Credit Risk Management and Bank Performance in Nigeria: A Conceptual/Meta-Narratives

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ABSTRACT

The study used conceptual narrative(s)/meta-narrative(s) procedure to review the researchers' empirical work and draw some conclusions on the relationship between Credit Risk Management and the performance of banks in Nigeria.

Several variables such as Return on Assets, Return on Equity, and Economic Value-Added were used by most researchers as a proxy for Performance, while variables like Non-performing Loan ratio, Impairment Charges, Capital Adequacy ratio, Asset Quality, Firm size, Financial Leverage, Management Quality, and Liquidity were used as a measure of Credit Risk Management.

While there is a consensus that loan loss provision and Impairment Charges have a negative relationship to performance (ROA) for most researchers such that the higher the loan losses, the lower the financial performance and vice versa. Most of the researchers agree that there is a positive relationship between Capital Adequacy Ratio and banks' performance. This presupposes that the more capital is available to the bank, the more credit exposure will increase. However, the profit maximization expectations should be moderated by the risk appetite defined by the banks so that loan impairment can be contained given the information asymmetry and moral hazards that attain a credit decision.

It is noted that while there is consensus in the findings, there is a need to expand the variables to include Nigeria-specific ones like Loan-to-deposit ratio and Cash Reserve requirement. These are currently significant phenomena in the Nigerian banking industry and will afford researchers the opportunity to recommend policy adjustments to ensure a sustainable economy.

CHAPTER ONE

INTRODUCTION

A. Background to the Study:

Bank performance has been attributed to many variables including product offering as was the case of internet banking pioneered by the defunct First Atlantic Bank in November 2000 (Chiemeka, Evwiekpaefe, & Chete, 2006). Other variables are the monetary policies of the government measured by the Monetary Policy Rates imposed, Cash Reserve Requirements mandated, Loan-to-deposit ratio, Liquidity ratio, and even money supply to the sector. The combination of these policy measures has some impact on the performance of banks but these are the not subject of our review in this paper.

Banking performance is predicated on the deployment of effective measures to prevent bank failures. Therefore, the attempt to wage war against the banking failures in the 1980s led to the formation of the Bank for International Settlement Committee in 1988 thereby shifting the attention to capital inadequacy and under-capitalization which was a major cause of bank failures (Afolabi, Salahudeen, Kamar, & Emeje, 2021).

In its traditional role to create value, the banking sector performs the role of intermediation where they aggregate funds from the surplus unit of the economy and lend to the deficit unit thereby making a spread that ultimately reflects in the overall performance. In line with the financial intermediation theory, banks as profit-maximizing economic agents will profit from the financial intermediation activities by setting the loan and deposit prices above and below the monetary policy rate set by the Central Bank (Kusi, Agbloyor, Gyeke-Dako, & Asongu, 2020).

The ability of banks' customers to offset their loans and advances as of when due is critical for the continued survival of the banks, therefore, in an attempt to avoid systemic failure, banks have to ensure due diligence before committing funds. It is noted that one of the most serious managerial inefficiencies prevalent among Nigerian banks is the inability of their management to identify problem loans or deliberate in their desire to declare huge profits at the end of the financial year (Ojo, 2010).

Bank intermediation role in the economy exposes the bank to credit risk and due to the increasing volume of non-performing loans, the Basel I, II, and III Accords have emphasized the strengthening of credit risk management practices. Commercial banks are exposed to a number of risks which are interest rate risk, foreign exchange risk, political risk, market risk, liquidity risk, operational risk, and credit risk. The issue of credit risk in banks is of serious concern to the stakeholders including regulators because of the high levels of perceived risks resulting from default and loan losses (Afolabiet. Al 2021).

The provision of credit by banks in Nigeria contributes largely to the income base through interest charges paid by borrowers. Despite interest charges from loans advanced to borrowers being one of the main sources of income for banks, the underlying risks of not repaying credit remain a more fundamental challenge to attaining desired performance of banks. These risks are exacerbated by poor assessment of the creditworthiness of borrowers and non-adherence to credit standards by credit officer in banks. Thus, according to the Basel Committee on Banking Supervision (2001), the likelihood of partially or wholly losing an outstanding loan due to credit events makes credit financing volatile. When a loan that is due for payment becomes outstanding for a certain period of time, it becomes a non-performing loan, and these matured but unrecovered loans are used as one of the measures of assessing the credit risk of banks.

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Banks typically charges-off debt (impaired loan) when it reaches a certain level of delinquency depending on the type of credit (debt) exposure. A bank loan is impaired when it is likely that it will not be collected when it falls due as specified by the terms of the loan contract. A charged-off loan is recorded as an expense in the income statement and decreases the value of the asset and the bank's financial position, including the net profit, especially in the year the charge is made. Impaired loan charge-off is therefore an extension of credit risk which affects the financial performance of banks (Echobu & Okika, 2019).

B. Statement of the Research Problem

There have been several studies on the nexus between Credit Risk Management and Bank performance across several climes including Nigeria. While all the studies agree that there is a verifiable relationship between banks' performance measures and credit risk management measures used as independent variables, however, they differ on the assessment of impact and types of variables applied in the study. Some studies used Profit Before Tax (PBT) and Profit After Tax (PAT) as a measure of performance while others used Return on Assets (ROA) and Return on Equity (ROE) as performance measures. Similarly, most of the studies used a combination of Total Loans and Advances, Performing and Non-performing loan stock as well as Loan loss provisions and write-offs as a measure of credit risk management.

While there is no clarity on the over-arching impacts of Credit Risk Management, this study will attempt to review the different variables used in various research and present an aggregate view of the different impacts in respect of Nigeria's experience. It is not our intention to determine which of the variable is superior or has a relatively higher impact, we will review and present the findings of these research works to enable us to draw conclusions on necessary policy advocacy without directly retesting the data sets.

CHAPTER TWO

LITERATURE REVIEW

A. Preamble:

The study will cover theoretical literature related that underpins credit risks and the empirical review of previous related studies across various climes to provide a broad view and draw conclusions.

B. Theoretical Literature

The theoretical literature considered in this study includes the a) Theory of Information Asymmetry, b) the Theory of Moral Hazard, c) Adverse Selection, d) Loan Pricing Theory, and e) Agency Theory.

- **Theory of Information Asymmetry:** The theory argues that markets may fail due to an imbalance in the available information to the buyer and the seller. Information asymmetry is a situation where one party to an economic transaction possesses more information than the other party (Stiglitz, Information and the change in the paradigm in economics., 2002). It is a common occurrence for a borrower to know more than the lender about their ability to repay a loan and the seller of a product is usually more aware of the quality of the product than the buyer. Similarly, the directors of a company are expected to know more about the company's actual performance than the shareholders (Kwashie, Baidoo, & Ayesu, 2022). Due to information asymmetry, banks may out bad loans from the preliminary/initiation stage of the loan process, therefore, banks' financial performance may be impacted by credit risk.
- **Theory of Moral Hazard:** This theory is closely linked to Information Asymmetry. A moral hazard occurs in a situation where an economic actor has the incentive to increase its exposure to risk because it does not bear the full costs of that risk. For example, when a corporation is insured, it may take on higher risk knowing that its insurance will pay the associated costs. A moral hazard will arise when there is a change in one party's behavior after signing the contract.
- **Theory of Adverse Selection:** This refers to the situation where sellers have more information than buyers have, or vice versa, about some aspect of product quality. Adverse selection occurs when asymmetric information is exploited and distorts the market and leads to market failure. Borrowers will normally have more accurate information about their ability to repay a loan but may only give information that will favour them in the loan application process.
- **Loan Pricing Theory:** Actual loan cost, profit expectation, monetary policy rates and risk premium are the key determinants of loan pricing. The problem of moral hazard, adverse selection, and asymmetric information should be considered when setting loan rates to ensure interest income maximization (Stiglitz & Weiss, 1981). The pricing of a loan affects the overall volume of loans that will be disbursed and by extension the credit risk to be borne by the bank (Kwashie, Baidoo, & Ayesu, 2022).
- **The Agency Theory:** Agency theory explains the relationship between business principals and their agents and focuses on scenarios where one delegate some decision-making authority to the other. The agent represents the principal in business transactions and is expected to advocate the best interests of the principal. This arrangement comes with agency costs to the bank. The credit risk arising from agency arrangements increases when shareholders get involved in the financing of investment decisions exacerbated by conflicts of interest. Banks may make tremendous gains from the success of these risky financial investments while the credit losses from these investments, will entirely be borne by the bank and affects its financial performance.

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C. Empirical Literature:

There have been several studies related to the link between banks' performance and credit risk.

(Nwude & Okeke, 2018), assessed the impact of credit risk management on the performance of deposit money banks in Nigeria using five banks with the highest asset base using ex-post facto research design on data from the period 2000–2014. The study showed that credit risk management (Non-performing Loans and Total Assets) had a positive and significant impact on total loans and advances, the return on assets, and the return on equity of the deposit money banks. The study recommended that bank managers need to put more effort to control non-performing loans by critically evaluating borrowers' ability to repay.

(Mayowa & Ehi, 2019), investigated the relationship between credit risk management and the performance of Deposit Money Banks (DMBs) in Nigeria over the period from 2006-2016 using the dynamic Generalized Method of Moments (GMM) and Granger causality techniques. According to the study, there is a direct and statistically significant relationship between DMBs credit risk management variables represented by capital adequacy ratio, non-performing loan ratio, and loan loss provision ratio and, performance-related variable represented by return on asset. However, the study also found that there is a significant inverse relationship between liquidity ratio and DMBs performance which indicates that excess liquidity not properly deployed into credit facility will lead to a reduction in the financial performance.

(Echobu & Okika, 2019), examined the impact of credit risks on the financial performance of listed DMBs in Nigeria, from 2006-2017 using data from audited financial reports of all the 15 listed DMBs in Nigeria as on 31 December 2017. Regression analysis showed that non-performing loans and impairment charge-offs have a negative and significant impact on the financial performance of banks. The impact of capital adequacy on financial performance was negative and statistically insignificant. The study recommended that DMBs should improve their risk management strategy to reduce loan defaults.

(Laar & Adjei, 2020), adopted explanatory research design using census sampling from the audited annual report of four banks. The results of the regression analysis indicated that credit risk has a negative relationship to the performance of the banks. Credit risk has a negative relationship with capital adequacy ratio, asset quality, management quality, earnings, profitability as well as liquidity. Therefore, deterioration in credit risk means bad credit risk management and improved credit risk management will result in improved financial performance.

Afolabiet. al (2021) investigated the effect of non-performing loans; total loans and advances; loan loss provisions as well as equity/shareholders' funds on the performance of deposit money banks in Nigeria. The study used a panel research design and panel data from 2009 to 2018 obtained from the annual reports of the sampled banks. The study discovered that a percentage change in Equity or Shareholders' fund increased profitability (ROA) by about 19%. It was also revealed that a percentage change in loan to deposit ratio reduces profitability by 3% while a percentage change in Non-Performing loan increases profitability by 7%. The study, therefore, recommends that Banks in Nigeria should monitor their loans and advances and avoid a mismatch between their assets and liabilities to safeguard their banks from sub-optimal credit decisions.

(Kaimu & Muba, 2021), studied the relationships between credit risks and the performance of 15 commercial banks in Tanzania between 2005 and 2019. The fixed and random effects models were used to determine the relationship while Hausman Test was used to determine the appropriate model. The findings reveal that credit risk has both negative and positive relationships with the proxies used for performance and that non-performing loans impact negatively on the return on assets. The study recommended that commercial banks in Tanzania should handle credit risk and management of capital adequacy closely to have better financial performance.

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(Kwashie, Baidoo, & Ayesu, 2022), investigated the impact of credit risk represented by non-performing loans on the financial performance of commercial banks in Ghana while using return on asset and economic value-add as measures of financial performance. Panel data spanning the period 2013 to 2018 across 15 commercial banks in Ghana were used for the analysis. The results from the random effect estimation technique showed that non-performing loans have a negative impact on both measures of financial performance.

D. Gap in Literature:

The Central Bank of Nigeria has recently increased the Loan-to-Deposit ratio to 65% but information within the banking sector recognizes that a lot of deposit money banks liquidity are currently trapped in the central bank under the Cash Reserve Requirements which makes it difficult for the banks to meet the LDR of 65%. Since the CRR is a key determinant of liquidity in the Nigerian banking sector, there is need to assess the impact of CRR on credit risk in addition to the popular variables like Loan losses provision, Impairment charges and others.

CHAPTER THREE

METHODOLOGY

A. Preamble:

This paper considered existing published news articles related to the impact of credit risk management on bank performance. While this study considered principally the relationships between the various components of the applicable variables measured within Nigeria, the study also considered empirical analysis from other climes to align the conclusions reached. This review will follow a three-way approach and progress as follows:

B. Search for relevant literature:

This process involves the search for relevant literature and empirical works from researchers and industry expert opinions published in periodicals and academic journals. The search strategy used keywords such as Credit risk, financial performance, non-performing loans economic value-add, return on assets, return on equity, loan loss provision, and total assets to isolate relevant literature for the study.

C. Review and observe the pattern:

This involves a review of the literature and aggregating the key themes to enable us to opine on relationships between the research questions and the views expressed in the articles and literature. Also, this review article was developed along salient themes drawn, and as thoughts, perspectives, and or implications established from the consulted literature.

D. Use of the literature:

The third stage is to format and present the result of the survey from the various literature and the findings will be used to answer the research question. Lastly, it is noteworthy that evidence of conceptual narrative(s)/meta-narrative(s) procedure which is a research method for review of articles used in this research is laid out by (Burton, 2014)and(Snyder, 2019).

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CHAPTER FOUR

FINDINGS

A. Preamble

Due to time limitations and the availability of research on the subject matter, collating views from the empirical findings will give a consolidated insight into the impact of credit risk management on the financial performance of banks in Nigeria.

The result of the empirical research related to this study can be summarized in the table below for ease of analysis:

S/N	Researcher	Performance Variables	Credit Risk Variables and Relationships	Conclusion
1	Nwude and Okeke, 2018	Total Loans; Return on Assets, Return on Equity	Non-performing loans; Total Assets	There is a positive and significant impact of the Credit risk variables on the performance variables. The lower the value of the CRM, the better the performance.
2	Mayowa and Ehi, 2019	Return on Asset	capital adequacy ratio, non-performing loan ratio, loan loss provision ratio	There is a direct and statistically significant relationship between DMBs credit risk management variables and the performance variable
3	Echobu and Okika, 2019	Return on Asset	Non-performing loan, Capital Adequacy, Impairment Loan Charge,	Non-performing loans and loan impairment written off have a negative and significant impact on financial performance and capital adequacy was insignificant.
4	Laar and Adjei, 2020	Return on Assets	Capital Adequacy - CAR, Asset Quality - AQ, Management Quality - MQ, Earning Efficiency -EE, Liquidity ratio - LR	CRM has a negative relationship with performance in the banking sector. ROA related negatively with CAR, AQ, MQ, EE and LR. The concept is that an increase in CRM means bad credit risk management and vice versa.
5	Afolabi et. al, 2021	Return on Asset	NPL - Non-performing loan ratio, CAR -Capital Adequacy ratio, IMPLR - impaired loan reserve ratio, LIMPC - loan impairment charges	Bank performance is influenced by credit risk, but shareholders' funds and loan-to-deposit ratio are variables that significantly influence bank performance compared to NPL, CAR, IMPLR and LIMPC.
6	Kaimu and Muba, 2021	Return on Asset	NPLR = Non-performing Loans; LLPR = Loan Loss Provision Ratio; CAR = Capital Adequacy Ratio;	A significant negative relationship exists between NPLR, and a positive CAR relationship,

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			BAS = Bank Asset	
7.	Kwasie, Baidoo and Ayesu, 2022	Return on Assets, Economic Value-Added	non-performing loans, capital adequacy ratio, and loans and advances ratio while SIZE, AGE, GDP, INF, and MPR were used as control variables	Non-performing loans have a negative impact on both measures of financial performance. Bank size, age, and GDP have a significant positive effect on both measures of financial performance although significant for return on asset.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATION

A. CONCLUSIONS

From the review of relationships between Credit Risk Management and Banks' performance, it can safely be concluded as follows:

- Return on assets is the overarching measure of performance while loan loss ratio is used as a measure of credit risk across all the empirical studies conducted and reviewed in this work.
- All the researchers referenced in this study are unanimous that the Non-performing loan ratio has a negative but significant relationship to performance measures. This means that the higher the non-performing loans in a bank, the lower the performance as such non-performing loans will be written off and negatively impact the profit and loss and ultimately, the return on assets. The asset quality is determined by loan loss provisions and impairment charges.
- Besides the foregoing, some researchers also considered Capital Adequacy as a measure of Credit Risk given that there is the tendency to increase credit portfolio as capital adequacy increases. However, there are different conclusions as to the direction of the impact of the Capital Adequacy Ratio - Kwasie, Baidoo, and Ayesu, 2022 found a positive but insignificant relationship to ROA but a negative and significant relationship to Economic Value-added, Kaimu, and Muba, 2021 agreed that CAR relationship is positive as well while Laar and Adjei, 2020 found a negative trend.
- There are other control variables that were introduced by some researchers but the impact of these variables is moderated and mixed as per the table above.

B. Recommendation:

Given the near unanimity in findings from several researchers, this study recommends the following:

- Future studies should take into account other variables that are peculiar to Nigeria such as CRR and LDR to demonstrate the real impact and make policy advocacy to create a sustainable credit portfolio that meets the need of the economy.
- Data used for future analysis should be significant and not less than 10 years to capture more seasonal trends and ensure the elimination of biases due to a short period as was the case with some of the studies considered in this review.

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REFERENCES

[1.] Afolabi, M. A., Salahudeen, S. O., Kamar, A., & Emeje, S. (2021). Credit Risk and Bank Performance in Nigeria: A Panel Analysis Approach. *International Journal of Multidisciplinary Sciences and Advanced Technology*, *2*(1), 44-53.

[2.] Burton, L. D. (2014). Doing research (part 1): Finding a problem to investigate. *Journal of Research on Christian Education*, 23(1): 1-4.

[3.] Chiemeka, S. C., Evwiekpaefe, A. E., & Chete, F. O. (2006). The Adoption of Internet Banking in Nigeria: An Empirical Investigation. *Journal of Internet Banking and Commerce, 11*(3), 1-10.

[4.] Echobu, J., & Okika, N. P. (2019). Credit Risks and Financial Performance of Nigerian Banking Industry. *Amity Journal of Finance*, 44-57.

[5.] Kaimu, A., & Muba, S. (2021). The Relationship between Credit Risk and Financial Performance: Evidence from Commercial Banks in Tanzania. *East African Journal of Business and Economics*, 22-33.

[6.] Kusi, B. A., Agbloyor, E. K., Gyeke-Dako, A., & Asongu, S. A. (2020). Financial Sector Transparency and Net Interest Margins: Should the Private or Public Sector lead Financial Sector Transparency?. *Research in International Business and Finance*.

[7.] Kwashie, A., Baidoo, S., & Ayesu, E. (2022). Investigating the Impact of Credit Risk on Financial Performance of Commercial Banks in Ghana. *Cogent Economics & Finance*, 10 - 25.

[8.] Laar, J., & Adjei, L. (2020). Assessing the Effects of Credit Risk Management on Financial Performance of Selected Banks in the Ghana Stock Exchange. *Research Journal of Finance and Accounting*, 79-100.

[9.] Mayowa, G. A., & Ehi, P. (2019). Relationship Between Credit Risk Management and Performance of Deposit Money Banks (DMBs) In Nigeria. *African Review of Economics and Finance*, 157 - 175.

[10.] Nwude, E., & Okeke, C. (2018). Impact of Credit Risk Management on the Performance of Selected Nigeria Banks. *International Journal of Economics and Financial Issues*, 287-297.

[11.] Ojo, A. T. (2010). *The Nigerian Maladapted Financial System: Reforming Tasks and Development Dilemma.* Lagos: Chartered Institute of Bankers of Nigeria (CIBN) Press Limited.

[12.] Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 333-339.

[13.] Stiglitz, J. E. (2002). Information and the change in the paradigm in economics. *American Economic Review, 92*(3), 460–501.

[14.] Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Economic Review, 71*(3), 393–410.