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Credit Risk Management and Profitability of Deposit Money Banks in Ekpoma, Edo State

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Abstract
This study investigated credit risk management and profitability in deposit money banks in Ekpoma, Edo State-Nigeria. Descriptive research design was adopted in the study. The population covered all the bankers in the nine (9) Deposit Money Banks in Ekpoma-Edo State. One hundred and fifty (150) bankers were drawn as sample from six deposit money banks in the area. The two instruments used in the study include: Banks' Credit risk Management Practices (BACRIMAP) for data on credit risk management practices and Profitability Satisfaction Inventory (PSI) to collect data on profitability indices of banks. Data were analysed with percentages (%), frequency distribution table, Mean ($\bar{X}$) and standard deviation (S.D) while the hypotheses were tested with Bi-variate Pearson Product Moment Correlation (PPMC) using Statistical Package for Social Sciences (IBM SPSS®). Results showed that: credit derivatives, credit Securitization, and adoption of a sound internal lending policy are the credit management strategies used in deposit money banks in Edo State. Findings further revealed that credit risk management has positive significant relationship with profitability of deposit money banks ($r= .355$, $p<0.001$). It was recommended that management of deposit money banks in Nigeria should enhance their skills in credit analysis and loan administration.
Keywords: Credit, Credit Risk Management, Profitability, Deposit Money Banks

Introduction

Banks are established for the purpose of provided various financial services to the general public. Their intermediation role (through credit creation) is a catalyst for business activities in an economy. Consequently, banks credit for productive endeavours provides the public and real sector with necessary financial resources needed to accelerate the nation's growth and economic sustainability. Their credit function enhances the ability of investors to exploit desired profitable ventures (Kargi, 2011). Unfortunately, the performance of this intermediation functions; sometimes exposes 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). Chen and Pan (2012) defined it as the degree of value fluctuations in debt instruments and derivatives due to changes in the underlying credit quality of borrowers and counterparties. It is the exposure faced by banks when a borrower (customer) defaults in honouring debt obligations at maturity or on due date. Just like any other risk - health, medical, physical, spiritual, meta-physical risks among other, credit risk has the capacity of eroding bank's profit and/or causing a bank distress; when appropriate management strategies are not in place. Hence, the role of credit risk management in the banking sub-sector cannot be overemphasized.

Credit risk management is the identification, measurement, monitoring and control of risk arising from the possibility of default in loan repayments (Coyle, 2000). Usually, banks extend credit on the understanding that the borrower(s) will repay their loans. However, such extended credit, may be at the risk of default; resulting in unprecedented decrease in banks income due to the need for provisions for such loans. Where commercial banks do not have an indication of what proportion of their borrowers will default, earnings will vary thus exposing the banks to an additional risk of variability of their profits (Onyiriuba, 2009).

Poor credit management and inadequate credit administration are the main causes of the problems faced by the banking industry in Nigeria (Alalade, Binuyo, & Oguntodu, 2014). In a quest to ensure adequate and sound credit management, lending has been characterized by high interest rate. Also, excess profit imposed by bank officials has scared the prospective investors from borrowing. There has been loan limits violation in order to meet up to target expected from the bank. Inappropriate documentation before draw-down has been one of the major causes of bad loans, moral hazards which are against the principles of credit. These situations occur due to the reckless and lawless behaviour of bank officials. Hence, loans and advances poses a number of risks to the deposit money banks and the banking sector in general, if not properly managed; leading to bank distress thereby affecting customers and stakeholders (Alalade, Binuyo & Oguntodu, 2014).

Marshal and Onyekachi (2014) noted that increasing level of non-performing loan rates in banks books, poor loan processing, inadequate or absence of loan collaterals, undue interference in the loan granting process, among other things are linked with ineffective credit risk management that could affect bank performance. This

is quite worrisome in the face of deposit money banks which have lot of economic roles to play in the financial sector because high level of non-performing assets in the bank's portfolio might erode the capital base of the banks and reduce its profitability if not brought under control. When things get worsened, inability to manage credit risk could result in bankruptcy or liquidation.

Studies on credit risk and corporate performance has been investigated in Nigeria and other nations with various mixed results (Kayode, Obamuyi, Owoputi and Adeyefa, 2015; Ugoani, 2015; Alalade, Binuyo and Oguntodu, 2014; Kolapo, Ayeni, and Oke, 2012). For instance, Kayode, Obamuyi, Owoputi and Adeyefa (2015) investigated the impact of credit risk on banks' performance in Nigeria. A panel estimation of six banks from 2000 to 2013 was done using the random effect model framework. This study used an unbalanced panel of six Nigeria banks spanning the period of 14 years from 2000 to 2013. The banks included for this study are: Ecobank Nigeria Plc., First Bank of Nigeria Plc., First City Monument Bank Plc., Skye Bank Plc., Wema Bank Plc. and Zenith Bank Plc. Findings showed that credit risk is negatively and significantly related to bank performance, measured by return on assets (ROA). This suggests that an increased exposure to credit risk reduces bank profitability. Also, total loan was found to have a positive and significant impact on bank performance.

Kolapo, Ayeni, and Oke (2012) carried out an empirical investigation into the quantitative effect of credit risk on the performance of commercial banks in Nigeria over the period of 11 years (2000-2010). Five commercial banking firms were selected on a cross sectional basis for eleven years. The traditional profit theory was employed to formulate profit, measured by Return on Asset (ROA), as a function of the ratio of Non-performing loan to loan & Advances (NPL/LA), ratio of Total loan & Advances to Total deposit (LA/TD) and the ratio of loan loss provision to classified loans (LLP/CL) as measures of credit risk. Panel model analysis was used to estimate the determinants of the profit function. The results showed that the effect of credit risk on bank performance measured by the Return on Assets of banks is cross-sectional invariant. That is the effect is similar across banks in Nigeria, though the degree to which individual banks are affected is not captured by the method of analysis employed in the study. A 100 percent increase in non-performing loan reduces profitability (ROA) by about 6.2 percent, a 100 percent increase in loan loss provision also reduces profitability by about 0.65percent while a 100 percent increase in total loan and advances increase profitability by about 9.6 percent

Ugoani (2015) investigated poor credit risk management and bank failures in Nigeria. The survey research was adopted in the study. Respondents were chosen from the top, middle and lower management levels of the managerial echelon of banks. They were selected using the simple random sampling technique to make sure that only those people who were conversant in the issues of interest were involved. Two methods of data collection were employed. One was a self-administered questionnaire, and the other informal in-depth interview, meant to complement, supplement and validate the data collected through each other. The data gathered were organized, coded and classified for the correction of errors and ensuring accuracy, consistency and completeness. For the systematic analysis of data, tables and the Chi-Square statistic tool were used. Results showed that poor credit risk management influences bank failures.

Ayodele and Alabi (2014) examined the risk management in the Nigerian banking industry. First Bank of Nigeria Plc was used as the case study being the oldest and the biggest bank out of the twenty- three (23) banks currently operating in Nigeria economy. The data used for the study were collected majorly from primary source through the distribution of questionnaires to respondents in the bank. Simple percentages were used to analyze the respondents' responses to each of the question while Chi-square (X^2) and the Analysis of Variance (ANOVA) statistic were used to test the stated hypothesis. The analysis revealed that risk in the likelihood of fraud and forgery, operational risk, market risk and system risk abound in the Nigeria banking operations which needed to be managed appropriately in order to improve performances and profitability of the banks. Based on the research findings, it was discovered that Nigeria banking operations are affected more by credit risk and operational risk than market risk. Fraud and forgeries also play adverse role in banking daily operations. However, the risk management techniques put in place by the banks have really curbed or reduced the various risks confronting Nigeria banks.

Kargi (2011) evaluated the impact of credit risk on the profitability of Nigerian banks. Financial ratios as measures of bank performance and credit risk were collected from the annual reports and accounts of sampled banks from 2004-2008 and analyzed using descriptive, correlation and regression techniques. The findings revealed that credit risk management has a significant impact on the profitability of Nigerian banks. It concluded that banks' profitability is inversely influenced by the levels of loans and advances, non-performing loans and deposits thereby exposing them to great risk of illiquidity and distress.

Alalade, Binuyo and Oguntodu (2014) examined the impact of managing credit risk and profitability of banks in Lagos state. Correlation coefficient was used to decide whether or not credit risk management has an impact on profitability. It was then revealed through the analysis of data from the questionnaire that credit risk management operations play a significant role in the profitability and performance of banks in Lagos State. Epure and Lafuente (2012) examined bank performance in the presence of risk for Costa-Rican banking industry

during 1998-2007. The results 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 while the capital adequacy ratio has a positive impact on the net interest margin.

From the foregoing, studies abound on credit risk management and profitability of banks in Nigeria. However, no study in this wise has been carried out among deposit money banks in Edo State environ. Hence, a knowledge gap on credit risk management and profitability of banks within Edo State exist. To fill this gap, this study examined credit risk management and profitability in deposit money banks in Ekpoma, Edo State-Nigeria. Specifically, the study sought to:

1) identify the credit risk management strategies used in money deposit banks in Nigeria
2) find out whether increment in interest rate increases the chances of loan default
3) determine whether the adoption of a sound internal lending policy affect profitability of money deposit banks in Ekpoma
4) examine whether the establishment of credit bureau affects profitability of money deposit banks in Ekpoma
5) determine the relationship between credit risk management and profitability of money deposit banks in Ekpoma

Hypothesis

The hypothesis formulated and tested in this study is given below:

1. There is no significant relationship between credit risk management and profitability of money deposit banks in Ekpoma

Methods

The descriptive research design was adopted in this study. Population of the study covered all the bankers in all the nine (9) Deposit Money Banks in Ekpoma Edo State namely: First Bank of Nig. (FBN) Plc., Guarantee Trust Bank (GTB) Nig. Plc., Keystone Bank Nig. Plc., Eco Bank Nig. Plc., Zenith Nig. Plc., United Bank of Africa (UBA), Fidelity Nig. Plc., Access Bank Nig. Plc., and Union Bank Nig. (UBN) Plc. Twenty five (25) bankers from six (6) banks selected by balloting were included in the study. Two instruments were used in the study. The first was a structured researcher-developed questionnaire titled: Banks' Credit risk management practices (BACRIMAP) while the other was the Profitability Satisfaction Inventory (PSI).

BACRIMAP was used to collect data on credit risk and credit risk management practices. The instrument was divided into Section A and B. The first section dealt with demographics of respondents while the other dealt on credit risk practices of banks. Some items in section B were rated on dichotomous scale of agree/disagree and the four (4) point likert scale: Strongly Agree-4, Agree -3, Disagree -2 and Strongly Disagree -1. On the other hand, data on profitability of the banks were measured through the Profitability Satisfaction Inventory (PSI). PSI is an inventory that provides a self-reported appraisal of an institution's satisfaction with turnovers, declared dividends, quality of asset, rate of returns on investment and other indicators of corporate success. All the item statements on the profit indicators were rated on the four (4) point likert scale: Strongly Agree-4, Agree -3, Disagree -2 and Strongly Disagree -1.

Face and content validity of the instrument was ensured by experts on bank administration in the Department of Business Administration (Ambrose Alli University, Ekpoma). They ensure that the questions were relevant and unambiguous so that each of the items in the instrument measures what it was intended to measure. The researcher personally administered copies of the questionnaires to bankers after due permission was taken from the branch manager. A letter to respondent was attached to further explain the purpose of the research exercise for better understanding on the research purpose. Data collected will be analysed with percentages (%), frequency distribution table, mean (X) and standard deviation (S.D) while the hypotheses were tested using Bi-variate Pearson Product Moment Correlation (PPMC) was used. The data were analysed and tested at 0.05 level of significance using Statistical Package for Social Sciences (IBM SPSS® version 20).

Results

Demographics of respondents, and result of the analysis is presented below

Table 1: Data on the demographics of respondents are presented below

Demographics	Options	Frequency (N=150)	Percentages (%)
Sex	Male	99	66.0
	Female	51	34.0
Educational Qualification	Ordinary/Higher National Diploma	6	4.0
	Bachelor degree	101	67.3
	Post-graduate degree	39	26.0
	Others	4	2.7
Years of Experience	Below 5years	12	8.0
	5-10years	122	81.3
	Above 10 years	16	10.7

Data in Table 1 showed that majority of the respondents (N=99, 66%) are males and bachelor degree holders (N=101, 67.3%). Majority (N=122, 81.3%) also had 5-10years work experience in the banking industry.

Table 2: Respondents opinion on the kind of credit management strategies used in their bank

S/n	Items	Agreed	Disagreed
a	Credit derivatives	121 (80.7)	29 (19.3)
b	Credit Securitization	131 (87.3)	19 (12.7)
c	Compliance to Basel Accord	47 (31.3)	103 (68.7)
d	Adoption of a sound internal lending policy	134 (89.3)	16 (10.7)
e	Credit Bureau	66 (44.0)	84 (56.0)
f	Others	124 (82.7)	26 (17.3)

Note: *percentages (%) indicated in bracket*

From Table 2, results showed that 121 of the respondents representing (80.7%) agreed that Credit derivatives is the credit management strategies they use in their bank. 131 (87.3%) agreed on credit Securitization, 103 (68.7%) disagreed that they comply with Basel Accord, 134 (89.3%) agreed that they adopt a sound internal lending policy, 84 (56.0%) disagreed that they use credit bureau while 124 (82.7%) agreed that they use other credit risk management strategies. Hence, this clearly indicated that the credit management strategies used in banks includes: credit derivatives, credit securitization, adoption of a sound internal lending policy, adoption of a sound internal lending policy, and other kind of strategies.

Table 3: Respondents' opinion on item statements

Item no.	Items	$SA_{(4)}$	$A_{(3)}$	$D_{(2)}$	$SD_{(1)}$	$\overline{X}$	S.D	Remarks
1	Provision of credit facilities by banks to customer goes with risk	72 (48.0)	29 (19.3)	33 (22.0)	16 (10.7)	3.05*	1.06	Agreed
2	Credit risk in the banking sectors can be managed	72 48.0	41 (27.3)	26 (17.3)	11 (7.3)	3.16*	0.96	Agreed
3	Interest rate increment increases the chances of loan default	11 (7.3)	49 (32.7)	29 (19.3)	61 (40.7)	2.07	1.01	Disagreed
4	Adoption of sound internal lending policy affects profitability of money deposit banks	14 (9.3)	79 (52.7)	24 (16.0)	33 (22.0)	2.49	0.94	Disagreed
5	Establishment of credit bureau affects profitability of money deposit banks	9 (6.0)	98 (65.3)	32 (21.3)	11 (7.3)	2.70*	0.69	Agreed
6	Credit risk management affects profitability of money deposit banks	7 (4.7)	117 (78.0)	6 (4.0)	20 (13.3)	2.74*	0.75	Agreed

* $\overline{X} \geq 2.50$ *Percentages in parenthesis*

Data in Table 3 showed that majority of the respondents [N=72, 48.0%] strongly agreed on item 1 at a mean score of 3.05. Furthermore, they agreed on item 2 ($\overline{X}$ = 3.16), item 5 ($\overline{X}$ = 2.70) and item 6 ($\overline{X}$ = 2.74) but disagreed on item 3 (interest rate increment increases the chances of loan default) and item 4 (Adoption of sound internal lending policy affects profitability of money deposit banks) at a mean score of 2.21. Therefore, majority of the respondents agreed that provision of credit facilities by banks to customer goes with risk, credit risk in the banking sectors can be managed, adoption of sound internal lending policy affects profitability of money deposit banks, establishment of credit bureau affects profitability of money deposit banks, and credit risk management affects profitability of money deposit banks.

Hypothesis: There is no significant relationship between credit risk management and profitability of money deposit banks in Ekpoma metropolis

Table 4: Summary result of Correlation analysis between Credit Risk Management and Profitability of Money Deposit Banks in Ekpoma metropolis

Variables	n	Pearson r-coefficient	p-value	Remarks
Credit risk management Profitability of money deposit banks	150	.355**	0.000	Null hypothesis rejected (p<0.01)

** *Correlation is significant at 0.01 alpha level*

Result showed that the Pearson coefficient (r) of .355 is statistically significant ($p<0.01$). Therefore, the null hypothesis (H_0) which states that there is no significant relationship between credit risk management and profitability of money deposit banks in Ekpoma metropolis is rejected while the alternate (H_1) is accepted. Furthermore, the magnitude and sign of the coefficient ($r = .355$, $p<0.01$) showed that a moderate and significant positive relationship exists between credit risk management and profitability of money deposit banks respectively at 0.01 level of significance.

Conclusion

Poor credit management, inadequate credit administration and failures among deposit money banks in Nigeria are closely linked. Consequently, most deposit money banks adopt some credit management strategies in Edo State namely: credit derivatives, credit securitization, and adoption of a sound internal lending policy. Although, provision of credit facilities by banks to customer goes with a lot of risk; however, such credit risk can be managed. Based on results, it is concluded that credit risk management has direct relationship with profitability of money deposit banks.

Recommendations

The following recommendations were made:

1. Management of deposit money banks in Nigeria should enhance their skills in credit analysis and loan administration.
2. A special credit disbursement unit should be established in banks to maintain sound internal lending policy in disbursing credit facilities to credible customers.
3. Customers and deposit money banks should always endeavour to reach an agreement on loan interest rate and loan pay-back to reduce the incidence of loan default in money deposit banks in Nigeria

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