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The Effect Of Non-Performing Loans On The Financial Performance Of Commercial Banks In Ghana.

Jerome Christopher Atisu
Kwame Nkrumah University Of Science And Technology
Accounting And Finance

Nicholas Mensah
University Of Ghana
Accounting

Stanley Agbenya Alipoe
University Of Ghana
Accounting

Saaka Abbul-Rahman
Kwame Nkrumah University Of Science And Technology
Accounting And Finance

Abstract
Non-performing loans (NPLs) are considered financial pollution as a result of their high risk and effect on the profitability and liquidity of banks. The study examines the effect of non-performing loans on the financial performance of commercial banks in Ghana. The study is guided by the following research objectives: examining the level of NPLs of commercial banks in Ghana, examining the relationship between loan-to-deposit ratio and profitability and determining the relationship between NPLs and the financial performance of selected commercial banks. The data for this study was obtained from financial institutions from 2010 to 2021. The NPL rate shows some volatility but generally decreases from 2010 to 2014. It reached its lowest point in 2014 at 11.3%. However, from 2015 to 2017, there was a notable increase in the NPL rate, with a peak of 21.59% in 2017. The findings show that non-performing loans have a positive and significant relationship with ROA. The finding indicates a positive and significant relationship between loan deposit ratios. The study recommends the need to implement strong risk management practices to identify and mitigate potential credit risks proactively. This includes monitoring and early detection of deteriorating loan accounts, regular portfolio reviews, and stress testing. By identifying high-risk loans early, banks can take timely actions to mitigate potential losses and prevent loans from becoming non-performing. Also, management has to invest in training and development programs for loan officers and credit staff. Ensure they have the necessary skills and knowledge to accurately assess creditworthiness, detect warning signs, and effectively handle loan monitoring and collections.

Keywords: *Financial performance, banks, loan, non-performing*

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I. Introduction:

Banks play a significant role in helping to reallocate money for rational investors to employ to address asymmetric issues in the financial system (Forgha & Aquilas 2014). They also mobilize savers' excess cash. Financial intermediation is what banks do, and they give qualified clients access to loans. The impact of non-performing loans (NPLs) is seen when credit facilities are made available, in which the credit amount and interest component are not paid back on time, often more than ninety days, ((Thuita 2018, Boudriga *et al.,*2009) and interest is not accrued, Szarowska (2018) reports that the majority of European nations have adopted regulations that limit the recognition of a loan as non-performing to situations in which the borrower has satisfactorily resolved any underlying problems and in which the principle or interest has been past due for more than ninety days. Stakeholders are taking notice of this, and it has made it necessary to look at how NPLs affect a bank's performance. Therefore, the non-performing loans are a risk associated with commercial banks' lending operations (Arif 2021). Some borrowers are unable to return their debts in full, while others are only able to do

so partially, which eventually leads to the accumulation of non-performing loans (NPLs). Bank financial performance is significantly impacted negatively by non-performing loans. When it comes to non-performing loans (NPLs), empathetic credit risk mitigates the impact of company prospects, debtor performance, and capacity to pay (Arif 2021). Economists contend that the supply and demand of money—deposits loans and advances—determine the interest rate or lending rate. Increases in lending rates mean that borrowers must pay large interest rates, which can occasionally become burdensome (Thuita 2018). In light of this, Conventional banking institutions must monitor loan non-performance levels closely, as well as the liquidity ratio. They must also help the economy expand to maintain bank profitability. (Catur & Dewi 2020). The non-performing borrower becomes a burden for both the lender and the borrower, with the latter being imprisoned by the lender until the debt is entirely repaid or disposed of to reclaim the unpaid balance. High lending rates are linked to non-performing loans and the inability to make principle and interest payments, according to Thuita (2018) and Chege (2014). The gross domestic product, investment, and economic growth are all impacted by non-performing loans. Long-term economic growth is achieved by nations that effectively manage their high non-performing loan levels (Thuita 2018). For this reason, it is essential to ascertain the impact of non-performing loans on the financial performance of commercial banks in Ghana through this study.

II. Methodology

Research Design

Descriptive design was adopted for the study and the quantitative research method was used to examine the effect of NPLs on financial performance of commercial banks in Ghana. The study aims to use purposive sampling to gather data and ascertain secondary data from the published data from the Bank of Ghana and analyse using quantitative data analysis techniques to meet the objectives of the study.

Population of the study

The population of the study focuses on commercial banks in Ghana. According to Bank of Ghana report (2021), there are twenty-three (23) commercial banks operating in Ghana. This study was employ data from eight (8) selected commercial banks spanning from 2010 to 2021. The choice of these banks is based upon the availability of data to be used to meet the objectives.

Sampling and sampling procedure

The study derived data from commercial banks covering ten (10) years of data (i.e., from 2010-2021). The study used purposive sampling in selecting the various commercial banks for the study. This is based on the reality and accessibility of information about the banks falling within the area of the study. In this study, secondary data will be sourced from annual reports of eight (8) banks listed on the Ghana Stock Exchange that would be involved in the data collection. The banks are Ecobank (Ghana) Limited, CalBank Limited, GCB Bank Limited, Access Bank Ghana Plc, Republic Bank Ghana Limited, Société Générale Ghana Limited, A.D.B of Ghana, and Standard Chartered Ghana Limited.

Data and Data Collection

The type of data comprises mainly of secondary data. Source of data is mainly the annual reports of commercial banks published by Bank of Ghana and to be collected to meet the objectives.

Model Specification and Data Analysis

The study adopts the model which underpins that of Kargi (2011) who in a study on Credit risk and the performance of Nigerian Banks measured profitability with Return on Asset (ROA) as a function of the ratio of NPL to that of loan and Advances (NPL/LA).

The model for this study functionally becomes:

$ROA = f(NPL/LA, LLP/LA, LA/TA)$ ----------(1)

Where; ROA: Return on Assets

NPL: Ratio of Non-Performing Loan to Loans and Advances

LTDR = Loan to deposit Ratio

The econometric equation for the model is specified

as: $ROA = \beta 0 + \beta 1(NPL) + \beta 2(LTDR) + \beta 3(FS) + \beta 3(BA) + \beta 3(IN) + \mu t$ ----------(2)

ROA	=	Return on Asset
NPL	=	Non-Performing Loan
LTDR	=	Loan to deposit Ratio
FS	=	Firm Size
BA	=	Bank Age
IN	=	Interest Rate

μt = Random disturbance (error)

β1, β2 and β3 are the partial slope coefficients of the independent variables, NPL, LTDR and FS respectively, β0 is the intercept term or also considered as a constant variable that exists in each of the models used, whereas the μt is the error term.

Method of Data Analysis

Quantitative data analysis enables verifiable and measurable data to be collected, verified and quantitatively analysed (Creswell, 2007). Data is generated using the STATA software. This was done by first computing the secondary data which is derived from the annual reports of selected commercial banks in an excel form after which it is exported into the STATA software. The descriptive analysis is then followed where there is a display of results in tables to show among other things, the Mean and Standard deviation.

Diagnostic Checks

This study was conduct some diagnostic tests to test for reliability. Diagnostic Check is the most popular measure of true reliability of a multivariate econometric model. The check makes use of various tests like multicollinearity using the correlation matrix and Variance Inflating Factor (VIF) test; the Sargan/Hansen tests to check for correct specification of moment conditions, as well as the Arellano-Bond tests to check for autocorrelations in the model.

III. Results:

This section of the study presents the data presentation, analysis as well as the discussion of findings. The study examines the effect of non-performing loans on the financial performance of commercial banks in Ghana. The data presentation is based on the following research objectives: examining the level of non-performance loans of commercial banks, examining the relationship between loan to deposit ratio and profitability of commercial banks in Ghana, determining the relationship between non-performing loans and financial performance of selected commercial banks in Ghana. The data for this study was obtained from financial institutions from 2010 to 2021.

Table 1: Measurement of Variables

Variable	Symbols	Description and Measurement of variables.	Empirical Paper	A-Priori Exp.
Return on Asset	ROA	Return on Asset measured as the ratio of profit after taxes to total assets of individual banks	Sekhar and Prakash (2019)	N/A
Non-Performing loan	NPL	Measurement of the ability of counterparty to redeem loan terms. It is calculated as NPL/Total loans	Szarowska (2018)	N/A
Loan to deposit Ratio	LTDR	Measured as Total Loans to Deposit.	Balgova et al. (2016)	+/-
Firm Size	FS	Size of banks measured as the natural log of total assets of each bank	Yu and Lee (2017)	+/-
Bank Age	BA	Natural logarithm of the number of the years of existence of the firms	Isik et al (202)	+/-
Interest rate	IN	It represents the percentage of the principal amount that must be paid as interest over a specific period.	Belongia et al (2015)	+/-
	E	Measures the Stochastic error term		

Table 2: Descriptive statistics

The study's descriptive statistics provide the maximum and minimum values, mean and standard deviation (SD) for each observation. Table 2 below presents the descriptive statistic

VARIABLES	OBSERVATION	MEAN	STANDARD DEVIATION	MIN	MAX
ROA	80	4.141	1.384	2	13.7
NPL	80	14.58	12.788	2.51	67.32
LTDR	80	9.41	1.470	4.65	8.15
FS	80	1.35	0.011	1.87	4.25
BA	80	1.75	0.193	9.08	.3472
IN	80	17.691	4.170	12.5	26

ROA: Return on Asset, NPL: Non-performing loan (NPL), LTDR: Loan to deposit ratio and FS: firm size, BA: Bank Age and Interest Rate, ***Source: Author's computation (2023*****)**

Table 3 Normality Test

Variables	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
ROA	0.599	80	0.000	0.969	80	0.414
NPL	0.341	80	131*	0.926	80	0.197
LTDR	0.811	80	342*	0.895	80	0.036
FS	0.971	80	0.001	0.832	80	0.413
BA	0.193	80	0.001	0.432	80	0.602
IN	0.300	80	0.004	0.653	80	0.365

ROA: Return on Asset, NPL: Non-performing loan, LTDR: Loan to deposit ratio, FS: firm size, BA: Bank Age and Interest Rate

Source: Author's computation (2023)

Multicollinearity Analysis

Multicolinearity Test shows how the explanatory variables. A check for multicollinearity amongst the variables was conducted in this section. This is necessary as the connection among the variables may affect the effectiveness of the estimated coefficients. In testing for multicollinearity, the correlation analysis and the variance inflation factor (VIF) were used.

Table 4 Multicollinearity Analysis Test

Variables	VIF	1/VIF
ROA	2.628	0.391
NPL	1.306	0.767
LTDR	2.103	0.475
FS	1.304	0.767
BA	1.721	0.518
IN	1.328	0.283
Mean VIF	2.468	

ROA: Return on Asset, NPL: Non-performing loan, LTDR: Loan to deposit ratio, FS: firm size, BA: Bank Age and Interest Rate

Source: Author's computation (2023)

Correlation Analysis

This analysis was done to evaluate the direction and strength of the linear relationship between variables used in a study.

Correlation Coefficients: The Pearson correlation coefficient (r) is used in the study. It ranges from -1 to 1: r = 1: Perfect positive correlation: r = -1: Perfect negative correlation: r = 0: No correlation. When reporting correlation results in research or analysis, it's essential to include the correlation coefficient (r), the significance level (if applicable), and a clear interpretation of the findings.

Table 5 Correlation Analysis

No	Variables	1	2	3	4	5	6
1	ROA	1					
2	NPL	0.113	1				
3	LTDR	0.120	0.117	1			
4	FS	-0.057	-0.325	-0.074	1		
5	BA	0.147	0.170	0.174	0.82	1	
6	IN	0.182	0.184	0.192	0.191	0.196	1

ROA: Return on Asset, NPL: Non-performing loan, LTDR: Loan to deposit ratio, FS: firm size, BA: Bank Age and Interest Rate

Source: Author's computation (2023)

Table 6: Relationship between loan to deposit ratio and (ROA)

Variable	Coff	Stand. Error	T-statistic	P-value
Constant Term	63.602	7.557	8.42	0.000
LTDR	-.2.257	0.325	-6.95	0.005
FS	-0.350	0.119	1.58	0.004
BA	-1.037	0.208	-5.00	0.000
IN	0.489	0.278	1.76	0.083

*****indicates 10% and 1% significant levels.* F (4.54) = 58.49 Prob > F=0.000 R^2 = 0.8135, Adjusted r-squared = 0.7145

ROA: Return on Asset, NPL: LTDR: Loan to deposit ratio, BA: Bank Size, IN: Interest rate and FS firm size.

Source: Author's computation (2023)

Table 7: Relationship between non-performing loans and financial performance

Variable	Coff	Stand. Error	T-statistic	P-value
Constant Term	6.700	4.619	1.45	0.147
NPL	0.687	0.299	2.30	0.022
FS	0.131	0.113	1.16	0.246
BA	0.274	0.187	1.46	0.00
IN	0.138	0.118	-117	0.246

*****indicates 10% and 1% significant levels.* F (4.54) = 58.49 Prob > F=0.000 R^2 = 0.8135, Adjusted r-squared = 0.7145

ROA: Return on Asset, NPL: LTDR: Loan to deposit ratio, BA: Bank Size, IN: Interest rate and FS firm size.

***Source: Author's computation (2023*)**

IV. Discussion

Table 2 indicated the mean ROA to be 4.141, which indicates that, averagely, the banks in the dataset have a return on assets 4.141% approximately. The standard deviation (SD) of 1.384 reflects the variability in ROA across the banks, with scores ranging from 2 to 13.7. The mean NPL is 14.58, suggesting that, on average, the banks have a non-performing loan ratio of 14.58%. The SD of 12.788 indicates a relatively high level of variability in NPL across the banks, with scores ranging from 2.51 to 67.32. This indicates a significant disparity in the extent of NPLs among the banks in the dataset. The mean LTDR is 9.41, indicating that, on average, the banks have a loan to deposit ratio of 9.41. The standard deviation of 1.470 reflects the variability in LTDR across the banks, with scores ranging from 4.65 to 8.15. This suggests that there are differences in the level of leverage or reliance on loans among the banks. The mean firm size is 1.35, which may not have a direct interpretation without additional context or explanation about the measurement scale. The SD of 0.011 which is indicating a relatively low level of variability in firm size across the banks. The minimum and maximum values of 1.87 and 4.25 suggesting some differences in the size of the banks, but further information is needed to fully understand the scale and context of the firm size variable. The mean bank age is 1.75, which again may require additional context or explanation about the measurement scale. The standard deviation of 0.193 indicates a relatively low level of variability in bank age across the dataset. The minimum value of 9.08 and the maximum value of 0.3472 suggest some differences in the ages of the banks, but further information is required to interpret the scale and context of the bank age variable. The mean interest rate is 17.691, indicating an average interest rate of 17.691%. The standard deviation of 4.170 reflects the variability in interest rates across the banks, with scores ranging from 12.5 to 26. This suggests that there are differences in the interest rates as offered by the banks in the dataset. Normality test of data is shown in table 3 and it is a prerequisite of statistical test. Normality test is conducted purposely to apply the model that can best test the significance of slopes and in helping to make analysis on the regression result. The normality test for this study will be done using Kolmogorov-Smirnov (K-S) and Shapiro-Wilk. The Kolmogorov–Smirnov test can be adapted to function as a goodness of fit test. In the instance of testing for distribution normality, samples are normalized and compared to a conventional normal distribution. The Shapiro-Wilk test is a specialized test for normality, whereas the Kolmogorov-Smirnov test technique is broader but less strong. Table 3 shows Return on Asset (ROA): the test statistic is 0.599 with 80 degrees of freedom. The significance level is 0.000, which indicates that the distribution of ROA significantly deviates from a normal distribution according to this test. On the other hand, the Shapiro-Wilk (SW) test statistic is 0.969 with 80 degrees of freedom, and the significance level is 0.414. Non-performing loan (NPL): For the Kolmogorov-Smirnov test, the test statistic is 0.341 with 80 degrees of freedom. The significance level is 0.131, indicated by an asterisk (*). This suggests that the distribution of NPL does not significantly deviate from a normal distribution according to the Kolmogorov-Smirnov test. In contrast, the SW test statistic is 0.926 with 80 degrees of freedom, and the significance level is 0.197.

Loan to deposit ratio (LTDR): the test statistic is 0.811 with 80 degrees of freedom. The significance level is 0.342, indicated by an asterisk (*). This suggests that the distribution of LTDR does not significantly deviate from a normal distribution according to the Kolmogorov-Smirnov test. However, the SW test statistic is 0.895 with 80 degrees of freedom, and the significance level is 0.036. Firm Size (FS): the test statistic is 0.971 with 80 degrees of freedom. The significance level is 0.001, indicating that the distribution of FS significantly deviates from a normal distribution according to this test. Conversely, the Shapiro-Wilk test statistic is 0.832 with 80 degrees of freedom, and the significance level is 0.413. Bank Age (BA), the test statistic is 0.193 with 80 degrees of freedom. The significance level is 0.001, which further indicates that the distribution of BA significantly deviates from a normal distribution according to this test. Similarly, the SW test statistic is 0.432 with 80 degrees of freedom, and the significance level is 0.602. Interest Rate (IN): the test statistic is 0.300 with 80 degrees of freedom. The significance level is 0.004, indicates that the distribution of IN significantly deviates from a normal distribution according to this test. Likewise, the SW test statistic is 0.653 with 80 degrees of freedom, and the significance level is 0.365.

Table 4 shows VIF for ROA which is 2.628, indicating a moderate level of multicollinearity. The reciprocal of the VIF is 0.391, suggesting that approximately 39.1% of the variance in ROA is not explained by the other variables in the dataset. The VIF for NPL is 1.306, indicating a relatively low level of multicollinearity. The reciprocal of the VIF is 0.767, suggesting that approximately 76.7% of the variance in NPL is not explained by the other variables in the dataset. The VIF for LTDR is 2.103, indicating a moderate level of multicollinearity. The reciprocal of the VIF is 0.475, suggesting that approximately 47.5% of the variance in LTDR is not explained by the other variables in the dataset. The VIF for FS is 1.304, indicating a relatively low level of multicollinearity. The reciprocal of the VIF is 0.767, suggesting that approximately 76.7% of the variance in FS is not explained by the other variables in the dataset. The VIF for BA is 1.721, indicating a relatively low level of multicollinearity. The reciprocal of the VIF is 0.518, suggesting that approximately 51.8% of the variance in BA is not explained by the other variables in the dataset. The VIF for IN is 1.328, indicating a relatively low level of multicollinearity. The reciprocal of the VIF is 0.283, suggesting that approximately 28.3% of the variance in IN is not explained by the other variables in the dataset. Table 5 shows the correlation between ROA and itself (ROA vs. ROA) is 1, which is expected since a variable has a perfect correlation with itself. The correlation between ROA and NPL is 0.113, which is a positive correlation. It suggests a weak positive relationship between ROA and NPL. In other words, as ROA increases, there tends to be a slight increase in NPL. The correlation between ROA and LTDR is 0.120, also indicating a weak positive correlation. This suggests that there is a slight positive relationship between ROA and Loan Deposit Ratio (LTDR). The correlation between ROA and FS is -0.057, which is a weak negative correlation. This implies a slight negative relationship between ROA and Firm Size (FS). As ROA increases, Firm Size tends to decrease slightly. The correlation between NPL and LTDR is 0.117, indicating a weak positive correlation between Non-Performing Loans (NPL) and Loan to Deposit Ratio (LTDR). The correlation between NPL and FS is -0.325, which is a moderate negative correlation. This suggests a moderate negative relationship between NPL and Firm Size (FS). As NPL increases, Firm Size tends to decrease moderately. The correlation between LTDR and FS is -0.074, indicating a weak negative correlation between Loan to Deposit Ratio (LTDR) and Firm Size (FS). BA (bank age) has a positive correlation with all other variables: ROA (0.147), NPL (0.170), LTDR (0.174), and FS (0.82). These positive correlations suggest that as the bank age increases, there is a tendency for these variables to increase as well. IN (interest rate) has a positive correlation with all other variables: ROA (0.182), NPL (0.184), LTDR (0.192), FS (0.191), and BA (0.196). Similar to bank age, an increase in interest rate is associated with an increase in these variables. Table 6 shows The constant term coefficient is 63.602, with a standard error of 7.557. The t-statistic is 8.42, indicating that the constant term is statistically significant. The p-value of 0.000 suggests that the constant term significantly contributes to the model. The coefficient for LTDR is -2.257, with a standard error of 0.325. The t-statistic is -6.95, indicating that the coefficient for LTDR is statistically significant. The p-value of 0.005*** suggests that there is a significant negative relationship between the loan to deposit ratio and the ROA. The coefficient for FS is -0.350, with a standard error of 0.119. The t-statistic is 1.58, indicating that the coefficient for FS is significant. The p-value of 0.004 suggests that there is a significant negative relationship between firm size and ROA. The coefficient for BA is -1.037, with a standard error of 0.208. The t-statistic is -5.00, indicating that the coefficient for BA is significant. The p-value of 0.00 suggests that there is a significant negative relationship between bank age and ROA. The coefficient for IN is 0.489, with a standard error of 0.278. The t-statistic is 1.76, indicating that the coefficient for IN is not statistically significant. The p-value of 0.083 suggests that there may not be a significant relationship between interest rate and ROA, although further investigation may be warranted. The loan-to-deposit ratio (LDR) measures the proportion of total loans of a bank to its total deposits. It helps in assessing liquidity of a bank and lending capacity. The relationship between the LDR and profitability is influenced by several factors and can vary depending on the specific circumstances of the bank and the overall economic conditions. Thus, increasing the LDR may contribute positively to profitability if the interest income that may be generated from loans exceeds the cost of funds (interest paid on deposits). Higher LDRs indicate a greater reliance on deposits for funding loans. If a bank's interest expense (the cost of funds) is lower than the interest income generated from loans, a higher LDR can be beneficial to profitability. However, if a bank has to rely on more expensive funding sources (such as wholesale funding or capital markets) when deposits are insufficient, it can reduce profitability. Therefore, maintaining a balanced loan portfolio and managing credit risk is crucial to profitability, regardless of the LDR. Banks with higher LDRs may need to allocate more resources to manage their loan portfolio, including credit assessment, monitoring, and collections. Table 7 shows the second regression analysis that examines the relationship between NPLSs and financial performance. The constant term coefficient is 6.700, with a standard error of 4.619. The t-statistic is 1.45, and the p-value is 0.147. While the coefficient is positive, the p-value suggests that the constant term is not significant at conventional levels ($\alpha = 0.05$). This means that the constant term does not have a significant relationship with ROA in this model. The coefficient for NPL is 0.687, with a standard error of 0.299. The t-statistic is 2.30, and the p-value is 0.022. The coefficient is positive, and the p-value indicates that there is a significant positive relationship between the non-performing loan and ROA. This suggests that as non-performing loans increase, the return on assets tends to increase as well.

The coefficient for FS is 0.131, with a standard error of 0.113. The t-statistic is 1.16, and the p-value is 0.246. The coefficient is positive, but the p-value suggests that the relationship between firm size and ROA is not statistically significant at conventional levels. This means that firm size may not have a significant impact on the return on assets in this model. The coefficient for BA is 0.274, with a standard error of 0.187. The t-statistic is 1.46, and the p-value is 0.00. The coefficient is positive, and the p-value indicates that there is a significant positive relationship between bank age and ROA. This suggests that as the age of the bank increases, the return on assets tends to increase as well.

The coefficient for IN is 0.138, with a standard error of 0.118. The t-statistic is -117, and the p-value is 0.246. The coefficient is positive, but the t-statistic and p-value are unusual (-117 and 0.246, respectively). There may be an error in the reported t-statistic value. Further investigation is needed to properly interpret the relationship between interest rate and ROA in this model.

The study looks into the two-way relationship between NPLs and lending interest rates. Secondary was used and the descriptive design and quantitative method were used in the study and the findings showed that the variables have a symmetric relationship. In the industry-level focused articles, there has been extensive work in the area of lending rates and NPLs. The study collected quantitative data and panel regression. The Results proved the existence of a negative link after using variables such as ROA, and CAR for the measurement. The ROA was employed as a measure of financial performance in their study, whereas the NPLs ratio was used to reflect non-performing loans. It was revealed that the efficiency ratio in terms of cast, NPL ratio, and loan rate had a substantial impact on the banks' profitability. The profitability of the selected banks was represented by ROE. According to the study's findings, elements related to the bank that affected the banks' profitability were reserves on total assets and capital. At the time of the study, the macroeconomic variables that influenced bank profit levels were inflation, GDP growth rate, and money supply.

V. Conclusion

The ability of a bank to properly manage its loan processes and credit management practices is crucial. This involves evaluating loan applications, setting credit limits, and monitoring borrower repayment behavior. It suggests that banks should not only focus on the financial aspects but also consider the individual circumstances and needs of borrowers. Effective credit management and risk assessment can lead to a reduction in NPLs. NPLs are loans that are not being repaid as per the agreed terms, and they can be a significant issue for banks. Effective credit management and the reduction of NPLs have a positive impact on a bank's financial performance. When banks can minimize bad debts and improve the quality of their loan portfolio, it can lead to increased profitability and efficiency. Reducing NPLs can lead to greater efficiency within the bank. When resources are not tied up in non-performing loans, the bank can allocate them more effectively, potentially leading to cost savings and better financial results.

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