# The Impact of Risk Management on the Profitability of Banks in Nigeria

# Abu Noruwa Ikponmwosa

Abstract— The study was set to examine the impact of risk management on the profitability of banks in Nigeria. The primary objective was to assess the effect of risk management indicators on the profitability of deposit money banks. In an attempt to achieve the objective, panel data was collected form fourteen banks (14) in Nigeria. The study adopted a panel regression to evaluate the causality between the variables and to test the hypothesis. Findings from this techniques reveals that loan loss provision to total assets has a positive and significant relationship with Nigeria banks profitability; also that loan to deposit ratio has a positive and no significant relationship with profitability of banks in Nigeria. Furthermore, it was stated that capital adequacy has negative and no significant relationship with profitability of banks in Nigeria; that Non-performing loan has a negative and no significant relationship with profitability of banks in Nigeria. Finally, the study found that bank size has insignificant relationship with profitability of banks in Nigeria. Based on these findings, it was recommended that that deposit money banks should upgrade their risk management and control systems.by establishing sound and competent strategies for risk management, increased capital for sustainable liquidity, sound training on risk management staff on new developments in risk management units which are run by best practices in risk management such as the institution of a clear loan policy and the adherence to underwriting authority and limits, such training will enable them to identify, measure, monitor and control all inherent risk in their day to day business transactions.

*Index Terms*— Risk management, profitability and deposit money banks.

#### I. INTRODUCTION

Risk is an unexpected variation in the future occurrence that could affect in growth process of an organization (Khan and Ahmed, 2001). The idea of banking business involves high level of risk and uncertainty which can impact the profit of the business. In recent times, the business of banks have increase in risk exposure as they no longer simply collect deposit and grant loan, they also function in a challenging and highly vulnerable environment which likely increase the pressure on their profit. Today, credit and liquidity risk are the major challenges affecting their performance and in most case resulting to insolvency if not adequately managed in the banking sector (Ongore & Kusa, 2013). However, the management of risk practices of banking mainly focus on liquidity, credit and capital risk on the growth of the business of banking. Thus, according to Soyemi, Ogunleye &Ashogbon (2014), the nature of banking activities around the world have a element of risk inherent, this makes the

Abu, Noruwa Ikponmwosa, Department of Finance, University of Lagos, Lagos Nigeria

sector more risk which cannot be eliminated or diversified but can only be managed in other to reduce its effect on operational efficiency

Risk management is a significant issue especially in the period ofworld economic imbalance that has affected the international financial institutions. Risk management involves assessment of and control of risk and screening of the possibility of unforeseen event that may likely affect the performance of the business. Furthermore, due to the immense role played by financial institutions over the years, the study of risk management is important in the current activities of the banking sector. The role banking sector plays in any economy facilitates the provision of finance for development of business in the economy (Njogo, 2012).

Risk Management is a stepwise process of ensuring that the risk banks are opened is minimized. It ensures the risk exposure of the banking sector portfolio is minimized. The management of risk helps to prevent the variability of return and ensures that the financing activities of banks are safe. Importantly, the risk management optimizes the trade of decision of risk and reward and not to eliminate the total risk exposure of the banking sector (Njogo, 2012).

Deposit money banks survival around the world depends on their ability to effectively and efficiently manage the level of risk exposure in their portfolio. In Nigeria for example, the major cause of the financial distress by banks has been as a result of high non-performing loan, large ratio of loan loss to total loan, credit exposure that turned out bad. In light of this, banks generally ensure proper analysis of their credit risk before undertaking any exposure. Thus, the ability of banks to become competitive in this global world is a function of their ability to favorably manage credit risk. This study was motivated by the recent distress in the financial sector which is accounted for by the increase in the provision of loan loss and the non-performing loans of deposit money bank.

To this end this study seeks examine the impact of risk management on the profitability of banks with special reference to banks in Nigeria by assessing the effect of some selected variables such as loss of loan provision, deposit to loan ratio, capital adequacy, proportion of non-performing loan to total loan on banks profitability in Nigeria.

#### A. Study Objectives

Primarily the aim of this study is to examine the impact of risk management on the profitability of banks. The specific objectives are to;

- 1. analyze the influence of loan loss provision on banks profitability
- 2. examine the non-performing loan on banks



profitability

- 3. assess the impact of deposit to loan ratio on banks profitability
- 4. verify the impact of adequacy of capital on banks profitability
- 5. analyse the effect of bank size on banks profitability

# II. EMPIRICAL REVIEW

This section involves the examination of some recent related literature on the subject matter management risk on profitability in the deposit money bank.

# Local Empirical

In the study of the impact of risk management on banks' financial performance in Nigeria conducted by Olusanmi, Uwuigbe and Uwuigbe (2015). Data was gathered from the time of 2006-2012 across fourteen (14) banks traded in the stock exchange. The variable that was analyzed was return on equity being the dependent variable and non-performing loan proportion, adequacy of capital, advance to loan to deposit ratio and risk divulgence being the independents factors. the study applied the regression strategies to establish the relationship and it was found out that there is a negative and insignificant connection between the management of risk and the performance of banking firms.

In Nigeria several similar studies has been conducted according to Oluwafemi and Obawale (2010), in their examination of the impact of managing risk on the growth performance of the banking sector in Nigeria. The study adopted a panel data from ten (10) banks in Nigeria over the time of 2006 to 2009. It was revealed that the unexplained variables showing the risk indicator which where liquidity, credit and capital risk has a direct positive connection between the indicators of performance indicators of banks (Return on assets and equity) in Nigeria. This findings was based on the regression analysis conducted.

Another investigation in Nigeria on the impact of management of risk on the performance of banks by Soyemi, (2014), the studyutilized the regression techniques to establish causation between the performance indicator and the risk management indicators. The result reveals that credit, liquidity, working, and capital risk practices has a significantly positive effect on the performance of the banks in Nigeria.

Charles, Okaro and Kenneth (2013), examined the impact of credit risk management on capital adequacy and banks financial performance in Nigeria. For this purpose six banks were selected for a period of 2004 to 2009. Panel data model was used to estimate the relationship between variables. Results showed that sound credit risk management and capital adequacy related positively on banks' financial performance with the exception of loans and advances which was found to have a negative impact on banks' profitability in the period under studied

Furthermore, as investigated by Kargi (2011), in Nigeria on the effect of the risk of bank credit on the profitability of banking firmsfor a period of 2004-2008. The examination utilizes correlation and regression method to set up the relationship. The consequence of the investigation uncovers that the risk of credit has a positive and critical relationship with profitability of banks in Nigeria. Likewise, it was uncovered that there is a negative association between the degrees of credits and advances, non-performing advances and stores and gainfulness of banks as such coming about to a significant level of hazard introduction of banking exercises in Nigeria.

# **Foreign Empirical**

Likewise, an examination of the effect of risk management on banking performance banks in Ghana between the time of 2007 to 2014. The examination utilized some performance indicators, for example, return on assets and equity being the explained variable while the explanatory variables are comprised of some firm specifics and the risk of macroeconomic factors which incorporate size of bank, solvency risk, bank liquidity, non-performing credits, changes in price level, and the rate of exchange. The investigation uncovers a positive connection between the management of risk and performance of banking firms (Ofosu-Hene and Amoh, 2016).

Likewise, in the study conducted by Angote, Malenya and Musiega (2015) on the evaluation of the effect of enterprise financial risk management on performance of banks employee in Kenya. The investigation examined three hundred and eight four (384) staff of thirty (30) parts of deposits money banks in Kenya. Nonetheless, the performance of employee was dependent variable and leverage of finance, product diversification and credit arrangement were the independent variables. Information was gathered with an organized survey and the theory was broke down utilizing regression strategy. Discoveries uncovers that there is a direct positive and significant relationship between enterprise risk finance and the performance.

Critically, another study by Arif Hussain, Ihsan and Hussain, (2016) review the effect of management of risk on the performance of Large and small banks from 2005-2014. The study adopted a regression estimated techniques to ascertain the nexus in the relationship between the risk indicators and performance variables. It was revealed that among the large banks, capital adequacy proportion, non-performing loan, financing cost rick and liquidity risk are key determinants of profitability also the non-performing advance and the adequacy of capital are the fundamental determinants of profitability of small banks in Pakistan.

Another examination led in Kenya by Karugu and Ntoiti (2015) examined banks in respect of the effect of credit risk on the performance. The study adopted the various unexplained variables such as management credit risk, credit appraisal, credit monitoring, and debt collection practice was utilized in the investigation on profitability. The examination developed an organized questionnaire which was utilized to gathered information from 55 workers from 11 recorded banks. Information was analyzed utilizing a graphic strategy and hypothesis was tested utilizing regression. It was uncovered that there is significantly positive connection between the indicators of the unexplained variables and the explained variable performance.

#### A. Gap in literature

This review discovered several limitations such as limited



studies from Nigeria banking sector despite the current exposure of the banking sector due to the nature of Nigeria economy. Again, some of the study conducted in Nigeria made used of regression method without considering the homogenous cross section of banks. Thus, there is need to fill the gap identified.

# III. METHODOLOGY

In this study, we investigate the effect of risk management on profitability of Banks in Nigeria. This study uses only banks in Nigeria that have consistently published their audited annual financial report between 2008 and 2016. A sample of fourteen (14) banks was used for this study; to ensure adequate observation for statistical testing, we adopted a panel data analysis to identify the possible firm's specific risk indicators in selected 14 Nigeria quoted banks.

#### A. Model specification and Justification

Several studies has been conducted in this area with different models, however in the study the impact of credit risk management on financial performance of commercial banks in Nepal (Ravi, 2012), the study made use of the regression model below.

$$ROA = \beta 0 + \beta 1DR + \beta 2CLA + \beta 3CAR + eit$$

**Econometrics Model** 

# Where:

 $\beta_{0}, \beta_{1}, \beta_{2}, \beta_{3}, \beta_{4}$  and  $\beta_{5}$  are parameter of the model

#### **Apriori Expectation**

The sign of  $\beta_1$ ,  $\beta_4$  and  $\beta_5$  are positive as literature suggests a positive relationship between profitability of banks and loan to deposit ratio, capital adequacy and firm size. B<sub>2</sub>and  $\beta_3$ being the coefficient of non- performing loan and loan loss provision has a negative relationship with profitability of banks.

Also on the "Basel Core Principles and Bank Risk conducted by (Asli & Enrica, 2010), the Z-score was used to estimates the bank risk, X1j=is the Basel compliance score in a country j, X2ij=is a bank characteristics of bank size and cost efficiency, X3j=country characteristics in terms of GDP growth, et= random characteristics.

 $Zij = \beta 0 + \beta 1X_{1j} + \beta 2X 2ij + \beta 3X 3j + eit$ 

In an attempt to fill the research gap, this study developed a model which shows the relationship between risk management and bank profitability. The functional form of the model specified for this study is given as

ROA = f(LLPA, LTD, CA, NPLA, SIZE)

Where:

ROA = Profitablity, Measured as Profit after tax/Total Asset

LTD= Loan to total deposit

CA = Capital Adequacy

NPL = Non-performing loans to Total Loans

LLP = Loan loss provision/ Total assets

SIZE= Size, Measured as Log of Total Asset

## IV. PRESENTATION AND ANALYSIS OF RESULTS

In this study, we initially conducted correlation matrix. Fixed and random effect panel data regression and the Hausman test were also conducted to select between fixed and random effect models.

#### **Table 1. Correlation Matrix**

 $ROAji = \beta 0 + \beta 1 LLPAji + \beta 2 LTDji + \beta 3 CAji + \beta 4 NPLAji + B5SIZE \mu$ 

Date: 02/12/18 Tin Sample: 2008 2016 Included observatio						
Correlation	ROA	LLPA	LTD	CA	NPLA	SIZE
ROA	1.000000					
LLPA	0.816709	1.000000				
LTD	0.054526	0.032575	1.000000			
CA	0.148725	0.181060	0.094999	1.000000		
NPLA	-0.210689	-0.177135	-0.057379	-0.349661	1.000000	
SIZE	0.184966	0.122284	0.070420	0.325557	-0.190303	1.000000

Source: Author computation, (201)

Correlation Analysis: Ordinary

In Table 2, focus was on the correlation between the bank profitability (ROA) and the risk management indicators. The result shows that loan loss provision ratio (LLP) was positively associated with ROA 0.8167 (81.67%). This implies that banks loan loss provision is likely to generate good return on assets. In the case of loan to deposit ratio of banks it was observed that the bank loan to deposit ratio was positively and weakly associated with ROA 0.05452 (5.452%). This means that banks with low loan to deposit

ratio are likely to be inefficient in total asset return. It was also observed that capital adequacy was positively and weakly associated with ROA 0.148725 (14.87%). This implies that banks with inadequate capital are likely to be inefficient in generating profits. In the case of Non-performing loan (NPL), it was observed this was negatively and weakly correlated with ROA -0.210689 (21.07%). This means that Non-performing loans will contribute negatively to banks profits. The bank size was



positively and weakly correlated to ROA O.184966 (18.5%). This means that the size of the bank have positive contribution to contribute, depending on how it is efficiently utilized. However, the result also reveals the absence of multicollinearity among the variables

# A. Regression Results

However, to examine the cause-effect relationship between the dependent variable (ROA) and the independent variables and to test our formulated hypotheses we used panel

# Table 2: ROA panel regression results

data regression analysis since the data had time series (2008 to 2016) and cross-section properties (14 quoted banks).

# **ROA MODEL**

The Return on assets model (ROA) panel data regression results examines how the Risk Management indicators affect the profitability of banks' and their ability to generate statistically significant positive return on assets (ROA). The results obtained are presented in table 2.

	Expected Sign	ROA (Fixed Effect)	ROA (Random Effect)
С		0.733045	0.782864
0		(0.315995)	(0.418793)
		[0.7527]	[0.6761]
LLPA	-	0.849369	0.869129
		(15.53536)	(16.42591)
		[0.000]	[0.0000)
LTD	+	0.002839	0.081649
		0.016323	0.491276
		0.9870	0.6241
CA	+	-0.019941	-0.020385
		(-0.586838))	(-0.719640)
		0.5586	0.4731
NPLA	_	0.001482	-0.028121
		0.032174	(-0.696738)
		0.9744	0.4873
	+	0.555810	0.568477
SIZE		0.865548	1.126528
		0.3888	0.2622
R-Squared		0.790713	0.700436
Adj-R-Squared		0.735749	0.687954
F-Statistic		14.38597 +0.0	56.1165 (0.00)
Hausman Test		-	5.33 (0.3774)
N(n)		14(9)	14(9)
DW		2.982111	2.655467

Note: (1) Parentheses () are t-statistic while bracket [] are p-values

(2) \* is 5% level of significance respectively

In testing the cause-effect relationship between the dependent and independent variables, the widely used panel data regression models (fixed effect and panel data estimation technique) was estimated. The differences in these models are based on the assumption made about the explanatory variables and cross sectional error term.

In table 2, panel data estimation technique (fixed effect and panel data estimator) was presented.

The results revealed difference in their coefficients magnitude, signs but did not necessarily change the number

of insignificant variables. In selecting from the two panel data models the Hausman test was conducted and the result shows that we should accept Ho (adopt random effect model and reject fixed effect model). This means that we should adopt the random effect panel regression results, since the chi-square probability is greater than 5%. In table 2, it was observed that the random effect results shows that the R-squared and adjusted R-squared values were (0.700) and (0.688). This indicates that all the independent variables jointly explains about 68.8% of the systematic variations in the performance of return on assets (ROA) across the 14



quoted banks sampled in this study and over the nine-years period (2008-2016). This means that any model that includes the various risk management indicators may be appropriate in explaining bank profitability. The F-statistics (56.11650) and its p-value (0.0) show that the ROA panel random regression model generally significant at 1% and 5% levels. The Durbin-watson statistics (DW) of 2.65 also confirms the validity of the model and indicates the model is free from autocorrelation problems.

# B. Hypothesis Testing

Following the above, it should be noted that random effect panel regression models provided the following results; loan loss provision to total assets based on the slope coefficient 0.8691, have a positive impact on banks Return on assets (ROA) a measure of profitability, and was statistically significant at 5%, since the probability value of 0.000 is less than the significant level at 5%. Therefore we can conclude that loan loss provision to total assets has a positive and significant relationship with Nigeria banks profitability

Loan to deposit ratio based on the slope coefficient 0.081649 have a positive but insignificant relationship with profitability, since the probability value of 0.6241 (62.41%) is greater than 5 % level of significance. Therefore we can conclude that loan to deposit ratio has a positive and no significant relationship with profitability of banks in Nigeria.

Capital adequacy based on the slope coefficient -0.020385 have a negative and insignificant relationship with profitability, since the probability value of 0.4731 (47.31%) is greater than 5% level of significance. Therefore we can conclude that capital adequacy has negative and no significant relationship with profitability of banks in Nigeria.

Non-performing loans based on the slope coefficient -0.028121 have a negative and insignificant relationship with profitability, since the probability value of 0.4873 (48.73%) is greater than 5% level of significance. Therefore we can conclude that Non-performing loan has a negative and no significant relationship with profitability of banks in Nigeria

Size of banks based on the slope coefficient 0.568477 have positive but insignificant relationship with profitability, since the probability value of 0.2622 (26.22%) is greater than 5% level of significance. Therefore we can conclude that bank size has insignificant relationship with profitability of banks in Nigeria

#### C. Discussion of Findings

The above result was substantiated by the result of Fernando and Ekanayake (2015) who examined whether commercial banks in Sri Lankan use LLP to smooth earnings over the period 2003 to 2012. They find a positive relationship between the loan losses provision and profits before tax, and that public banks do not use LLP to manage their income. A similar study was conducted with a mixed result by Tahir, Shehzadi, Ali, and Rizwanullah (2014), in the study of the impact of loan loss provision on Bank Profitability in Pakistan on return on assets (ROA) and return on equity (ROE) as a proxy of profitability. It was reveal that the loss provision has a negative impact on the profitability indicators. However, this current study conducted in Nigeria was consistent with Fernando and Ekanayake (2015) that there is a positive relationship between loan losses provision and profitability.

The study also revealed that loan to deposit ratio has positive and insignificant relationship with profitability ofbanks in Nigeria. Similarly, the study conducted by Pahlevie (2009), found a positive relationship between the loan deposit ratio on profitability. This therefore implies that the level of banks in Nigeria profitability will increase if the lend more form deposit provided the lending follows the stated guidelines to avoid bad loan

It was also revealed from the empirical investigation that capital adequacy has negative and no significant relationship with profitability ofbanks in Nigeria. Similar studies were conducted by Dewiyani Research (2014); Pratiwi and Hindasah (2014) and found that the Capital Adequacy Ratio (CAR) had a negative and not significant effect on lending which were consistent with the current findings of the study.

Furthermore, the study reveals that that non-performing loan has a negative and no significant relationship with profitability ofbanks in Nigeria. In the study of Rahman (2009) and Pahlevie (2009) also Dewiyani (2014); Hasyim (2014) also show that NPLs have a negative and significant effect on lending. The implication of this current finding is that the level of profitability though affected by non-performing loans but the impact is not significant.

#### V. CONCLUSION AND RECOMMENDATION

The general objective of the study was to establish the impact of risk management on the banks profitability. Panel data were collected from banks in Nigeria form 2008 to 2016. Specifically, the study examined the relationship between profitability and the loan loss provision, loan to deposit ratio, capital adequacy, non-performing loan, and size of banks in Nigeria. The findings indicate that loan loss provision has a positive and significant relationship with Nigeria banks' profitability, it was also reveal that loan to deposit ratio, banksize has a positive and no significant relationship with profitability and also the study found that there capital adequacy was negative and insignificant on profitability. Finally, it was found that non-performing loans has a negative and no significant relationship with profitability. Based on the finding, the study concluded that Nigeria banks are yet to ensure appropriate implementation of risk management policy this was reflected from the negative and insignificant results obtained from the indicator. Thus, poor management of risk in today's banking sector in Nigeria has exposed them to a high variability of return. The study also revealed that commercial banks with higher capital adequacy ratio can better advance more loans and absorb credit losses whenever they crop up and therefore record better profitability.

We can therefore recommend thatdeposit money banks should upgrade their risk management and control systems.by establishing sound and competent strategies for risk management, increased capital for sustainable liquidity, sound training on risk management staff on new developments in risk management units which are run by best practices in risk management such as the institution of a clear loan policy and the adherence to underwriting authority and limits, such training will enable them to identify, measure, monitor and control all inherent risk in their day to day business transactions. In addition.staff of depositmoney banks credit units such as project and advance managers,



credit/loan officers and field officers perform a range of functions from project appraisals through credit disbursement, loan monitoring to loans collection. Thus issues pertaining to their selection, training, placement, job evaluation, discipline, and remuneration need to be tackled effectively. The regulatory authority should pay more attention to banks' compliance to relevant provisions of the Bank and other Financial Institutions Act 1991 and prudential and monetary guidelines.

#### REFERENCES

- Angote, A., W. V. Malenya, A. A. & Musiega, D. (2015). Effect of enterprise financial risk management on performance in Kenya commercial bank, Western Region. *International Journal of Business* and Management Invention, 4(6), 19-40. Retrieved from <u>http://www.ijbmi.org/papers/Vol(4)6/C046019040.pdf</u>.
- [2] Charles, Okaro Kenneth. (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 and Banking, An Online International Monthly Journal, Arab Infortech FZLLC.
- [3] Dewiyani, P. (2014). Effects of Net Interest Margin, Non Performing Loans, Capital Adequacy Ratio, Third Party Funds and Amount of Fund Placement on SBI Against Credit Distribution (Case Study at Commercial Banks Registered on IDX Period 2008-2012). Thesis. Diponegoro University.
- [4] Fernando, W. D., & Ekanayake, E. M. (2015). Do Commercial Banks Use Loan Loss Provisions to Smooth TheirIncome? Empirical Evidence from Sri Lankan Commercial Banks. *Journal of Finance*, 3(1), 167-179.
- [5] Hasyim, Diana. (2014). Factors Affecting Credit Distribution at Commercial Banks in the 2008-2012 Period. *Journal of Educational Social Sciences*, 6 (2)
- [6] Kargi, A.S (2011). Credit risk and performance of Nigerian Banks, Ahmadu Bello University, Zaria.
- [7] Karugu, B. M. & Ntoiti, J. (2015). Effect of credit risk management practices on profitability of listed commercial banks in Nairobi Securities Exchange in Kenya, *IOSR Journal of Economics and Finance*, 6(5), 92-96
- [8] Khan, T. & Ahmed, H. (2001). Risk management: An Analysis of Issues in Islamic Financial Industry. IRTI/IDB Occasional Paper, No. 5.
- [9] Njogo, B.(2012). Risk management in the Nigerian banking industry. Kuwait Chapter of Arabian Journal of Business and Management Review, 1, 25-3.
- [10] Ofosu-Hene, D. & Amoh, P. (2016). Risk management and performance of listed banks in Ghana. *European Journal of Business Science and Technology*, 2(2), 107 – 121. Retrieved from <u>http://citifmonline.com/wp-content/uploads/2017/08/Risky-banks-on-GSE-study.pdf</u>.
- [11] Olusanmi, O., Uwuigbe, U. & Uwuigbe, O. R.(2015). The effect of risk management on bank's financial performance in Nigeria. *Journal of Accounting and Auditing: Research & Practice*, 23,112-124. Retrived from

http://ibimapublishing.com/articles/JAARP/2015/239854/239854.pdf.

- [12] Oluwafemi, A. S. & Obawale, S. (2010). Risk management and financial performance of banks in Nigeria. *International Journal of Economics and Financial Issues* 14(6), 52-5
- [13] Ongore V.O &Kusa G.B (2013).Determinants of Financial Performance of Commercial Banks in Kenya. International Journal of Economics and Financial, 3, 237-252
- [14] Pahlevie, Nu'man Hamzah. (2009). Analysis of the Effect of CAR, NIM, LDR, NPL, BOPO and EAQ on Profit Changes (Empirical Study of Commercial Banks in Indonesia for the 2004-2007 Financial Statement Period). Master of Management Thesis. Semarang: Diponegoro University.
- [15] Pahlevie, Nu'man Hamzah. (2009). Analysis of the Effect of CAR, NIM, LDR, NPL, BOPO and EAQ on Profit Changes (Empirical Study of Commercial Banks in Indonesia for the 2004-2007 Financial Statement Period). Master of Management Thesis. Semarang: Diponegoro University.
- [16] Pratiwi, Susan., & Hindasah, Lela. (2014). The Influence of Third Party Funds, Capital Adequacy Ratio, Return On Assets, Net Interest Margins and Non Performing Loans on Loans of Commercial Banks in Indonesia. *Management and Business Journal*, 5 (2)



- [17] Rahman, Teddy. (2009). Analysis of the Effect of CAR, NIM, BOPO, LDR, NPL Against Changes in Profit (Case Study of Non-Foreign Exchange Banks in Indonesia Period 2003-2007). Thesis. Diponegoro University.
- [18] Soyemi, K. A. (2014). Risk management practices and financial performance : evidence from the Nigerian deposit money banks ( DMBs). *The Business & Management Review*, 4(4), 345–354.
- [19] Soyemi, K. A., Ogunleye, J. O., & Ashogbon, F. O. (2014). Risk management practices and financial performance: evidence from the Nigerian deposit money banks (DMBs). *The Business & Management Review*, 4(4), 345
- [20] Tahir SH, Shehzadi I, Ali I, Rizwanullah M (2015) Impact of bank lending on economics growth in Pakistan: an empirical study of lending to private sector. Am J Ind Bus Manag 5:565–76