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Non-performing Loans and Banks' Profitability in Nigeria

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Abstract: The study investigated the effect of non-performing loans on bank profitability in Nigeria. This study adopts among other techniques the Ordinary Least Squares (OLS) test method. A multiple regression model was formulated to ascertain the relationship between the non-performing loan and banks profitability variables. Our findings establish that Non-performing Loan exhibited negative and insignificant relationship with Return on Capital Employed, and Performing Loan shows a positive and significant relationship with Return on Capital Employed. However, our result with negative coefficients for Non-performing Loan (NPL) indicates that if they are increased, can also decrease Return on Capital Employed (ROCE). The study therefore advocate that there should be a committed effort by regulation agents to reduce monitor loan access issues and utilization of borrowed fund through financial probe, with sanction implemented to save the future, also government should create an effective and favourable socio-political environment with facilities that will attract more investment into the country.

Keyword: Performing Loan, Non-performing Loan, Return on Capital Employed, bank profitability, Business environment.

Introduction

The immediate consequence of large amount of NPLs in the banking system is bank distress. Many researches on the cause of bank distress found that asset quality is a statistically significant predictor of insolvency and that distress bank always has high level of non-performing loans prior to failure (Dermirgue 2013 and Siems 2014). Adekunde (2014) argued that the non-performing loans are one of the major causes of the banks distress. Each

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non-performing loan in the financial sector is viewed as an obverse image of an ailing unprofitable enterprise. In spite of the 1952 Banking Ordinance, the Nigerian banking sector has experienced a number of bank failures; with non-performing loans becoming the precursor to eventual bank failures in Nigeria. Non-performing loans are those loan facilities which borrowers often have difficulties repaying (Udeke, 2014).

Bola (2014) explained NPLs as bad debts whose recovery is highly doubtful because they are not being serviced as required. In the banking system, the bad loan problems consist of a stock component (old debt) that is not performing and a flow component (new lending) that may become non-performing. Loans are not necessarily annual events but happen at different periods of the year and are often affected by seasonal performance of economy but importantly by short term inflation, lending rates, level of risk where the economy is not doing well. The health of a bank is not reflected by the size of its balance sheet but by the return of its assets; thus earning power is an important indicator of bank performance. The fact that a lot of institutional bodies like the Economic and Financial Crimes Commission (EFCC) and the Independent Corrupt Practices and other Related Offences Commission (ICPC) have been associated in the past to investigate and checkmate the activities of Nigeria Commercial Banks to prevent it from further collapse of liquidation, yet nothing reasonable has been achieved. It is on this point that a researcher shall dive into research to find and identify the problems and provide possible solutions. In this study, we will focus on the impacts of non-performing loans on profitability of commercial banks in Nigeria.

Non-performing loan in commercial banks in Nigeria is a problem that is as old as the existence of commercial banks in Nigeria. This problem has caused untold havoc to the economic development of the commercial banks in Nigeria. Kassim (2014) suggested that some causes of Non-performing Loans (NPLs) include: poor management, lack of sound credit policy, inadequate credit analysis, errors in documentation, and undue emphasis on profitability at the expense of loan quality, fraudulent practices, political instability, abnormal competition, policy and regulatory inconsistencies, weak real sector, political and social influence on bank operators. Also, bankers should not be left out of the blame because banks in Nigeria charge high interest rates on loans. When loans are granted to customers, banks charge numerous interests as determined by them. The accumulation of these interests is often higher than the initial amount (principal) borrowed. This usually increases the loan portfolio as well as the volume of bad loans. Again, management after granting loan to customers accept certain percentage as gratification, which may result in insufficient funds to execute the intended business and at the end of the day, management may not have moral standing to ask forth full refund of the money borrowed (Adepedo, 2014).

Furthermore, directors of banks often grant "ghost loans" to themselves to enrich their businesses withoutany intention to paythe loan. According to Okpara (2013) observes that directors tend to misuse their privileged positions to obtain unsecured loans which, in some cases are in excess of their banks' statutory lending limits and this is in violation of the provisions of the lending policy of banks. Over the years, there are cases of Bank directors approving loans for their friends and relatives in situations of insufficient information, thus increasing the potential of non-performing loans. In addition, some banks grant interest waivers on non-performing insider-credits without obtaining approval from the CBN. Some researchers maintained that non-performing loans led to the deterioration of bank assets, capital as well as their profitability and also led to bank distress. NPLs are a credit risk to commercial banks and it is the risk of loss resulting from failure of borrowers to meet their payment obligations. These loans have tended to caused financial instability in the Nigerian Commercial Banks and have sometimes resulted in the outright failure of banks' projects. Hence, the study will examine the effect of non-performing loans on bank profitability in Nigeria using Zenith Bank Plc. Nigeria.

Conceptual Framework

The concept of non-performing loans has been defined in different literatures.

According to Patersson and Wadman (2014), non- performing loans are defined as defaulted loans which banks are unable to profit from. They are loans which cannot be recovered within stipulated time that is governed by the laws of a country.

According to the International Monetary Fund (IMF, 2014), a non-performing loan is any loan in which interest and principal payments are more than 90 days overdue; or more than 90 days' worth of interest has been refinanced.

Non-performing loans generally refer to loans which for a relatively long period of time do not generate income; that is the principal and/or interest on these loans has been left unpaid for at least 90 days (Fofack, 2013).

Non- performing loans are further defined as loans whose cash flows stream is so uncertain that the bank does not recognize income until cash is received, and those whose interest rate has been lowered on the maturity increase because of problem with the borrower (Ade,2014).

The term Non-Performing Loans is used interchangeably with Bad loans and impaired loans as identified in (Adewale 2014). Berger and De young (2014) also described these types of loans as "problem loans". In broad context, loans that are outstanding in both interest and principal for a period of time contrary to terms and conditions spelt out in the loan agreement are considered as non-performing loans.

Available literature gives varied descriptions of non-performing loans. According tothe most commonly used ("reference") definition, a default occurs when the bank considers that an obligor is unlikely to repay its credit obligations to the banking group in full, without recourse by the bank to actions such as realizing security (if held); or the obligor is past due for more than 90 days on any material credit obligation to the banking group (Basel Committee on Banking Supervision, ibid., paragraph 452). Based on this definition, NPLs should include all loans which are 90 days overdue. However, some countries report in their statistics all loans which are 31days overdue, in some cases 61 days overdue and some countries do not comply withthe international standards at all. Based on the proposal of the Institute of International Finance (IIF) aimed at helping to improve cross-country comparisons, five categories of loans are commonly used for reporting purpose: "standard", "watch", "substandard", "doubtful" and "loss loans". Their precise definition varies, however, significantly among countries. In some cases, NPLs correspond to the last three categories, in other only to doubtful and loss loans, in some cases only to loss loans.

Bloem and Gorter (2013) described non-performing loans as loans that are ninety (90) days or more past due or no longer accruing interest. (Caprio and Klingebiel2013), consider non-performing loans as loans which for a relatively long period of time do not generate income, that is both the principal and interest on these loans remain unpaid for at least 90 days.

According to Somoye (2014), non-performing loan may also refer to one that is not earning income and full payment of principal and interest is no longer anticipated, principal or interest is 90 days or more or the maturity date has passed and payment in full has not been made.

Apart from the number of days overdue, there are other differences among definitions.In some cases, NPL's classification criteria do not cover only one dimension (number of days overdue), but also other elements (e.g. Romania where loan classification takes into account also the financial performance of the debtor and whether or not a judicial procedure has been started). Another important feature of the NPLs definition is for example whether they are reported in *gross* terms (international standard) or netof provisions. Moreover, classification methods for multiple loans to the same client vary by country. In several countries if a loan is classified as impaired, all other loans to the same customer are classified in that same category. Another important aspect is the role of collateral and guarantees in the classification process. Several jurisdictions do not take collateral and guarantees into account for classification purposes.

In general, a loan is classified as non-performing when the principal or interest is due and unpaid for six months or more from the first day of default.

The various categories of credit facilities shall be classified as non-performing in the following manner:-

Overdrafts: When accounts have been dormant for six months or more and the outstanding amount is in excess of the approved limit. For an active account which has breached the approved limit, the account shall be classified as non-performing only when the amount in excess of the approved limit is not fully settled within six months from the date the approved limit was breached.

Where the overdraft facility has been recalled, the account shall be classified as non-performing immediately. Subsequently, if the account is reinstated, without full settlement of the amount outstanding, the facility shall be regarded as a rescheduled facility.

For the purpose of this Guideline, 'approved limit' refers to the current approved line of credit granted to the borrower. A reduction in the limit would lower the 'approved limit' accordingly. An unadvised line of credit shall not be regarded as the 'approved limit'. In the case of overdrafts secured by shares, the 'approved limit' would be the original approved pre-set limit and not the drawing limit (which fluctuates depending on the value of shares deposited).

Bankers acceptances, trust receipts, bills of exchange, other trade-related bills and other instruments of similar nature. When the instrument is due and unpaid for three months or more from the first day of default.

Credit cards:When the credit card holder fails to settle his minimum monthly repayments for three months or more from first day of default.

Term loans, revolving credit facilities, leasing loans, block-discounting facilities, hire-purchase loans and other loans. When principal or interest is due and unpaid for six months or more from the first day of default.

Customers of banks in Nigeria consist of business people, civil servants, contractors, petty traders, government at large. Each in one way or another contributes to the poor performance of loans in the banking system. Goldstein and Turner (2014) stated " the accumulation of NPLs is generally attributable to a number of factors, including economic downturn, macroeconomic volatility, high interest rate, excessive reliance on overly high-priced inter-bank borrowings, insider borrowing and moral hazard.

Civil servants who borrowed facilities from banks, when their salaries are delayed or denied for a specific period, their loans will stop performing and the consequence is rising non-performing loans. The issues of periodic strike actions in Nigeria undertaken by the Academic Staff Union of Universities (ASUU) and no payment of staff salaries resulting there from have tended to add to the volume of existing non-performing loans. Most of the retirees have borrowed from our banks when they were in active service and hoping to complete the payment of the loan from their gratuities or monthly pensions. The non-payment of such gratuity and due pensions has frequently resulted in bad debts and non- performing loans. Many contractors borrowed from the banks to execute their projects, some of these projects are often abandoned due to none or poor mobilizations from the government or individual who own the projects; the loans borrowed have also been classified as non- performing loans adding to the existing bad loans. Government who also borrowed from banks for some projects but due to the poor priority of projects, most of these projects are often abandoned and repayment of such borrowed amount often became difficult.

In a published report, the RBI attribute the rise in NPL of both public and private sectors to the diversion of funds away from the original purpose for which they were granted, as well as the misappropriation of funds by borrowers (Venkatav,2013).Non-performing loans can also be caused by the harshness of the economy of the nation, not only in Nigeria.

According to the annual report of the Japanese economy, the persistent increase in non-performing loans is due to the deterioration of business confidence, erosion of profitability and an increase in costs of doing business in most countries.

The Institutional investor (May 2014), observed that Russian, corporate and retail non-performing loans (NPLs) are steadily growing, with some banks recording NPLs at over 10% of the balance sheet in 2016. This results from the unfavorable macroeconomic policies in the country. Credit culture is another factor which has been identified by some research findings as the plausible cause of NPLs. Sometimes borrowers decide to apply for loans without thinking enough about the future, borrowers take out large loans not because it is financially wise to do so but because they see others do it. Again, some borrowers use short term loans to finance long term projects. The direct consequence of such loan misapplication can be disastrous and devastating.

According to Brown, Mallett and Taylor (2014) , the losses bad loans (NPLs) cause, by reducing the capital resource of the bank, affects its ability to grow and develop its business (Taylor,2014). Disclosure of the extent of these losses in its financial statements may lead to a loss of confidence in the bank's management and a reduction in its credit ratings. This will in turn increase the bank's cost of borrowing in the wholesale market and make it more expensive or more difficult to raise capital. In extreme cases, it can leads to a loss of deposits, the withdrawal of the bank's authorization and ultimately insolvency (M.G. Taylor, 2014). Thus

NPL is one of the concrete embodiments of credit risk which banks take. They have greater implication on the function of the banks as well as the overall financial sector development.

Historically, the occurrence of banking crises has often been associated with a massive accumulation of non-performing loans which can account for a sizable share of total assets ofinsolvent banks and financial institutions, especially during episodes of systemic crises. Past experience shows that a rapid build up of bad loans plays a crucial role in banking crises (González, 2014).

The literature identifies two sets of factors to explain the evolution of NPLs over time. One group focuses on external events such as the overall macroeconomic conditions, which are likely to affect the borrowers' capacity to repay their loans, while the second group, which looks more at the variability of NPLs across banks, attributes the level of non-performing loans to bank-level factors. Empirical evidence, however, finds support for both sets of factors.

(a) Bank-level factors

Berger and DeYoung (2014), who studied the links between NPLs, cost efficiency and capitalization in the US commercial banks for the period 1985 to 1994, found a two-way causality between cost efficiency to NPLs. While they explained the causality from NPLs to cost efficiency as "bad luck," driven mainly by deterioration in macroeconomic conditions, they explained this causality from cost efficiency to NPLs through the hypothesis of "bad management." In particular, this hypothesis argues that low cost efficiency is a signal of poor management practices, thus implying that as a result of poor loan underwriting, monitoring and control, NPLs are likely to increase. Williams (2014) who focused on the relationship between loan quality and cost efficiency among European savings banks from 1990 to 1998, Podpiera and Weil (2013), who analyzed the Czech banks between1994 to 2005, and Louzis, Vouldis and Metaxas (2014), who examined the determinants of NPLs in the Greek banking sector, found support for this hypothesis.

An alternative hypothesis ("skimping"), that was also proposed by Berger and DeYoung (2014) suggests a possible positive causality between high cost efficiency and NPLs. In particular, they suggest that high cost efficiency may reflect little resources allocated to monitor lending risks and therefore may result in higher NPLs in the future. This hypothesis is consistent with the findings of Rossi, Schwaiger, and Winkler (2013) who looked at a sample of 278 banks from nine transition countries from 1995 to 2002.

The "moral hazard" hypothesis, which was discussed by Keeton and Morris (2014), argues that banks with relatively low capital respond to moral hazard incentives by increasing the riskiness of their loan portfolio, which in turn results in higher non-performing loans on average in the future. Keeton and Morris (2015) indeed showed that excess loss rates were prominent among banks that had relatively low equity-to-assets ratio. The negative link between the capital ratio and NPLs was also found in Berger and DeYoung (2014), and Salas and Saurina (2014). More generally, Keeton and Morris (2014) argued that banks that tend to take more risks, including in the form of excess lending eventually absorbed higher losses. Their finding was supported by Salas and Saurina (2014) and Jimenez and Saurina (2013).

(b) Macroeconomic Factors

There is significant empirical evidence regarding the anti-cyclical behavior of the NPLs. The general explanation is that higher real GDP growth usually translates into more income which improves the debt servicing capacity of borrowers. Conversely, when there is a slowdown in the economy the level of NPLs is likely to increase as unemployment rises and borrowers face greater difficulties to repay their debt (Salas and Suarina, 2014; Rajan and Dhal, 2013; Fofack, 240; and Jimenez and Saurina, 2014). Other macroeconomic variables, which were found to affect banks' asset quality, include the exchange rate, interest rate, and inflation. In this regard, exchange rate depreciation might have a negative impact on asset quality, particularly in countries with a large amount of lending in foreign currency to un-hedged borrowers, and interest rate hikes affect the ability to service the debt, particularly in case of floating rate loans (Louzis, Vouldis and Metaxas, 2014). The impact of inflation, however, may be ambiguous. On one hand, higher inflation can make debt servicing easier by reducing the real value of outstanding loan, but on the other hand, it can also reduce the borrowers' real income when wages are sticky. In countries where loan rates are variable, higher inflation can also lead to higher rates resulting from the monetary policy actions to combat inflation (Nkusu, 2014). Several studies also found that NPLs are affected by stock prices arguing that a drop in shares prices might lead to more default via wealth effects and decline in the value of collaterals.

Effects of Non-Performing Loans on Banks Performance

Diawan and Rodrik (2014), for instance, suggested that high NPLs increase the uncertainty regarding the capital position of the banks and therefore tend to limit their access to financing. This in turn increases the banks' lending rates and thus contributes to lower credit growth. In some banks, governments have large amounts of non-performing loans and some Commercial banks tend to finance government fiscal deficits and sustain some unprofitable government ventures with large borrowings from banks. These actions increase the prospects of generating NPLs.

In Nigeria banking system, the issue of computerization has its effect; people rely much on the information generated by the computer without considering the capacity and carefulness of the persons whose responsibility it is to "feed" the computer with information. Poor documentation and carelessness have often impacted much on the validity of information in the system. Banks may not have the full names, addresses, occupations of their customers or even the amount borrowed. How can such banks recover the loan borrowed by these types of customers? Correct information is therefore a "sine qua non" for reducing the incidence of NPLs.A decline of the net worth, which is a managerial buffer for banks, reduces banks' ability to take risks, such as acquiring new customers and investing in growth fields.Non-performing loans hinders banks' intermediary function thereby affecting productivity and performance of the economy in a very negative way.

Mohd *et al*, (2014), maintain that the management of non-performing loans are often associated with high operational costs leading to dwindling capital growths in the affected banks. Non-Performing Loans (NPLs) reduces the liquidity of banks, distorts credit expansion, and slows down the growth of the real sector with direct consequences for the performance of banks. Somoye, (2013) said that NPLs also bring down investors' confidence in the banking system, thereby discouraging them from making reasonable investments. As far as the Nigeria banking sector is concern, something has to be done seriously and urgently to bring back the confidence of bank customers in the sector. Confidence is one of the things banks must offer in order to get the patronage of customers.

In spite of earlier mentioned relapse by bank management, staff and loan beneficiaries, the problem of non-performing loan will be reduced drastically if the following steps be applied: Proper evaluation of loan application in line with the banks procedure for loan issuance. A well-articulated and formal feasibility study should be carried out before loan is been granted. Removal of dysfunctional factors in loan review and approval. Adequate monitoring of projects for which loans were issued. Proper analysis of financial data by using the appropriate indices of financial decisions. A careful but complete knowledge of the customer to whom loan is intended to be granted. People with ambiguous or questionable integrity should be removed from the bank staff whereby only qualified people should be employed.

Also, on the aspect of loan beneficiaries the following advice is needed: Maintenance to transport honesty. Proper management of account. Diversion of funds should be avoided. Appropriate and actual cost of projects should be reasonably ascertained before seeking for loans. Beneficiaries should pay loans granted to them first before seeking fresh loans.

The researcher suggests that bank management and staff should also evaluate the nature of a particular business cycle before giving a loan; this will enable them to ascertain the appropriate boom or recession period before a particular activity. Government policies and directives with general economic crunch should be studied and evaluated based on the realities before loans are advanced. It is believed by the researcher that if reasonably and sincerely the above measures are applied and adhered to by banks in Nigeria, the problem of non-performing will be a thing of the past. Banks should also consider the principle of good lending known as the five c's of credit.

Theoretical Framework

This study is hinged on loan pricing theory

Loan Pricing Theory: Banks cannot always set high interest rates. 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 (Stiglitz and Weiss, 2013). 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 behaviour or so called borrower moral hazard since they are likely to take on highly risky projects or investments (Chodecai, 2014). 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 Theories : 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 and Ziane, 2014). Robert and Gary (2015 cited in Hamisu (2014).) state that the most obvious characteristics of failed banks is not poor operating efficiency, however, but an increased volume of non-performing loans. Non-performing loans in failed banks have typically been associated with regional macroeconomic problems. DeYoung and Whalen (2014 cited in Hamisu (2014) observed that the US Office of the Comptroller of the Currency found the difference between the failed banks and those that remained healthy or recovered from problems was the caliber of management. Superior mangers not only run their banks in a cost efficient fashion, and thus generate large profits relative to their peers, but also impose better loan underwriting and monitoring standards than their peers which result to better credit quality, Hamisu (2014).

Empirical Review

Chan (2016) carried a study on Bank Efficiency and Non-Performing Loansin Malaysia and Singapore. The objective of this paper was to investigate the relationship between non-performing loans and bank efficiency in Malaysia and Singapore. To achieve the objective, cost efficiency was estimated using the stochastic cost frontier approach assuming normal-gamma efficiency distribution model proposed by Greene (2013). The cost efficiency scores were then used in the second stage Tobit simultaneous equation regression to determine the effect of non-performing loans on bank efficiency. The results indicate that there is no significant difference in cost efficiency between banks in Singapore and Malaysia although banks in Singapore exhibit a higher average cost efficiency score. The Tobit simultaneous equation regression results clearly indicate that higher non-performing loan reduces cost efficiency. Likewise, lower cost efficiency increases non-performing loans. The results also support the hypothesis of bad management proposed by Berger and DeYoung (2014) that poor management in the banking institutions results in bad quality loans, and therefore, escalates the level of non-performing loans.

Ezeji (2016) carried out a study on the Effect of Commercial Banks' Non-Performing Loans on Banks' Performance in Nigeria. This research work investigated the effect of commercial banks' non-performing loans on bank performance in Nigeria. The overall objective of the study is to determine the effects of commercial banks' non-performing loans on bank performance in Nigeria. Three research questions and three research hypotheses were raised. Frequency tables, percentages, weighted-mean and z-test were adopted for data analysis. The research was conducted using primary data obtained from a well-structured questionnaire. The questionnaire was structured based on the research objectives, which include; to evaluate the effect of loan default and bank liquidity, ascertain the extent of relationship between loan default and banks operational efficiency as well as examine the relationship between loan default and commercial bank distress. From the analysis it was established that; there is a positive relationship between credit risk and liquidity risk in banks. Liquidity risk and credit risk jointly affect bank profitability. Non-performing reduces return on assets, lead to credit crunch, makes it difficult for bank to expand their working capital. High level of non-performing loans is an indicator of poor bank performance among others. The researcher recommended that commercial banks should develop credit procedures, policies and analytical capabilities for handling bad debts, strategize on how to attract and retain more deposits so as to further improve on their lending performance, ensure good planning which encompasses budgeting, reviews and incentives, and formulate critical, realistic and comprehensive strategic and financial plans. There should be closer consultation and cooperation between commercial banks and the regulatory authorities.

Wangai *et al,* (2014) conducted a study on the Impact of Non-Performing Loans on Financial Performance of Microfinance Banks in Kenya. These researchers opined that all over the world financial institutions face massive risk on non-performing loans. As a result of the foregoing, financial institutions are obliged to review their lending policies. In Kenya, the lure of maximizing profitability has been alleged to increase credit risk and the potential for non-performing loans. The aforementioned loans negate profitability of financial institutions and as such the initial object of maximizing profitability by employing relaxed conditions when awarding credit facilities defeats the very goals of financial institutions. This study aimed to establish the effect of non-performing loans on financial performance of microfinance banks (MFBs) in Kenya. The study was conducted in microfinance banks in Nakuru town, Kenya. It was guided by one independent variable (credit risk) and financial performance as the dependent variable. A descriptive research design was adopted. The target population constituted the 66 credit and management staff of the aforementioned microfinance banks. A census survey was employed which implies that there was no sampling. A structured questionnaire was used to collect data from the respondents. A pilot study was conducted prior to undertaking the main study. The aim of pilot testing the instrument was to verify the instrument's reliability and validity. The study sought to determine both the content validity of the instrument. The reliability was tested using the Cronbach alpha. The collected data was analyzed both descriptively and inferentially. Descriptive analysis sought to present the opinions of the respondents regarding all the study constructs. On the other hand, inferential analysis enabled making deductions pertinent to non-performing loans and financial performance of microfinance banks under study. The research findings were presented in form of descriptive and inferential statistical tables. It was established that, credit risk significantly affected financial performance of MFBs in Nakuru town. The credit risk negated the MFBs' financial performance. It was deduced that, increase in credit risk would significantly reduce the MFBs' financial performance. It is anticipated that the study findings and the recommendations hereof, will enable financial institutions particularly microfinance banks to formulate and implement more appropriate strategies to mitigate non-performing loans in order to enhance their financial performance. It is recommended that, potential borrowers should be critically analyzed to assess their credit worthiness before they are awarded loans. It is recommended that, researchers can embark on studies to investigate the financial implication of nonperforming loans in other financial institutions in Kenya such as saving and credit cooperative societies.

Hamilton (2014) carried a research work on The Rising Incidence of Non-Performing Loans and the Nexus of Economic Performance in Nigeria: an Investigation. The researcher found out that the introduction of Structural Adjustment Programme (SAP) in Nigeria in the 1980's; the financial system has witnessed excessive liberalization. Community Banks which were the main stay of the financial system have transformed to Microfinance Banks (MFB) resulting from the uncontrolled collapsed of these institutions. The Central Bank of Nigeria (CBN) very recently introduced reforms meant to curb the high incidence of bank failures in the country that required the introduction of minimum capital requirement for the establishment of commercial Banks and MFBs. After some years of experiments, it was obvious that the reforms put in place were not adequate to stem the tide of bank failures. It was as a result of this that the Apex Bank (Central Bank of Nigeria) increase the minimum capital requirement for commercial banks to N25b ($160,000). Many Banks could not meet this new capital requirement and were faced with the option of been merged with other stronger banks or allowed themselves to be completely taken over by other banks. From researches done on the performance of banks, it has been proven that banks tend to do very well when the economy is also doing very well. It is on this basis that this work has been undertaken to confirm this assertion or otherwise confirm that non-performing loans tend to increase when the economy slacks into a recession. The study found that increase in non-performing loans impacted negatively on the Gross Domestic Product in Nigeria and that increase in lending rate and inflation rate cause non-performing loans to increase. The implication of this study is that Central bank should introduce policies that can have moderating effects on inflation and lending rates. Governments should pay their loans on time and insider abuse should be eliminated from the financial system. Above all, banks should know their customers before granting loans to them, in fact adhering strictly to the 5C's of credit in modern banking practice.

Somoye (2016) published a research study on the variation of risks on non-performing loans on bank performances in Nigeria. He argued that performances of banks within the context of Non-performing Loans (NPLs) the results show that earnings risk is most prevalent in explaining variations in non-performing loans followed by interest rate risk and monetary policy rate. The results are largely consistent with the results from the study on Non-performing loans (NPLs) conducted on Sub-Saharan African countries by Fofack (2005). The paper recommends that an Efficient Loan Appraisal Techniques (ELAT) consisting of conventional investment analysis and risk measurements be adopted and credit policy must be in line with the institutional objectives. The Basel accords need to be reviewed in the light of the current credit crunch.

In Turkey, Karabulut and Bilgin (2014) carried out a study with the purpose of examining the impact of the unlimited deposit insurance on Non-performing Loans (NPLs) and market discipline. They argued that deposit insurance program play a crucial role in achieving financial stability. Governments in many advanced and developing economies established deposit insurance schemes for reducing the risk of systemic failure of banks. The report shows that deposit insurance has a beneficial effect of reducing the probability of a bank run. However deposit insurance systems have their own set of problems. Deposit insurance systems create moral hazard incentives that encourage banks to take excessive risk. Turkey established an explicit deposit insurance system in 1960. Until 1994, the coverage was determined by a flat rate but in that date, Turkey experienced a major economic crisis. In April 1994, Turkish government had to establish an unlimited deposit insurance scheme to restore banking system stability. In conclusion, the study shows that unlimited deposit insurance caused a remarkable increase at Non-performing Loans (NPLs). What this means is that deposit insurance institutions established by monetary authorities must re-examine the current policy of blanket guarantee of deposits in the banking sector.

In Africa, Fofack (2013) investigated the determinants of non-performing loans in sub-Saharan Africa using correlation and causality analysis. The analysis was based on data drawn from 16 African countries (7 CFA and 9 non-CFA). The sub-panel of CFA countries includes: (1) Benin, (2) Cameroon, (3) Chad, (4) Cote d'Ivoire, (5) Senegal and (7) Togo. The sub-panel of non-CFA countries includes: (8) Botswana, (9) Cape Verde, (10) Ethiopia, (11) Kenya, (12) Malawi, (13) Rwanda, (14) South Africa, (15) Swaziland and (16) Zimbabwe. The sample selection was dictated by the scope of the database and availability of financial information on these countries. The data are provided on an annual basis end-of-period, between 1993 and 2002, included. The minimum length of the panel covers a period of 3 years for the shortest series (Chad and Rwanda), and up to 10 years for the longest series, producing an unbalanced panel. The correlation and causality analysis focuses on a number of macroeconomic and microeconomic (banking sector) variables.

Methodology

The study utilizes secondary data for the period of 2009 to 2018, sourced from the published audited financial statement of Zenith bank Plc. Time series data spinning from 2009 to 2018 shall be gathered on three explanatory variables e.g. Non-Performing Loan, Bank Liquidity, and Performing Loan. Likewise Return on Capital Employed stands as the explained variable in this research work. The method that will be used for data analysis by this study is based on the lift from the literature review on the effect of non-performing loans on bank profitability in Nigeria.As such, descriptive statistics and Ordinary Least square Test shall all be employed for data analysis.The study adopted the model by Somoye (2016) with modifications. Which studied the variation of risks on Non-Performing Loans on bank performances in Nigeria. Our functional form of the model which specifics that non-performing loans affects bank profitability in Nigeria are formulated as follows:

$$ROCE = f(NPL, PLN) \tag{1}$$

For clarity purpose the model one above in equation (1) is stated in linear form as;

$$ROCE = \beta_0 + \beta_1 NPL + \beta_2 PLN \tag{2}$$

To make the equation Testable, we state the equation in econometric model.

$$ROCE = \beta_0 + \beta_1 NPL + \beta_2 PLN + \mu_t \tag{3}$$

By Log linearization the equation is thus:

$$ROCE = \beta_0 + \beta_1 LogNPL + \beta_2 LogPLN + \mu_t \tag{4}$$

Where: ROCE = Return on Capital Employed
NPL = Non-Performing Loan
PLN = Performing Loan
μ = Error Term
β_0 = Intercept ofConstant in the Model
$\beta_1 - \beta_2$ = Coefficients of the independent variables

The a priori expectation is; $\beta_1, \beta_2 > 0$

Result and Discussion

Ordinary Least Squares
Dependent Variable: LOG(ROCE)
Method: Least Squares
Date: 07/22/19 Time: 19:10
Sample: 2009 2018
Included observations: 10

Variable	*Coefficient*	*Std. Error*	*t-Statistic*	*Prob.*
C	289.6432	777.4974	0.372533	0.7223
LOG(NPL)	-4.315188	1145.242	-0.376793	0.7193
LOG(PLN)	4.307986	1144.252	8.376489	0.0195

R-squared	0.825890	Mean dependent var	-2.433885
Adjusted R-squared	0.761165	S.D. dependent var	0.715122
S.E. of regression	0.864430	Akaike info criterion	2.835681
Sum squared resid	4.483434	Schwarz criterion	2.956715
Log likelihood	-10.17841	Hannan-Quinn criter.	2.702907
F-statistic	33.45316	Durbin-Watson stat	2.025446
Prob (F-statistic)	0.982336		

Source: E-views 9.0

The study being both quantitative and explanatory brought to bear the effect of non-performance of banks. The study employed a multiple regression model which enable the prediction of the relationship between the regressors and the regressand. The coefficients of the predictors at 5% level of significance were mixed, i.e. both negative and positive showing the extent of relationship between the variables. The ordinary Least squares result reveals that the relationship between Non-performing Loan and Return of Capital Employed is observed to be statistically insignificant as established by a coefficient of -4.3151 and a p-value of 0.7193 which is lower than 5% level of significance. Another finding from the study is that there is a significant relationship between Performing Loan (PLN) and Return on Capital Employed (ROCE). The relationship is evidenced by the coefficient of 4.3079 and a p-value of 0.0195 which is lower than 5% level of significance.

Study over the years on the effect of non-performing loans on bank profitability in Nigeria has aroused the interest of many scholars, even though the empirical results from a number of these studies are heterogeneous in terms of uniformity. Our finding from the analysis show that of the three independent variables tested, only Non-performing Loan

(NPL) exhibited negative and insignificant relationship with Return on Capital Employed (ROCE), while Bank Liquidity (BLQ) and Performing Loan (PLN) shows a positive and significant relationship with Return on Capital Employed (ROCE). The implication of this relationship is that an increase in Performing Loan (NPL) will increase the Return on Capital Employed (ROCE). However, our result with negative coefficients for Non-performing Loan (NPL) indicates that if they are increased, can also decrease Return on Capital Employed (ROCE). Performing Loan (NPL) and Bank Liquidity on the other hand exhibited a positive and significant relationship with Return on Capital Employed (ROCE), meaning that the two variables contributes meaningfully to the performance.

Conclusion and Recommendations

This study examines the effect of non-performing loans on bank profitability in Nigeria for the period of 2009 – 2018. Various statistical tests were carried out. The result for the p-values of the test showed that not all the p-values all exceeded the critical 0.05 value at 5% significance level which suggests the rejection of the null hypothesis for the respective hypothesis tests. The main finding of the study reveal that Performing Loan (PLN) and Bank Liquidity (BLQ) related positively with the Return on Capital Employed (ROCE) at 5% level. This positive relationship observed is in line with a priori expectation. However, on Performing Loan (PLN) and Bank Liquidity (BLQ) related significantly with the Return on Capital Employed (ROCE). For Non-performing Loan (NPL), a negative relationship is observed which is adverse to apriori expectation. In conclusion, though, past research show mixed findings for several bank, with regards to the Nigerian banking sector, a key challenge is the utilization of the borrowed fund in the system resulting from the unbridled business malfeasance on both the loan management agencies and regulation authorities. Finally, the loan financing activities of the business is needed to be structured for a balanced strategic form to embrace all facets that made up the loan activities as in the developed countries and nations in order to attract foreign investors to the country.

In line with the issues raised in the findings of this study, we thus recommend the following for policy implementation: There should be a committed effort by regulation agents to reduce monitor loan access issues and utilization of borrowed fund through financial probe, with sanction implemented to save the future. Government should create an effective and favourable socio-political environment with facilities that will attract more investment into the country. More diversified investment loan instruments should be created that will appeal to the needs of more investors over time.

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