



Content is available at: CRDEEP Journals
Journal homepage: <http://www.crdeepjournal.org/category/journals/ijrem/>

International Journal of Research in Engineering and Management (ISSN: 2456-1029)



Full Length Research Paper

Analysing the impact of Non-Performing Assets on Banking Performance

Ms. Dnyaneshwari Gadge¹; Dr. Pushparaj Kulkarni^{2*} and Dr. Vivek Pimplapure³

¹Student (MBA), Dr. Ambedkar Institute of Management studies & Research, Nagpur, India.

²Assistant Professor, Dr. Ambedkar Institute of Management studies & Research, Nagpur, India.

³Associate Professor, Dr. Ambedkar Institute of Management studies & Research, Nagpur, India.

ARTICLE DETAILS

Corresponding Author:

Dr Pushparaj Kulkarni

Key words:

Non-Performing Assets,
Return on Capital
Employed, Return on
Assets, Return on Equity

ABSTRACT

The analysis of Non-Performing Assets on banking performance is a critical examination aimed at understanding the impacts of Non-Performing Assets on the financial health and operational efficiency of banking institutions. Non-performing assets are loans or advances for which the borrower has stopped repaying the principle or interest after a predetermined amount of time, endangering the bank's asset quality. The research focused on analysing the non-performing assets which are affecting the banking performance and used statistical tools to analyse the data. The study's overall findings include the following: The analysis is a statistically insignificant negative association between Return on Capital Employed and Gross Non-Performing Assets and Net Non-Performing Assets, but a positive correlation between Return on Capital Employed and both Return on Assets and Return on Equity. Net Non-Performing Assets alone can account for about 44% of the fluctuation in Return on Equity; other factors account for the remaining 56%. Furthermore, while there was no significant difference in the means of Return on Capital Employed, there were substantial disparities in the means of Return on Assets and Return on Equity when compared to Net Non-Performing Assets. The statistical analysis strongly suggests a noteworthy relationship between Net Non-Performing Assets and Return on Equity. It underscores the importance for businesses to address and mitigate non-performing assets to improve their return on equity metrics and overall financial performance.

1. Introduction:

Good banking performance generally means that a bank is making money, keeping a solid balance sheet, and managing its resources well. On the other hand, subpar banking performance could be an indication of problems with low profitability, excessive risk, or insufficient capitalization. Banks frequently keep a careful eye on their performance indicators and, where needed, take action to enhance performance. Banking performance is influenced by both external (macro-financial and macro-economic) factors that represent the regulatory and economic landscape in which the bank works and internal factors that are unique to banks. Numerous researches attempted to explain the impact of one element on another on the banks.

The idea behind banking performance

Performance is often understood to mean meeting the goals set by the bank within the predetermined time structure, utilizing the resources at hand, and incurring the fewest expenses possible. The ability of a bank or other financial organization to efficiently manage its operations, obligations, and assets in order to meet its financial objectives is referred to as banking performance. This comprises metrics for risk management, asset quality, profitability, efficiency, and liquidity. Metrics like

* Author can be contacted at: ¹Department of Agricultural Economics, Federal University of Technology Owerri, Imo State, Nigeria

Received: 15-5-2024; Sent for Review on: 19-05-2024; Draft sent to Author for corrections: 10-06-2024; Accepted on: 26-06-2024; Online Available from 29-06-2024

DOI : [10.13140/RG.2.2.24648.53761](https://doi.org/10.13140/RG.2.2.24648.53761)

IJREM-7854/© 2024 CRDEEP Journals. All Rights Reserved.

return on equity (ROE), return on assets (ROA), net interest margin, loan-to-deposit ratio, non-performing loan ratio, and capital adequacy ratio are examples of key indicators of banking performance. Measuring bank performance is an essential part of evaluating the stability and health of financial institutions. In order to assess a bank's profitability, liquidity, efficiency, and overall risk management, a number of measures and ratios must be examined. Stakeholders, including investors, regulators, and consumers, can learn more about a bank's financial health and make wise decisions by examining these important signs. It also entails assessing how a bank manages its risks. By comparing a bank's non-performing loans to its tangible equity and reserves, the commonly used Texas Ratio measures the credit risk of the institution. Given that problematic loans make up a sizable amount of a bank's capital, a greater Texas Ratio is indicative of a larger danger of insolvency. Analysing a variety of quantitative and qualitative indicators is part of measuring banking performance since it allows one to assess various facets of a bank's operations, financial standing, and efficiency in accomplishing goals. These metrics assist interested parties in evaluating the bank's overall performance in providing customer service and fostering economic growth as well as its stability, profitability, efficiency, and asset quality.

Banks are the primary drivers of economic growth and have considerable influence over the amount of money in circulation, they play crucial roles in the economic development of countries. Economic development is a dynamic, ongoing process that heavily depends on investment, resource mobilization, and the operational effectiveness of the many economic sectors. Thus, a healthy banking industry is essential for economic expansion, wealth creation, job creation, poverty eradication, entrepreneurship, and GDP growth.

NPA is used by financial institutions that refer to loans that are in jeopardy of default the so called NPL. Once the borrower has failed to make interest or principal payments for 90 days the loan is considered to be a non performing asset depend on interest payments for income. Troublesome pressure from the economy can lead to sharp increase in NPLs and often results in massive write-downs. The banking industry has undergone a sea change after the first phase of economic liberalization in 1991 and hence credit management. While the primary function of bank is lead to lend funds as loans to various sectors such as agriculture, industry, personal loans, housing loans, etc., The banks have become very cautions in extending loans in recent times. The reason being the mounting non-performing assets.

Objectives:

- 1) *To Study the impact of NPA in banks.*
- 2) *To analyze the financial health of a bank.*
- 3) *To analyze various financial ratios of a bank.*

Hypothesis:

Null hypothesis: There is no significant impact of NPA on banking performance

Alternate hypothesis: There is a significant impact of NPA on banking performance

2. Review of literature:

(Gayakwad, 2021) - NPA not only impact the profitability of the banks but also affect their operational efficiency, increasing operating costs, and low loan sanctioning power because of a mismatch in liquidity and cash flows. when we compare the NPA level of private banks and public sector banks, the private sector banks have good control over managing NPA as compared to public sector banks. (Gaba, 2018)- A high level of NPAs suggests a large number of credit defaults that besides liquidity, adversely affects the profitability and net worth of a bank. The present study intended to assess the impact of NPAs on the profitability of the Indian banking industry with special reference to private sector banks.

(Jha, 2011-2018)- The problem of NPAs could be a major hurdle and live danger faced by banking industry, as a result of it destroys the healthy financial condition of the banks. Its right time to require appropriate and stringent measures to get rid of NPA problem. (Goel, 2017)- NPAs are point of no return as they do not generate any income, whereas, the banks are required to make provisions such as assets. (Ramaswami, 2020)- NPA (Non-Performing Asset) is a critical factor which has adversely impacted the development and growth of the economy. NPA is a critical factor which has adversely impacted the financial sector in India. NPAs affect the flow of credit which in turn affect the development and growth of the economy.

(Jones, 2016)- Non-Performing Assets affects not only the banking industry but the total financial system and there by the economy of the country. The economic growth of every country depends on the proper functioning of financial system of the country. (Roy, 2017)- the overall NPA position of all the banks is deteriorating over the years. Since there is a negative high degree correlation between GNPA and NNP, the profit gradually decreases as the GNPA grows which has become a serious concern right now. Provisioning can act as cushion for NPA losses but it can't be regarded as a solution for growing NPAs. (Hussain, 2021)- A high degree of NPAs signals a high risk of a significant number of loan defaults impacting bank's performance and net worth and even eroding asset value. NPAs in relative terms to get a better picture about their asset selection.

Research Question: "Are NPA Ratios affecting banking performance?"

Bank performance is greatly impacted by non-performing assets (NPAs), and examining this impact offers important insights into trends and patterns. NPAs are advances or loans that have ceased to be profitable for the lender, usually as a result of the borrower's failure to make interest or principal payments on time. NPA ratios significantly impact banking performance by indicating asset quality and risk exposure. Understanding this relationship is crucial for research to assess the health of financial institutions and ensure stability in the banking sector. By evaluating the effects of non-performing assets (NPAs) on banking performance may evaluate the efficacy of the risk management mechanisms that banks have put in place. This could involve actions like reorganizing loans, enhancing credit risk assessment or stepping up recovery efforts. More protective rules for NPA categorization and provisioning have been put in place by numerous regulatory authorities in recent times. The success of these adjustments in controlling and containing non-performing assets (NPAs) can be evaluated by examining their effects over the previous three years. A three-year trend analysis makes it possible to assess how well NPA recovery efforts are working. Legal actions, asset sales, and loan restructure are all included.

Due to a number of continuing and new causes that are affecting the financial landscape, research on the effects of non-performing assets (NPAs) on banking performance is still essential. Financial institutions, corporations, and individuals are all being impacted by the COVID-19 pandemic's outcome, which is still having an impact on the world economy. Because of the pandemic-caused economic slowdown, there were many job losses, company closures, and supply chain disruptions, which eventually affected the capacity of borrowers to repay their loans. Consequently, there has been a rise in non-performing assets (NPAs) for banks, potentially harming their overall financial stability, profitability, and strength of capital. To effectively manage risks and promote economic recovery, it is crucial to comprehend how non-performing assets (NPAs) impact banking performance during the post-pandemic recovery phase. The management of non-performing assets (NPAs) and banking performance are still impacted by regulatory reforms and shifts in macroeconomic policy. Increasingly, regulators are concentrating on increasing risk governance, improving transparency, and guaranteeing the stability of the financial system. Complying with regulatory obligations, evaluating systemic risks, and preserving investor trust in this context all depend on an understanding of how non-performing assets (NPAs) affect banking performance. Furthermore, by affecting variables like interest rates, inflation, and economic development, macroeconomic policies like fiscal and monetary stimulus plans can affect the frequency and severity of non-performing assets.

Development and prosperity of the economy depend on a strong and healthy banking industry. NPAs can seriously impair a bank's capacity to lend, which limits the amount of credit available to both individuals and enterprises. Determine any hazards to the financial system and take the appropriate action to mitigate them by analysing the impact of non-performing assets (NPAs). Following the interruptions caused by the COVID-19 epidemic, the world economy is still recuperating. Hidden difficulties in loan repayment may affect individuals and businesses and may have an effect on non-performing assets. Examining how NPAs affect the banking industry in this particular setting helps in determining how strong the industry is and where assistance may be required to ensure a smooth recovery.

3. Method

The study is conducted in India w.r.t., banking sector stocks which are listed on NSE, India. The study focuses on analyzing the impact of non-performing asset on banking performance ratios. The study has used a quantitative research design to collect data.

3.1 Sample design

Population- All listed banks on National Stock Exchange (NSE) of India (36), Sample size- (36) banks, sampling technique - Entire Population is studied

3.2 Research Design

The current study is based on secondary data collected from money control. A structured study was designed to collect information from sources. Secondary data was collected from various sources, such as Wikipedia, money control, RBI sides journals.

3.3 Data collection

3.4 Collection NPA and banking performance data from financial sides and financial statements. That the data is an important source of time in order to effectively capture trends and fluctuations. The data for the study will be collected from financial websites and articles. Secondary data will be collected from various sources such as company annual reports and stock market reports.

4. Results and Data Analysis

Table 1: Correlation Matrix

		Correlations				
		Return on Capital Employed	Return on Assets	Return on Equity	Gross NPA	Net NPA
Return on Capital Employed	Pearson Correlation	1	.460**	.318	-.216	-.291
	Sig. (2-tailed)		.005	.059	.205	
	N	36	36	36	36	36
Return on Assets	Pearson Correlation	.460**	1	.801**	-.682**	-.752**
	Sig. (2-tailed)	.005		.000	.000	.000
	N	36	36	36	36	36
Return on Equity	Pearson Correlation	.318	.801**	1	-.604**	-.663**
	Sig. (2-tailed)	.059	.000		.000	.000
	N	36	36	36	36	36
Gross NPA	Pearson Correlation	-.216	-.682**	-.604**	1	.730**
	Sig. (2-tailed)	.205	.000	.000		.000
	N	36	36	36	36	36
Net NPA	Pearson Correlation	-.291	-.752**	-.663**	.730**	1
	Sig. (2-tailed)	.085	.000	.000	.000	
	N	36	36	36	36	36

** Correlation is significant at the 0.01 level (2-tailed)

The positive correlation between ROCE and Return on Assets (ROA) is 0.460, significant at the level. The correlation between ROCE and ROE is 0.318, which is positive, but not significant at the 0.01 level. The negative correlation between ROCE and Gross Non-Performing Assets (GNPA) is -0.216, but it is not significant at the 0.01 level. The negative correlation between ROCE and Net Non-Performing Assets (NNPA) is -0.291, but it is not significant at the 0.01 level. Every other correlation shows a negative correlation and is significant at the 0.01 level.

Hypothesis testing: the null hypothesis of this research is “There is no significant impact of NPA on banking performance”. The Net NPA is taken as a measure of NPA in this regards.

ROE is independent of Net NPA (ROE is not explained by Net NPA)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.663 ^a	.440	.423	3.67186

a. Predictors: (Constant), Net NPA

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	359.655	1	359.655	26.676	.000 ^b
	Residual	458.407	34	13.483		
	Total	818.061	35			

a. Dependent Variable: Return on Equity

b. Predictors: (Constant), Net NPA

Result: We do not accept null hypothesis, here p value is 0.00 this value is less than 0.05 therefore we reject null hypothesis. The p value is 0.00 which indicates that there is a significant impact of NNPA on ROE. Approximately 44.0% of the variability in the dependent variable (ROE) is explained by Net NPA and the remaining 56% can be explained by the other variable, according to the R-squared value of 0.440 (Net NPA). The R-squared number is slightly higher than the adjusted R-squared value, which is 0.423. This could mean that, when taking into account the total number of predictors included, the Net NPA variable doesn't substantially increase the explanatory power of the model

ROA is independent of Net NPA (ROA is not explained by Net NPA)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.752 ^a	.565	.552	.41725

a. Predictors: (Constant), Net NPA

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.688	1	7.688	44.158	.000 ^b
	Residual	5.919	34	.174		
	Total	13.607	35			

a. Dependent Variable: Return on Assets

b. Predictors: (Constant), Net NPA

Result: We do not accept null hypothesis, here p value is 0.00 this value is less than 0.05 therefore we reject null hypothesis. The p value is 0.00 which indicates that there is a significant impact of NNPA on ROA. Approximately 56.0% of the variability in the dependent variable and the remaining 44% can be explained by the independent variable, according to the R-squared value of 0.565 (Net NPA). The R-squared number is slightly higher than the adjusted R-squared value, which is 0.552. This could mean that, when taking into account the total number of predictors included, the Net NPA variable doesn't substantially increase the explanatory power of the model.

ROCE is independent of Net NPA (ROCE is not explained by Net NPA)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.291 ^a	.085	.058	2.31674

a. Predictors: (Constant), Net NPA

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.856	1	16.856	3.141	.085 ^b
	Residual	182.487	34	5.367		
	Total	199.343	35			

a. Dependent Variable: Return on Capital Equity

b. Predictors: (Constant), Net NPA

Result: We will accept null hypothesis, here p value is 0.085 this value is greater than 0.05 therefore we accept null hypothesis. The p value is 0.085 which indicates that there is a no significant impact of NNPA on ROCE. Approximately 85% of the variability in the dependent variable and the remaining 15% can be explained by the independent variable, according to the R-squared value of 0.085(Net NPA). The R-squared number is slightly higher than the adjusted R-squared value, which is 0.58. This could mean that, when taking into account the total number of predictors included, the Net NPA variable doesn't substantially increase the explanatory power of the model.

5. Conclusion

The analysis reveals that while ROCE is positively correlated with ROA and ROE, the relationships are not uniformly significant. Additionally, while there are negative correlations with non-performing assets, they lack statistical significance. Thus, while these correlations provide insights into potential relationships, further investigation and consideration of other factors are necessary for informed decision-making and strategic planning. While Net NPA appears to have some explanatory power for ROE, its contribution to the model's overall predictive ability seems limited. Therefore, it might be prudent to reconsider its inclusion or explore ways to enhance its impact within the model. Additionally, further investigation into alternative variables or refining the model structure could lead to a better understanding of the factors influencing ROE.

The statistical analysis strongly suggests a noteworthy relationship between NNPA and ROE. It underscores the importance for businesses to address and mitigate non-performing assets to improve their return on equity metrics and overall financial performance. The finding underscores the importance of prudent credit risk management practices in maintaining a favorable Return on Equity. By addressing and minimizing Net NPA, the company can potentially enhance its financial performance and strengthen investor confidence.

6. References

- Gaba, M. A. (2018). Non - Performing Assets and Profitability: A Study of Private Sector Banks in India.
- Gayakwad, A. (2021). A study of npa and its impact on banking performance. NLDIMSR Innovation Journal Of Management Research.
- Goel, S. (2017). Measurement of correlations (NPA and ROA) of different banks and trend analysis of NPAs in Indian banks.
- Hussain, m. (2021). A Study Of The Impact Of Non-Performing Assets Of Indian Banking System On Selected Public Sector Banks.
- Jha, p. (2011-2018). Analysis of NPA among SBI bank and ICICI bank for operating (2011-2018).
- Jones, P.K. (2016). Effect Of Non-Performing Assets On The Profitability Of Banks – A Selective study.
- Krishnudu, c. (2021). Analysis of NPAs in banking sector - A case study of public and private sector.
- Patel, m. R. (2013). A study on non-performing assets management with reference to public sector banks, private sector banks and foreign banks in India .
- Ramaswami, D. R. (2020). Impact of NPA of profitability of bank.
- Roy, P. (2017). Analysis of non-performing assets in public sector banks of India.
www.moneycontrol.com
- Yadav, P. s. (2019). Impact of Non-Performing Assets (NPAs) on Assets Turnover Ratios of Punjab National Bank Limited.