Delinquent Loans and Financial Performance of Selected Commercial Banks in Nigeria

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ABSTRACT
The loan portfolios of the lending institutions are major assets that generate a significant amount of interest income. The loan portfolios play a critical role in determining the financial performance of these institutions and it can therefore be said that the healthier the loan portfolio of the banks, the better their financial performance. The rising volume of non-performing loans was identified as one of the threats to financial system stability in Nigeria and thus the non-performing loan ratio has become a very important index for measuring the performance of bank. This study is an attempt to empirically examine the relationship between non-performing loan and financial performance of Banks in Nigeria. Two proxies was used to represent the independent variables. These variables are non-performing loan ratio and Loan Loss Provision ratio. Fifteen (15) banks were sampled from the population of twenty-one (21) banks in the Nigerian banking industry as at December, 2014. Secondary data were collected from the financial statements of the banks for a period of five years, from 2009 - 2013. The regression analysis result revealed that non-performing loan has a negative effect on financial performance of Nigerian Banks. The findings revealed that there is significant relationship between the variables used in this study. The overall result is that non-performing loan has negative significant relationship with financial performance of Nigerian Banks. The model is fitted as there is absence of serial correlation and multicollinearity based on the Durbin Watson result of approximately 2, tolerance values of less than 1 for the coefficients of the model. Changes in financial performance are explained by changes in the independent variables. It was therefore, observed that there is a significant negative relationship between non-performing loans and financial performance, which implies that the higher the non-performing loan in the books of the bank the lower the Profit before Tax and Earnings per Shares of these banks. In line with these findings, the study recommends that management of Nigerian banks should adopt a strong credit risk and loan granting service process management to keep the level of non- performing loan as low as possible in order to record a good financial performance as there is significant negative relationship between non-performing loans and financial performance.

Keywords: *Loan Portfolios, Non-Performing Loan, Profit before Tax, Earning per Share, Loan Loss Provision, Financial Performance.*

INTRODUCTION

Lending has become a vital function in banking because of its direct effect on economic growth and development. This is being pursued in most countries particularly the developing ones where banks and lending activities have been usefully integrated into government policy formulation in the national economic development process. Thus, the lending activity of banks as it affects economic growth and development has continued to gain prominence in the light of modern economy.

As agents of development, banks provide loans and advances including a variety of contingent facilities. The bulk of the funds deposited with banks constitute the basis for loans and advances to personal and business customers to facilitate their individual economic activities. Like any other business entity, banks are in business to make profit and as such they charge interest on credit extended and pay interest on funds deposited with them. The difference between the interest received and that paid is the gross margin which constitutes the profit of the banks (Damankah, Anku-Tsede & Amankwaa, 2015).

Essentially, commercial banks are deposit taking entities. They are financial intermediaries through which funds are transferred from the surplus sectors to the deficit sectors and thereby started assuming credit risk. Credit, thus, became the primary business of banking, and the primary basis on which a bank's quality and performance are judged (Aremu, Suberu & Oke, 2010). Empirical studies on banking crises all over the world have shown that poor assets quality (predominantly loan) has been the most frequent factor in bank failures. Stuart (2005) emphasized that the spate of non-performing loans, is as high as 35% in the United State. According to Umoh (1994), the rising trend of non-performing loans' ratio in banks' books is due to poor loan processing, undue interference in the loan granting process, inadequacy or absence of loan security, among other things, which are all linked with poor and ineffective credit administration.

Lending is said to be the most profitable activity of banks. However, if lending decisions are not handled with care, it could turn out to be the most loss-making activity of a bank. The safety of any loan and advance is therefore of paramount importance to bank. Banks therefore ensure that there is a reasonable certainty that the loans granted are likely to be repaid by the borrower. In order to keep these risk factors under control, the bank lending function is closely regulated to ensure prudent policies and practices (Anolue, 2010).

Banks also control risk in the lending function by setting up written policies and procedures for processing each loan request. The bulk of loans and advances made by banks follow some basic principles, which help to minimize the adverse effects of lending especially the incidence of bad load. Banks lay great emphasis on the character, integrity and reliability of borrowers. There must be a reasonable certainty that the amount granted can be repaid from the operations of the firm. If the loan is granted to a personal borrower, the source of repayment must not be doubtful. The borrower must be able to provide acceptable security which will serve as something to fall back on if the expected source of repayment should fail (Anolue, 2010).

All these safeguards are built into the lending activities to help reduce credit risk. Credit risk is the risk that the principal or the interest, or both or part thereof of the credit extended to a customer will not be repaid by him in accordance with the loan agreement (Anyanwaokoro, 1996). When this happens, the bank will end up classifying the credit as bad debt, and in due course it will be written off. The long-run effect of this on the bank can be very detrimental with its attendant effect on the entire economy. This is what has happened to many Nigerian banks that were classified in the past as distressed by the Central

Bank of Nigeria. It is therefore expected that a high degree of efficiency and effectiveness be maintained in the operations of banks especially in the area of loan-making considering its implication on the profitability, liquidity and safety objective of banks and the well-being of the economy at large.

The performance of these banks is affected by the amount of loans and advances they grant, the quality of the loans and the provision made for the loans losses. Banks need to ensure they maintain adequate amount of liquidity, so as to be able to meet their customers' deposit withdrawal. Nevertheless, excess liquidity should not be kept idle in the banks' vault, so the banks need to deploy these resources into profitable venture mostly granting them out in form of loans and advances which form the bulk of their profit. The bail out of eight banks in Nigeria by the Sanusi led Central Bank of Nigeria in 2009 can be traced to a large extent to be as a result of substantial volume of unsecured and non-performing loans in the books of these banks. The rising volume of non-performing loans and unsecured loans was identified by Sanusi as one of the threats to financial system stability in Nigeria. He further argued that the inability to manage non-performing loans well, has caused most banks distress in the world (Sanusi, 2012).

The Problem of the Study

Banking problems majorly are caused by low credit standards for borrowers and counterparties, poor portfolio management, and lack of attention to changes in economic or other circumstances that can lead to deterioration in the credit standing of bank's counter parties. The major issue addressed by this study was, 'how has a delinquent loan in Nigeria banking industry influence financial performance of selected commercial banks. The key objective of the study was to examine the impact of delinquent loans of commercial banks in Nigeria on their financial performance.

REVIEW OF RELATED LITERATURE

The lending of money is in fact a major essential function of a bank. A bank that does not lend, in the opinion of Rose (1999), is not a bank in its true sense of the world. The principal reason banks are licensed by government is to make loans to their customers. Banks are expected to support their local communities with a sufficient supply of credit for all legitimate business and customer financial needs. Indeed making loans is the principal economic function of banks – to fund consumption and investment spending by businesses, individuals and units of government. According to Oboh (2005), lending as the provision of funds to end users in full or partial support of business activities or personal projects with the hope of value-added repayment. Uzoka (2006) sees bank lending as the extension of credit to an individual, group of individuals or organizations against stipulated terms and conditions.

Anyanwaokoro (1996) in his own contribution defines bank lending as all forms of credit extension by banks. According to him, bank have moral obligation to extend credit to borrowers in the area served provided they are able to present request that are economically and logically sound. To Clark (2007), lending is temporary grant of money, goods, equipment, people and so on, made on the understanding that the things lent, or its equivalent will be returned, often with additional (interest) payment.

Undoubtedly, banks in Nigeria have come of age and are gearing to make the center stage in the global scene as Nigeria moves to become one of the twenty largest economies come 2020. This dream remains one too tall to achieve in the face of problems facing banking sector. Emphatically, the spate of non-performing loans, which according to Umeaba (2009) is as high as 40%, is one of such problems. He traced rising non-performing loans' ratio in banks' books to poor loan processing, undue interference in the loan granting process, inadequate or absence of loan collaterals, among other things. These are all outcomes of poor,

ineffective credit administration. He warns that only effective and efficient credit administration will finally bring the banking sector and Nigeria's economy at large, out of the menace. Until credit administration is set straight, the vision 20-20-20 agenda remains a laughable one.

A good lending policy requires that a borrower should supply some form of security which will act as insurance to the bank against non-payment. Unfortunately, in Nigeria, a good number of bank loans are administered without collaterals. Peterside (2009) criticizes banks for giving out credit facilities without collaterals. He cited cases of banks that gave as much as N10 billion loans without collateral, while another bank that gave out loan based on a bill of lading that was however discovered to have been cleared and the goods sold. He notes that the recovery of such loans will be difficult. Banks have taken so many risks with little or no securities to back them up so much that recovery of these debts becomes a problem.

Khan (2009) observes that banks that have problems of non-performing loan have a disproportionately heavy concentration of loan exposure to high risk areas such as the stock market and oil and gas sectors relative to other sectors of the economy. Sanusi Lamido Sanusi, the then Central Bank of Nigeria Governor notes that some Nigeria banks, mainly due to huge concentration in the exposure to certain sectors, but due to a general weakness in risk management and corporate governance, have continue to display sign of failures (Business Day Newspaper, 2009). Khan says it is a lax credit administration to concentrate one's trading activities just in two areas of the economy. Commentators have attributed the current credit crisis to banks failure to conduct due diligence on the two sectors before offering them jumbo loans that were not secured. He therefore attributed the excessive high level of non-performing loans to poor credit administration processes and the absence of non-adherence to credit risk management process.

Some research findings and publications indicate that non-performing loans are caused by poor management (Arko**,** 2012). They argue that managers in most banks with the problem of non-performing loans do not practice adequate loan underwriting, monitoring and control. Credit culture is another factor which has been identified by some research findings as a cause of delinquent loans. Sometimes borrowers decide to apply for loan without thinking enough about the future and what else they need to buy with their income. When this occurs, a credit culture can develop where borrowers take out large loans not because it is financially wise to do so but because they see others do it (Arko**,** 2012).

The incidence of non-performing Loans can be reduced by ensuring that loans are granted to only applicants who demonstrate the ability to repay the loan at the agreed date. Credit analysis of the prospective borrower should be carried out to determine their risk profile and to reach a sound credit decision. Again, loan repayment should be constantly monitored and whenever there is a default in repayment a quick action should be taken. The banks should also avoid granting loans to the risky customers or for speculative ventures, monitor loan repayments, and renegotiate loans whenever borrowers get into difficulties (John Kay Associates Ltd, 2005).

Golden and Walker (1993) as cited in Arko, (2012) also identify the 5Cs of bad credit, which represent factors to guard against to help prevent the incidence of NPLs. They are:

(a. Complacency: refers to the tendency to assume that because things were good in the past they will be good in the future. Common examples are over reliance on guarantors, reported net worth or past loan repayments success because things have always worked out well in the past.

(b. Carelessness: involves poor underwriting typically evidenced by inadequate loan documentation, lack of current financial information or other pertinent information in the credit files and a lack of protective covenants in the loan agreement. Each of these makes it

difficult to monitor a borrower's progress and identify problems before they become unmanageable.

(c. Communication: ineffectiveness refers to when a Lender's credit objectives and policies are not clearly communicated. This is when loan problems can arise. Management must effectively communicate and enforce loan policies and loan officers should make management aware of specific problems with existing loans as soon as they appear.

(d. Contingencies: refer to lenders' tendency to play down or ignore circumstances in which a loan might result in default. The focus is on trying to make a deal work rather than identifying downside risk.

(e. Competition: involves following competitor's behavior rather than maintaining the lender's own credit standards. Doing something because another lender is doing it does not mean it is a prudent business practice.

Various theories related to loan, non-performing loans and risk associated are as follows:

Loan Pricing Theory: Banks cannot always set high interest rates, e.g. trying to earn maximum interest income. Banks should consider the problems of adverse selection and moral hazard since it is very difficult to forecast the borrower type at the start of the banking relationship (Umar, 2015). If banks set interest rates too high, they may induce adverse selection problems because high-risk borrowers are willing to accept these high rates. Once these borrowers receive the loans, they may develop moral hazard behavior since they are likely to take on highly risky projects or investments (Chodecal, 2004). From the reasoning of Stiglitz and Weiss, it is usual that in some cases we may not find that the interest rate set by banks is commensurate with the risk of the borrowers.

Firm Characteristics Theory: These theories predict that the number of borrowing relationships will be decreasing for small, high-quality, informational opaque and constraint firms, all other things been equal (Godlewski & Ziane, 2008).

Theory of Multiple-Lending: It is found in literatures that banks should be less inclined to share lending (loan syndication) in the presence of well-developed equity markets and after a process consolidation. Both outside equity and mergers and acquisitions increase banks' lending capacities, thus reducing their need of greater diversification and monitoring through share lending (Karceski, Ongena & Smith, 2004; Degryse, Masschelein & Mitchell, 2004). This theory has a great implication for banks in Nigeria in the light of the 2005 consolidation exercise in the industry.

Credit Market Theory: A model of the neoclassical credit market postulates that the terms of credits clear the market. If collateral and other restrictions (covenants) remain constant, the interest rate is the only price mechanism. The signaling argument states that good companies should provide more collateral so that they can signal to the banks that they are less risky type borrowers and then they are charged lower interest rates. Meanwhile, the reverse signaling argument states that banks only require collateral and or covenants for relatively risky firms that also pay higher interest rates (Chodecal, 2004; Ewert & Schenk, 1998). With an increasing demand for credit and a given customer supply, the interest rate rises, and vice versa. It is thus believed that the higher the failure of the borrower to pay, the higher the interest premium (Garr & Kyereboah-Coleman, 2013).

Oke, Ayeni and Kolapo (2012) carried out a study on credit risk and commercial banks' performance in Nigeria: a panel model approach where it found that increase in non-

performing loan, increase in loan loss provision and increase in total loan and advances have a significant impact on the profitability of Nigerian banks.

In a study carried out by Chikoko, Tendekayi and Takaiona (2012), on the insights of non-performing loans: evidence from Zimbabwean Commercial Banks in a Dollarized Environment, it was found that 73% of the banks had problems of non-performing loans whilst the 23% which adopted the values driven credit culture did not have a problem of nonperforming assets leading to these banks having good loan books.

Vatansever and Hepşen (2013), in a study to determine the impacts on non-performing loan ratio in Turkey using ordinary least square method of data analysis found that debt ratio, loan to asset ratio, confidence index-real sector, consumer price index, EURO/ Turkish lira rate, USD/ Turkish lira rate, money supply change, interest rate, GDP growth, the Euro Zone's GDP growth and volatility of the Standard & Poor's 500 stock market index does not have significant effect to explain NPL ratio on multivariate perspective. On the other hand, Industrial Production Index (IPI), Istanbul Stock Exchange 100 Index (ISE), Inefficiency ratio of all banks (INEF) negatively, Unemployment Rate (UR), Return on Equity (ROE), Capital Adequacy Ratio (CAR) positively affect NPL ratio.

Anolue (2010) in his study on the causative factors for non-performing loans of deposit money banks in Nigeria using descriptive statistics, he found that there is a positive relationship between the size of loans advanced by banks and non-performing loans. In other words, the size of nonperforming loans of banks increased as the size of the loan portfolio increased. At the end of 2007 the ratio of non-performing loans to total loans and advances was 22.4%. This implies that almost 23% of total loans granted were not performing. This is not encouraging by all standards.

Ozurumba (2016) described a situation where non-performing loans is as high as 20% as dreadful. Odufuye (2007) was even more conservative in his assessment of what should be the optimal level of non-performing loans. According to him non-performing loans must surely arise in the business of banking no matter how prudent a banker is, but this should hover between 1% and 12%. A situation where the ratio of non-performing loans to total loans is more than 12% is not acceptable. The study also revealed an upward trend of non-performing loans. It grows at an annual rate of 23.7%. It was deduced from the analysis that poor credit administration of banks contributed to a large extent to the incidence of non-performing loans.

Also, Agu and Okoli (2013), in a study - credit management and bad debt in Nigeria commercial banks –implication for development using variance analysis found that the causes of bad and doubtful debts in Nigeria Commercial Banks are the following;

a. Inadequate close monitoring of the borrowers to ensure proper utilization of fund (i.e. on site visit to factory or project site).
b. Incessant increase in interest rate (lending rate).
c. Lack of adequate knowledge of the loan seeker.
d. Failure by Commercial Banks to give their loan immediate follow-up to avoid diversion.
e. Poor credit policy administration.

The study also reveals inefficient credit management, which results in high bad debts portfolio, which is the principal cause that drives banks to their untimely grave.

Louzis, Vouldis and Metaxas (2010) conduct study to examine the determinants of NPLs in the Greek financial sector using fixed effect model from 2003-2009 periods. The variables included were ROA, ROE, solvency ratio, loan to deposit ratio, inefficiency, credit growth, lending rate and size, GDP growth rate, unemployment rate and lending rates. The finding reveals that loan to deposit ratio, solvency ratio and credit growth has no significant effect on NPLs. However, ROA and ROE has negative significant effect whereas inflation

and lending rate has positive significant effect on NPLs. It justifies that performance and inefficiency measures may serve as proxies of management quality.

The study by Saba, Kouser and Azeem (2012) on the title "Determinants of Nonperforming Loan on US Banking Sector" also investigate the bank specific and macroeconomic variables of nonperforming loans from 1985 to 2010 period using OLS regression model. They considered total loans, lending rate and Real GDP per capital as independent variables. The finding reveals as real total loans have positive significant effect whereas interest rate and GDP per capital has negative significant association with NPLs.

Rajiv and Sarat (2003) analyze the determinants of NPLs of commercial banks' in Indian in 2002. The objective of the study was to evaluate how NPLs influenced by financial and economic factors and macroeconomic shocks. In the study, they utilized panel regression model and found that lending rate also have positive impact on the NPLs justifying that the expectation of higher interest rate induced the changes in cost conditions to fuel and further increase in NPLs. Besides, loan to deposit ratio had negative significant effect on NPLs justifying that relatively more customer friendly bank is most likely face lower defaults as the borrower will have the expectation of turning to bank for the financial requirements (Fawad, & Taqadus, 2013).

Daniel and Wandera (2013) conducted the study on the effects of credit information sharing on the nonperforming loan of commercial banks in Kenya. The objectives of the study was to assess the impact of credit information sharing on nonperforming loans, to identify the factors that account for bad loans and to determine the economic sector that records higher bad loans and the efforts taken to reduce the risk in this sector The study found as lending rates has positive significant effect on NPLs. It justifies as these causes make many borrowers not to pay their loans hence leading to many bad loans.

Many of the empirical studies reviewed largely focus on the effect of non-performing loans on Gross Domestic Product, and some on the relationship between non-performing loans and interest rate, but none of these studies covered its effect on the financial performance of banks., Most of the work reviewed are done in other countries (like USA, Pakistan, India, and Turkey) and a few in developing countries (like Kenya, Ghana). From these studies, conclusion can be drawn that few studies had been done in Nigeria in relation to analyzing the effect of non-performing loans on the financial performance of banks.

Most of the work done in Nigeria and elsewhere was focused on effects of effect of non-performing loans on Gross Domestic Product, and some on the relationship between non-performing loans and interest rate. These include: Rajiv and Sarat (2003), "Non-Performing Loans and Terms of Credit of Public Sector Banks in India"; Badar and Yasmin (2013),"Impact of Macroeconomic Forces on Nonperforming Loans: an Empirical Study of Commercial Banks in Pakistan"; Ali and Iva (2013), "Impact of Bank Specific Variables on the Nonperforming loans ratio in Albanian Banking System"; Saba, Kouser and Azeem (2012), "Determinants of Nonperforming Loan on US Banking Sector "; Fawad and Taqadus (2013), "Macroeconomic Determinants of Nonperforming Loan of Banking Sectors in Pakistan".

Conclusively, the study intended contribute to existing literature in various ways. First, its focus is solely on non-performing loans of Nigeria commercial bank and how it impacts on their financial performance and it will helps to give better informed judgement since companies in the same industry are seen to have similar characteristics. Finally, it provides empirical evidence from Nigeria, an emerging economy, on the effect of non-performing loans on financial performance of the banks in Nigeria.

STUDY METHODOLOGY

The panel data research design was adopted as a proper research design for the study. This research work made use of secondary data. The data shall be obtained from the CBN statistical bulletin and audited Financial Statement of selected banks in Nigeria. The entire Commercial Bank in Nigeria was used as the population of the study. Based on this research, the researcher proposed to use judgemental sampling technique. Judgmental sampling is a non-probability sampling technique where the researcher selects units to be sampled based on their knowledge and professional judgment. The advantages of this type of sampling, is that it's based on the researcher discretion and professional judgement.

Based on the population of the study, the researcher proposes to use sample size of 15 banks out of the entire population of study. The determination of the sample size in this study is based on certain criteria like the size, structural base, the current performance and the availability of information required. A panel data of a 4 year financial data of banks (2010 – 2013) under the study, to examine the relationship between Earnings per Share (EPS) which is performance indicator and non-performing loan ratio (NPL/TL) and loan provision to total loan (LP/CL) and the relationship between Profit before Tax and non-performing loan ratio (NPL/TL) and loan provision to total loan (LP/CL).

The data collected were analyzed with the use of ordinary least square method. The model employed was used for empirical analysis and exploration or investigation of the relationship between non-performing loans and banks' financial performance. The model was then evaluated by the numeric values of its parametric to generate the econometric model. The model was interpreted and subjected to further statistical analysis to ascertain significance, validity and explanatory power of the independent variable.

The variables that went into the model are the dependent variable and the independent variables. Banks' performance measured with (PBT and EPS) will be used to represent the dependent variable while non-performing loan ratio and loan loss provision was used to represent the independent variables. The model is specified below:

$PBT = \beta_0 + \beta_1 NPL + \beta_2 LLP + \mu$

$EPS = \beta_0 + \beta_1 NPL + \beta_2 LLP + \mu$

Where:

PBT = Profit before Tax

EPS = Earnings per Shares

NPL = Ratio of Non-Performing Loan to Total Loan and Advances

LLP= Ratio of Loan Loss Provision to Classified Loan

μ= Error Term.

β_0 = Intercept

β_1 and β_2 are the coefficient of independent variables

The economic priori criteria refer to the sign and size of the parameters and the economic relationship between the variables. The priori expression of this regression model is that $\beta_1 < 0$, $\beta_2 < 0$. A negative sign is expected from the coefficient of the relationship between banks' performance and non-performing loans and also between banks' performance and Loan Loss Provision.

The parameters of the model were estimated using the ordinary squares (OLS) techniques. This estimation yielded numerical values of the model parameters. It will ensure that the technique has minimum estimation errors. Estimation will be facilitated with the statistical software-econometric views (E-Views) or SPSS. It will help form the basis for acceptance or rejection of the research hypothesis. Estimated values of model parameters (model coefficients) were evaluated for partial or individual and overall or joint statistical

significance as a basis for testing and accepting or rejecting the research hypothesis. Evaluation was based on relevant statistics for joint or overall significance.
Decision Rule: individual or partial significance

For partial or individual effect of the change of independent variables, if;

Tcal>ttab, if it statistically significant. Hence, accept H1 and reject H0

Tcal<ttab, if is statistically insignificant. Hence, accept H0 and reject H1

Overall Joint Significance

For joint or overall effect of the independent variables, if;

Fcal>ftab, it is statistically significant. Hence, accept H_1 and reject H_0

Fcal<ftab, it is statistically insignificant. Hence, accept H_0 and reject H_1

Explanatory Power of the Model: This is the last evaluation for the estimated model. It determines the extent to which the independent variables explain variations or changes in the dependent variable. The relevant statistics are the coefficient of determination (R squared or R^2) and adjusted coefficient of determination (Adjusted R Squared or R^2).

RESULTS AND DISCUSSIONS

Major aim of the study was to examine the impact of delinquent loans on financial performance of commercial banks in Nigeria. Total number of fifteen (15) bank was employed for the study. These banks were selected using purposive sampling techniques based on banks with the required available information. Data used in this study were obtained from secondary source i.e., the annual reports and accounts of the sampled banks. The summary statistics of pooled series of the Non-Performing Loans ratio (NPL ratio), Loan Loss Provision Ratio (LLP), Earnings per Share (EPS), and Profit before Tax (PBT).

Table 1 - Regression Analysis of Model 1

Dependent Variable: PBT
Method: Panel Least Squares
Sample: 2010 2013
Periods included: 4
Cross-sections included: 15
Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-12673831	4810986.	-2.634352	0.0117
NPLRATIO	-259099.6	180226.7	-1.977632	0.0218
LLP	-40111.94	71610.45	-0.560141	0.5783

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.825436	Mean dependent var	8665625.
Adjusted R-squared	0.760481	S.D. dependent var	21958442
S.E. of regression	10746602	Akaike info criterion	35.45160
Sum squared resid	4.97E+15	Schwarz criterion	36.04500
Log likelihood	-1046.548	Hannan-Quinn criter.	35.68371
F-statistic	12.70796	Durbin-Watson stat	2.046422

Prob(F-statistic)	0.000000

Model 1 and A prior expectation

$PBT = \beta_0 + \beta_1 NPL + \beta_2 LLP + \mu$

PBT = -12673831 - 259099.6NPL-40111.94LLP

From the result of the panel regression model above, the coefficient of the independent variable (β1) shows negative, which indicate that Non-Performing Loans have a negative effect on profit before tax. This is indicated by the sign and size of (β_1 = -259099.6< 0). This result is consistent with a prior expectation.

Interpretation of Result: The panel regression model result shows that Non-Performing Loans has a negative effect on Profit before Tax. R square gives 0.825436, which stipulates that 82.54% variation in Profit before Tax can be attributed to Non-Performing Loan and loan loss provision, while the remaining 17.46% variations in PBT were caused by other factors not included in the model such as personal and operating expenses, loss on sales of asset etc. The F-Statistics p-value of 0.00% shows that the panel regression result is statistically significant at 5% level since it is less than 5%. The coefficient showed that one unit change in NPL will cause a negative -259099.6 unit change in PBT. This negative effect is statistically significant for the period covered in this study.

Decision Criteria: Therefore, from the above panel regression estimates, Non-Performing Loans has a significant negative impact on Profit before Tax of Nigerian commercial banks. Thus, the null hypothesis is rejected.

Table 2 - Regression Analysis of Model 2

Dependent Variable: EPS
Method: Panel Least Squares
Sample: 2010 2013
Periods included: 4
Cross-sections included: 15
Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	174.8223	27.36827	6.387775	0.0000
NPLRATIO	-2.189394	1.025256	-2.135461	0.0385
LLP	-1.201377	0.407371	-2.949102	0.0051

Effects Specification
Cross-section fixed (dummy variables)

R-squared	0.637600	Mean dependent var	90.88800
Adjusted R-squared	0.502754	S.D. dependent var	86.69592
S.E. of regression	61.13422	Akaike info criterion	11.29754
Sum squared resid	160707.9	Schwarz criterion	11.89094
Log likelihood	-321.9263	Hannan-Quinn criter.	11.52965
F-statistic	4.728343	Durbin-Watson stat	2.428675
Prob(F-statistic)	0.000023		

Model 2 and a prior expectation

$EPS = \beta_0 + \beta_1 NPL + \beta_2 LLP + \mu$

EPS = 174.8223 - 2.189394NPL - 1.201377LLP

From the result of the panel regression model above, the coefficient of the independent variable (β1) shows negative, which indicate that Non Performing Loans has a has a negative effect on Earnings Per Share. This is indicated by the sign and size of (β_1 = - 2.189394< 0). The estimated Durbin Watson statistics is relatively high, suggesting that there is no problem of autocorrelation in the data. This result is consistent with a prior expectation.

Interpretation of Result: The panel regression model result shows that Non Performing Loans has a negative effect on Earnings per Share. The R square gives 0.637600, which means that 63.76% variation in Earnings per Share can be attributed to Non-Performing Loan and Loan Loss Provision, while the remaining 36.24% variations in EPS were caused by other factors not included in the model such model such as personal and operating expenses, loss on sales of asset. The F-Statistics p-value of 0.000023% shows that the panel regression result is statistically significant at 5% level since it is less than 5%. The coefficient showed that one unit change in NPL will cause **-2.189394** unit change in EPS. This negative effect is statistically significant for the periods covered in this study.

Decision Criteria: From the above panel regression estimates, Non-Performing Loans has a negative significant impact on Earnings per Share of Nigerian commercial banks. Thus, the null hypothesis is rejected.

Table 3 - Test of Combined Financial Performance (combined fixed effect)

Dependent Variable: PERF
Method: Panel Least Squares
Sample: 2010 2013
Periods included: 4
Cross-sections included: 15
Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	23369.04	4497.607	5.195883	0.0000
NPLRATIO	-444.1299	168.4870	-2.635989	0.0116
LLP	-16.72687	66.94588	-0.249857	0.8039

Effects Specification
Cross-section fixed (dummy variables)

R-squared	0.927286	Mean dependent var	19518.86
Adjusted R-squared	0.900230	S.D. dependent var	31806.72
S.E. of regression	10046.59	Akaike info criterion	21.50138
Sum squared resid	4.34E+09	Schwarz criterion	22.09477
Log likelihood	-628.0413	Hannan-Quinn criter.	21.73349
F-statistic	34.27256	Durbin-Watson stat	1.738429
Prob(F-statistic)	0.000000		

Model 3 and A prior expectation
X =NPL +LLP
Y= $\sqrt{EPS} \times PBT$ (Financial Performance)
Y= F(X)
FP = $\beta_0 + \beta_1$NPL+β_2LLP + μ
FP = 23369.04 - 444.1299NPL - 16.72687 LLP
From the result of the panel regression model above, the coefficient of the independent variable (β1) was negative, which indicate that Non Performing Loans have a negative effect on Financial Performance of Nigerian banks. This is indicated by the sign and size of (β_1 = -444.1299< 0). The estimated Durbin Watson statistics is relatively high, suggesting that there is no problem of auto-correlation in the data. This result is consistent with a prior expectation.

Interpretation of Result: The panel regression model result shows that Non-Performing Loans has a negative effect on Financial Performance of Nigerian banks. The R square gives 0.927286, which stipulates that 92.73% variation in Financial Performance of Nigerian can be attributed to Non-Performing Loan and Loan Loss Provision, while the remaining 7.27% variations in Financial Performance were caused by other factors not included in the model such as high cost of funds, personal and operating expenses, loss on sales of assets. The F-Statistics p-value of 0.000000% shows that there is zero probability that panel regression result can be rejected at 5% level since it is less than 5%. The T Statistics of -2.635989 is greater than 1.96 in absolute value. The coefficient showed that one unit change in NPL will cause -444.1299 unit changes in Financial Performance. This negative effect is statistically significant for the periods covered in this study.

Discussion of Findings

The result from the analysis of the audited financial statement as presented above is the data produced from the sampled fifteen banks to establish the relationship between the non-performing loan of these banks and their financial performance. This relationship was tested using hypothesis represented by the models. The analysis and descriptive statistics were used to answer the research question stated in chapter one and are discussed below.

The descriptive statistics indicate that there is not much statistical differences in the mean and standard deviation scores and values of the non-performing loan and financial performance variables, although some of the minimum and maximum scores and ratios varies. This can be attributed to the nature of the variables representing the non-performing loans. Also, most of the skewness values show greater than 1 for financial performance ratios. This shows that the ratios are normally distributed.

Furthermore, the regression analysis shows that Non Performing Loans Ratio (NPLR) has a significant negative impact on PBT (β_1 = -259099.6). This indicates that the level of non-performing loans in the books of these banks has a negative effect on their Profit before Tax. Increased non-performing loan implies increase in provision for non- performing loan which has the potential to lower the bottom line of these banks. This is in line with work of Arko (2012) which Impact of Non-Performing Loans on the Operations of Microfinance Institutions found that firm's performance which is measured by (PBT) is negatively related to Non-Performing Loan.

Also, it was found that non-performing loans has a negative significant effect on Earnings per Share (β_1 = -2.189394). This implies the higher the level of non-performing loans in the books of these banks the lower the return earned by each share of the banks i.e. EPS. This is in line with Louzis, *et al.* (2010) which examined the determinants of NPLs in

the Greek financial sector using fixed effect model from 2003-2009 periods and found out NPL has a negative effect on EPS.

Furthermore, the result also reveals that there is a significant negative relationship between non-performing loans and financial performance of Nigerian bank. This is line with the work of Oke, Ayeni and Kolapo. (2012) who undertook the study of credit risk and commercial banks' performance in Nigeria and found out that increase in non-performing loan had negative impact on the performance of Nigerian banks.

Conclusion

The study examined the effect of delinquent loans on financial performance of Nigerian banks. It also looked at the relationship between the variables of non-performing loans with variables of financial performance. The study established that there is a negative significant relationship between the non-performing loans of Nigerian commercial banks and the financial performance of these banks. The effect of the non-performing loans variable on PBT and EPS which are the financial performance variables was statically significant and the effect is negative.

Findings of this study therefore provide an interesting insight into the negative significant impact these delinquent loans have on the financial performance of these banks and the reason why proper attention needs to be given to the Credit Risk Management framework of these banks to ensure that the incidence of this bad loans is reduce to the beariest minimum in order for these banks to be able to give maximum returns to their shareholders. The study concludes that delinquent loans of these banks negatively affect the financial performance of the banks and these calls for swift response of the management of these banks to curb the incidence of non-performing loans in the theirs books by ensuring that credit applications are critically appraise to clarify on ambiguities before decisions are taken as to whether or not to approve a credit facility.

Recommendation

The effect of non-performing loans on the financial performance is extensive, thus, it is impossible to exhaustively study the subject in a single report. Consequently, even after this effort, there are still numerous areas that are open for study. The study revealed that non-performing loans negatively affect the performance of these banks, the following recommendations are made:

1. The management of these banks should adopt a strong credit risk and loan service process management to keep the level of non-performing loan as low as possible in order to record a good financial performance.
2. Concentration of loan exposure to high risk areas such as oil and gas sector and stock market should drastically be reduced to curtail the problem of non-performing loans by diversifying the loan portfolio of the banks.
3. The Board of Directors of these banks should assume full responsibility of over-seeing the activities of the Executive Management by ensuring that only viable and profitable loan proposals are approved to reduce the incidents of bad loans.
4. The provision of BOFIA (2007), which states that Directors of the bank who has direct or indirect interest in any credit facilities must disclose such interest which should be strictly adhere to and if any director is found culpable such person should be sanctioned accordingly.
5. The Central Bank of Nigeria and the Security and Exchange Commission should collaborate to regulate Margin lending which is a major cause of non-performing loans recorded in the books of these banks in the period under review.

Contribution to Knowledge

This study is believed to have made the following contributions to knowledge:

1. The study has contributed to existing literature by focusing on a developing country like Nigeria, in examining the impact of non-performing loans on the financial performance of banks.
2. The study has contributed to the on-going discussion on the effect of non-performing loans on financial performance. The study revealed that non-performing loans has a negative significant effect on the financial performance of the banks.
3. This study will be of help those handling credit functions in banks as it will serve as a useful source of information to create database and provide resource material for further study of this area of knowledge.

Limitations of the Study

The major limitations of the study were accessibility of the audited financial statements for the period use in the study; as a result the sample size was limited to 15 banks out of the total 21. An enhanced sample may enhance robustness of the results. However, available data were adjudged good enough to give a reasonable insight as to the effect of non-performing loans on the financial performance of Nigerian banks.

REFERENCES

Agu, O. C. & Okoli, B. C. (2013). Credit Management and Bad Debt in Nigeria Commercial Banks Implication for development. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*; Volume 12, Issue 3 (May. - Jun. 2013), P. 47-56.

Ali, S. & Iva, S. (2013). Impact of Bank Specific Variables on the Nonperforming loans ratio in Albanian Banking System. *Journal of Finance and Accounting*; Vol.4, No.7.

Anolue, J. O. (2010). *Causative Factors for Non-Performing Loans of Deposit Money Banks in Nigeria: A Critical Examination:* An unpublished Master Thesis.

Anyanwaokoro, M. (1996). *Banking Method and Processes:* Enugu, Hosanna Publications.

Aremu, O. S., Suberu, O. J. & Oke, J. A. (2010). Effective Credit Processing and Administration as a Panacea for Non-performing Assets in the Nigerian Banking System. *Journal of Economics*; 1 (1): 53-56.

Arko, S. K. (2012). *Determining the Causes and Impact of Non-Performing Loans on the Operations of Microfinance Institutions:* An unpublished Master Thesis.

Badar, M. & Yasmin, A. (2013). Impact of Macroeconomic Forces on Nonperforming Loans: an Empirical Study of Commercial Banks in Pakistan. *Journal of Transactions on Business and Economics*; Issue 1, Volume 10.

Business Day Newspaper (2009). Business Day Editorial; Aug. 19th, P. 12 & Aug. 20 p. 11.

Chikoko, L., Tendekayi, M. & Takaiona V. (2012). Insights on Non-Performing Loans: Evidence from Zimbabwean Commercial Banks in a Dollarized Environment (2009-2012). *Journal of Emerging Trends in Economics and Management Sciences* (JETEMS); 3(6): 882-886.

Chodecal, D. (2004) Impact of lending policy on banking industry in Nigeria. *Journal of Banking and Finance*; 7(1), 12-22.

Clark, J. (2007). *Dictionary of Banking and Finance Terms*. U.K; IB Publications.

Damankah, B. S., Anku-Tsede, O. & Amankwaa, A. (2015). Is Traditional Banking Declining? An Empirical Analysis of Banks in Ghana. *International Journal of Academic Research in Accounting, Finance and Management Sciences;* Vol. 5, No.1, January, pp. 27–32.

Daniel, K. & Wandera, M. (2013). Effects of Credit Information Sharing on Non-performing Loans. *European Scientific Journal*; Vol. 9, No.13.

Degryse H., Masschelein, N. & Mitchell, J. (2004). SMEs and Bank Lending Relationships: the Impact of Mergers. *National Bank of Belgium Working Paper*, No. 46.

Ewert, R. & Schenk, G. (1998). Determinants of Bank Lending Performance. *Center for Financial Studies Working Paper*, University of Frankfurt.

Fawad, A. & Taqadus, B. (2013). Explanatory Power of Macroeconomic Variables as Determinants of Non-Performing Loans: Evidence Form Pakistan. *World Applied Sciences Journal;* 22 (2): 243-255.

Garr, D. K. & Kyereboah-Coleman, A. (2013). Macroeconomic and Industry Determinants of Interest Rate Spread-Empirical Evidence. Developing Country Studies; Vol.3, No.12.

Godlewski, C. J. & Ziane, Y. (2008). How Many Banks Does it Take to Lend? Empirical Evidence from Europe, Working Paper. World Bank Series - Laboratoire de Recherche en Gestion & Economie.

John Kay Associates Limited (2005*). In-House Training in Accounting for Non-accountants for Credit Officers.* Accra, Ghana: John Kay Associates Limited.

Karceski J., Ongena, S. & Smith, D. C. (2004*).* The Impact of Bank Consolidation on Commercial Borrower Welfare. *Journal of Finance*; 60(4), 2043-2082,

Khan, R. (2009). *The Age of Banking Transparency in Nigeria*. Retrieved from http://Financial. Blackboard.com.

Louzis, D. P., Vouldis, A. T. & Metaxas, V. L. (2010). Macroeconomic and Bank Specific Determinates of Non-Performing Loans in Greece's, Comparative Study of Mortgage Business and Consumer Loan Portfolios Bank of Greece, *Working Paper*, No 118.

Oboh, G. A. T. (2005). *Selected Essays on Contemporary Issues in the Nigerian Banking System.* Ibadan, Oyo State, Nigeria; University Press Plc.

Odufuye, B. M. (2007). Imperative for Effective and Efficient Credit Administration in the Banking Sector. *The Nigerian Banker*; July/September, P. 28.

Oke, M. O., Ayeni, R. K. & Kolapo, T. F. (2012). Credit Risk and Commercial Banks' Performance in Nigeria: A Panel Model Approach. *Australian Journal of Business and Management Research;* Vol. 2 No. 02 [31-38].

Ozurumba, B. A. (2016). Impact of Non-Performing Loans on the Performance of Selected Commercial Banks in Nigeria. *Research Journal of Finance and Accounting*; Vol. 7, No.16.

Peterside, C. (2009). *Taking Nigerian Banking to New Heights*. Business Day Newspaper, August 20, 2009.

Rajiv, R. & Sarat, D. C. (2003). Non-Performing Loans and Terms of Credit of Public Sector Banks in India: An Empirical Assessment. *Reserve Bank of India Occasional Papers;* Vol. 24, No. 3.

Rose, P. S. (1999). *Commercial Bank Management*, 4th Edition. N Y; McGraw International Editions.

Saba, I., Kouser R. & Azeem M. (2012). Determinants of Non-Performing Loans: Case of United State Banking Sector. *International Journal of Banking and Finance*; No. 44, P. 479.

Sanusi, L. S. (2012). Towards Financial System Stability: Recent Policy Reforms in the Nigerian Banking Sector. *A speech Delivered at the 2nd Murtala Muhammed Foundation Policy Dialogues*, Lagos, 15 February, 2012.

Stuart, T. (2005). New Players, New Landscape: The Banker, Special Supplement. *Financial Times*, April 2005.

Umar, H. (2015). Relationship between Non-performing Loans and the Performance of Money Deposit Banks in Nigeria. Retrieved from

http://eprints.abuad.edu.ng/648/1/26%20Hussain%20(aka%20Young%20Millionire)%20Afe%20Babalola%20Seminer.pdf

Umeaba, T. K. (2009). *The Impact of Non-performing Loans in Banking Operations in Nigeria*. A paper presented at Kaduna Chambers of Commerce conference on Vision 20-20-20: Challenges Ahead.

Umoh, P. N. (1994). Bank Loans' Recovery: The Roles of the Regulatory and Supervisory Authorities. *Judiciary Law Enforcement Agencies and the Press, NDIC Quarterly*; 4 (3), 8.

Uzoka, N. D. (2006). *Bank Lending and Securities.* Owerri, Imo State, Nigeria; Bon Publications.

Vatansever, M. & Hepşen, A. (2013). Determining Impacts on Non-Performing Loan Ratio in Turkey. *Journal of Finance and Investment Analysis*; vol. 2, no.4, 2013, 119-129, Scienpress Ltd.