the Period 2005-2015. *European Journal of Sustainable Development*, 5(3), 445-452.

- [14] Hausman, J. A. (1978). Specification Tests in Econometrics. *Econometrica*, 46(6), 1251-1271.
- [15] Tian, G. G. & Zeitun, R. (2007). Capital Structure and Corporate Performance: Evidence from Jordan. *Australasian Accounting Business & Finance Journal*, 1(4), 40-61.