© June 2026 | IJIRT | Volume 13 Issue 1 | ISSN: 2349-6002

# Financial Performance, Asset Quality and Non-Performing Assets of Selected Public and Private Sector Banks in India: A Comparative and Empirical Study with Special Reference to Ranchi District

Nishant Kumar[1], Dr. Sumita Roy[2], Dr. Ajay Kumar[3]
[1,2,3]*Department of Commerce, St. Xavier's College, Ranchi*

*Abstract*—**Banking institutions is the part of the financial institutions which provide the financial services to people, government, industries and other sectors of the country. Banks collects the deposits and lends the loans for the different purposes and growth. As there is the so much demand of loan and bank provide the loan to the customers without scanning credit appraisal of the customers, credit score and mismanagement of the banks led to bad debts for the banks. When borrower fails to repay the interest with the principal amount of the loan, it becomes the bad debts for the banks and after 90 days it transfers into the Non-Performing Assets. It calls NPA because it stops to generate income for the banks. In this research, researcher has study Financial Performances, NPA and Assets Quality of the banking system and make comparative analysis of public sector and private sector with special references of Ranchi District. To conduct this study researcher collects secondary data from the website of the Reserve Bank of India, Ministry of Finances, authorized journals and official websites. Researcher also collects the primary data by the help of questionnaires and the interview. This study finds that NPA of the public bank is more as compare to the private sector. Because of high NPA it reduces the profitability, liquidity and make poor assets quality. Financial Performances, Non-Performing Assets and Assets Quality can be improved by proper credit appraisal system, regular monitoring of loans, strict recovery procedure and by adopting strict banking norms. This study help banking institutions and government to make policy and proper decisions for future functioning.**

*Index Terms*—**Banking System, Non-Performing Assets, Financial Performances, Assets Quality, Loans, Financial Institutions**

## I. INTRODUCTION

1.1 Background of study

Banking is a financial institution which mobilize and allocate funds for the economic development of the country. Banking Institutions is a most important pillar of a financial system. It is a institutions where we not only save money but also it helps in economic and social development of a country. It mobilizes the fund and allocates the fund in a best effective and efficient manners. We have seen the growth of banking sector in our country significantly after the New Economic Policy of 1991. Although so much growth and digitalization there is serious challenges that banking sector have. Among them there are three most important problem that any bank suffer are their poor financial performance, increment of Non-Performing Assets and the poor Assets Quality of the Banks.

Financial performances of banks mean the available resources, deposits, profits, assets, investment and rate of return that bank earn in a financial year. In simple word financial performances says about the bank is financially strong or weak, profitable or loss making, and capability to handle future uncertainty.

Asset quality is another critical aspect of banking performance. Since loans and advances constitute a major portion of bank assets, the quality of these assets determines the stability and sustainability of banking operations. Poor asset quality increases credit risk, weakens financial strength, and adversely affects the confidence of depositors and investors.

One of the major factors affecting both financial performance and asset quality is the growth of Non-Performing Assets (NPAs). NPA means the loan

amount that is not repay on time and after 90 days from the due date it becomes NPA. When borrower do not pay principal and interest of the loan it directly effects on the profitability, financial performance and the assets quality of the bank. If NPA is continuously increase, it will make banking sector unstable and negatively effect on the economy.
To tackle the NPA problem, the Government of India and the Reserve Bank of India introduced measures such as the SARFAESI Act, Debt Recovery Tribunals (DRTs), Asset Reconstruction Companies (ARCs), and the Insolvency and Bankruptcy Code (IBC). These reforms have strengthened recovery mechanisms and contributed to improving asset quality and the financial performance of banks.
Main aim of this research is to study the NPA, Financial Performances and Assets Quality of selected public and private bank and make a comparative study. This study especially focusses on the Ranchi District, from which we can get practical insights.

1.2 Statement of the Problem
Indian banking sector has 3 most challenging factor that any bank suffer are their poor financial performance, increment of Non-Performing Assets and the poor Assets Quality of the Banks. this issues adversely affect the profitability, financial performances, stability of the bank. Most of the study focus on national level with less focus on regional studies. It's important to understand, how much NPA actually impact in the bank's efficiency and how much difference in the impact of the NPA in the private and the public banks. Many others study held in past, in different different context and their findings also vary. So, it is important to analysis with updated data so that we can make a realistic comparative study.

1.3 Significance of the Study
The present study provides the comparative understanding of financial performance, Non-Performing Assets and assets quality of selected private and public bank. This study helps us to identify, analyze and compare the differences in the effectiveness and efficiency of the banks of managing their NPA Assets Quality and financial performance.
This study will be helpful to the Reserve Bank of India, government of India and policymaker to formulate the rules and regulatory system to make policies to manage NPA. It is also helpful to banking sector to formulating strategies to improves credit appraisal, recovery mechanisms, and financial performance of banks.
Further it also helpful to the researcher, student and investor as it helps to understand the relationship between NPA, Financial Performances, Assets Quality. Along with this, it will also be helpful to future researcher use this study as a reference of their study.

1.4 Scope of the Study
The present study is confined to Ranchi District and covers a period of 25 years from 2000 to 2025. The study focuses on Financial Performance, Asset Quality and Non-Performing Assets of selected public and private sector banks. For the purpose of the study, two public sector banks, namely State Bank of India and Union Bank of India, and two private sector banks, namely HDFC Bank and ICICI Bank, have been selected. The study is based on both primary and secondary data collected through questionnaires, interviews, reports of banks, RBI reports, PIB reports, websites, government data, newspapers, articles and journals.

## II. LITERATURE REVIEW

Swandewi et al. (2021) explained that after the economic reforms of 1991, Indian banks faced intense competition due to globalization, liberalization, and privatization. The study highlighted that poor credit management and priority sector lending contributed significantly to rising NPAs. The implementation of prudential norms, income recognition, and asset classification systems improved banking regulation and NPA management.
V. Kumar and Khosla (2020) emphasized that increasing NPAs adversely affect banks' profitability, liquidity, and operational efficiency. The study highlighted the importance of recovery mechanisms such as the Insolvency and Bankruptcy Code (IBC), SARFAESI Act, and RDDBFI Act in strengthening loan recovery and reducing bad debts.
Sharma and Sharma (2019) observed that before economic reforms, banks focused primarily on branch expansion and rural development rather than asset quality. However, rising NPAs compelled banks to improve credit appraisal and recovery systems. The study concluded that effective NPA management is

essential for maintaining financial stability and profitability.

Rana and Desai (2019) conducted a comparative analysis of public and private sector banks and found that private banks generally maintained lower Gross and Net NPA ratios and achieved better financial performance. Public sector banks experienced weaker profitability due to higher NPAs, indicating a strong relationship between asset quality and financial performance.

Singh (2016) examined the impact of NPAs on profitability, liquidity, and overall banking performance. The study concluded that NPAs remain a serious challenge, particularly for public sector banks, and recommended stronger recovery policies and preventive measures.

Agarwala and Agarwala (2019) found that although NPAs increased significantly after 2011, regulatory measures such as RBI's stricter norms and the IBC helped slow their growth. The study also revealed that public sector banks and SBI reported higher NPAs than private sector banks.

Karunakar, Vasuki, and Saravanan (2008) highlighted that NPAs negatively affect profitability, liquidity, and operational efficiency. They stressed the need for a strong credit monitoring system and timely recovery of loans.

Berger and Humphrey (1997) stated that the intermediation approach is more suitable for measuring overall bank efficiency, while the production approach is better for evaluating branch-level operational and service efficiency.

Mishra (1992) examined the profitability of scheduled commercial banks and found that increasing investments in SLR and CRR raised expenses without a corresponding increase in interest income, affecting profitability.

Shinde and Kaveri (1992) emphasized the importance of identifying early warning signals and using both legal and non-legal recovery measures such as debt restructuring, compromise settlements, mergers, and write-offs.

Kaur (2011) also observed that while NPAs cannot be completely eliminated, they significantly affect both banking institutions and the broader economy through increased credit risk and financial instability.

Poonagavanam (2011) similarly suggested financial restructuring, Debt Recovery Tribunals (DRTs), Lok Adalats, SARFAESI Act, and recovery camps as effective tools for controlling NPAs.

Srivastava and Bansal (2012) found that although public sector banks had relatively high NPAs, asset quality improved over time due to preventive measures and better monitoring systems.

Balasubramaniam (2012) examined post-Narasimham Committee banking reforms and concluded that financial sector reforms, Basel norms, and improved asset classification systems enhanced banking stability and NPA management.

Chatterjee (2012) highlighted that low NPAs indicate strong financial health and effective asset quality management. The study found that public sector banks recorded higher NPAs compared to private and foreign banks.

Das and Dutta (2014) analyzed 26 public sector banks and concluded that poor credit appraisal, inadequate supervision, and weak recovery systems were the primary reasons for rising NPAs. Significant variations in NPA levels among banks reflected differences in management efficiency and risk management practices.

Wadhwa and Ramaswamy (2020) investigated the relationship between NPAs and profitability in public and private banks. Using correlation and regression analysis, they found a significant negative relationship between NPAs and net profit. Public sector banks were more adversely affected due to their higher NPA levels.

Khairi (2021) also reported that financial crises and economic factors increase non-performing loans, which negatively affect profitability and operational performance.

Patel (2015) analyzed the impact of NPAs on the Indian banking sector using various NPA ratios and statistical techniques. The study confirmed that public sector banks consistently reported higher NPA levels than private sector banks.

Tandon (2006) argued that globalization increased competition in the banking industry and forced banks to improve technology, capital adequacy, corporate governance, and customer-centric services while controlling NPAs and operating costs.

### 2.2 Summary of Previous Research

The studies conducted so far on the Non-Performing Assets (NPAs), asset quality and bank performance have shown that NPAs have a profound effect on bank's profitability, liquidity and overall efficiency. A study found that an increase of NPAs leads to loss of income for banks, provisions for banks and effects on their financial performance. Many studies have pointed to the need for properly managing credit, assessing credit risk and recovery procedures to manage NPAs.

It has also been argued in the literature that the functioning of the banking sector has been significantly enhanced by economic reforms, regulatory measures and prudential norms. Normally, studies have shown that Public Sector Banks and Private Sector Banks show that in terms of managing NPAs, they are performing better in the private sector because of having better credit appraisal and risk management practices, thus they are more profitable. Moreover, research into banking efficiency indicates that effective resource utilization, cost control and optimal efficiency in the daily operations of banks are vital in enhancing the performance of banks. In general, the literature reviewed proves that there is a strong relationship between asset quality and the financial performance of banks, highlighting the importance of adopting good NPA management strategies.

### 2.3 Identification of Research Gap

As per the literature survey, most of the previous studies conducted either on trend analysis of NPAs or made comparative studies between public banks and private banks. Most of the studies have been based on pre-reform data, and have not looked into the financial effects of asset quality changes. There has been little research that compares some selected public and private banks for a long time on recent data. Hence, the present study aims to identify the NPA trends, to compare financial performance of selected public sector banks and private sector banks and to evaluate the effectiveness of NPA management practices in the present banking scenario.

## III. RESEARCH GAP

Research Gap A lot of research has been already done on the topic Non-Performing Assets, Financial Performance and the Assets Quality, but all this research mainly focus on the national level. However, there is limited research which make a comparative study in Public and Private Bank in a particular regional context and in the current trends. As lot of study had occurred in Financial Performance, Assets Quality and NPA separately. There is not any integrated and comparative study with special references to Ranchi. Generally, all the previous research uses the secondary data which are previously collected and make interpretation and analysis as per previously collected data but there is no real time data. No one has done research on current causes of NPA as world is changing as per the time and technology and there are maybe some additional reasons which are also present for the causes of NPA.

## IV. RESEARCH QUESTIONS

1. What are the main causes of NPA in Ranchi?
2. Which sector bank (Private or Public) is more superior on the basis of financial performance?
3. What is the major Impact of NPA in economy?

## V. RESEARCH OBJECTIVE

- To analyze the trends of the NPA of past 25 years.
- To compare the financial performances of selected private banks and public banks.
- To assess the effectiveness of NPA management

## VI. HYPOTHESIS

H0 (Null Hypothesis) – There is no difference between Private and Public Bank on the Asis of Financial Performance, Assets Quality and Non-Performing Assets.

H1(Alternative Hypothesis) – There is difference between Private and Public Bank on the basis of Financial Performance, Assets Quality and Non-Performing Assets.

## VII. RESEARCH METHODOLOGY

Research Methodology is a systematic process of collecting data and relevant information by conducting proper research.

### 7.1 Data sources

Used For our study, we used the primary and secondary data. For collection of Primary Data conduct by the direct interview with the numerous branches of public bank (selected public bank is State Bank of India and Union Bank of India) and Private bank (selected private bank is ICICI Bank and Housing Development Finance Corporation Bank of India) in a Ranchi District. We will also form the questionnaires as per the objective of the study. It ensures the higher accuracy and participations from the banks. For the Secondary Data, the data was accumulated from the various sources like Reports of bank, Research, Report of Reserved Bank of India, Websites, Government Data, Newspapers, Articles, Journals.

7.2 Research Design
The present data is based on descriptive, diagnostic, analytical and comparative research design.

7.3 Sampling Techniques and Sample Size
The purposive sampling techniques is used in this research study. For the sample, 2 banks from Private and Public Banks respectively selected.
In Public Sector Bank, State Bank of India (SBI) and Union Bank of India is selected. For Private Sector Bank, Housing Development Finance Corporation Bank (HDFC) and Industrial Credit and Investment Corporation of India (ICICI) is selected.

7.4 Statistical Tools and Software Used
The collected data is analyzed by using bar graphs, averages, tables, percentage, pie charts and hypothesis testing. MS Excel and Statistical Package for Social Sciences (SPSS) are tools from help of which interpretation and analysis have done.

## VIII. DATA ANALYSIS

8.1 Data Analysis of Primary Data

Table 1: Awareness and Perception Regarding NPAs

| Statement | Agree + Strongly Agree (%) | Neutral (%) | Disagree + Strongly Disagree (%) |
|---|---|---|---|
| Aware of NPA | 78.0 | 18.0 | 4.0 |
| Problems in Loan Repayment | 38.0 | 30.0 | 32.0 |
| NPA Harms the Economy | 48.0 | 32.0 | 20.0 |
| NPA Affects Asset Quality and Financial Performance | 58.0 | 30.0 | 12.0 |
| High NPA Reduces Customer Trust | 74.0 | 14.0 | 12.0 |
| Strict Rules for Loan Repayment | 74.0 | 14.0 | 12.0 |
| RBI Should Introduce New Policies to Control NPA | 76.0 | 20.0 | 4.0 |

Source: Primary Data, Analyzed through SPSS Software.

Interpretation
The survey findings indicate a high level of awareness regarding NPAs among respondents, as 78% agreed that they are familiar with the concept, while only 4% disagreed and 18% remained neutral. Regarding loan repayment, responses were mixed, with 38% reporting repayment difficulties, 32% disagreeing, and 30% remaining neutral.
Almost half of the respondents (48%) believed that NPAs adversely affect the economy, whereas 32% remained neutral and 20% disagreed. Similarly, 58% agreed that NPAs directly affect the asset quality and financial performance of banks, while 30% were neutral and 12% disagreed. A strong majority (74%) believed that high levels of NPAs reduce customer trust and confidence in banks. The same percentage supported stricter rules and regulations for loan repayment. Furthermore, 76% of respondents suggested that the RBI should introduce new schemes and policies to control NPAs, indicating widespread concern regarding the growing impact of bad loans on the banking sector.

Table 2: Perception Regarding Banking Performance and Asset Quality

| Statement | Agree + Strongly Agree (%) | Neutral (%) | Disagree + Strongly Disagree (%) |
|---|---|---|---|
| Public Sector Banks Have Higher Bad Loans | 62.0 | 22.0 | 16.0 |
| Poor Loan Recovery Causes High NPA | 32.0 | 36.0 | 32.0 |
| Digital Banking Improves Financial Performance | 76.0 | 20.0 | 4.0 |
| Proper Loan Monitoring Improves Asset Quality | 46.0 | 20.0 | 34.0 |

Source: Primary Data, Analyzed through SPSS Software.

Interpretation

The results show that 62% of respondents believe public sector banks have higher bad loans than private sector banks, while 22% remained neutral and 16% disagreed. Opinions regarding poor loan recovery as a cause of NPAs were divided, with 32% agreeing, 32% disagreeing, and 36% remaining neutral.

Digital banking received strong support, with 76% of respondents agreeing that technological advancements can improve the financial performance of banks. Regarding loan evaluation and monitoring, 46% agreed that proper monitoring can improve asset quality, while 34% disagreed and 20% remained neutral.

Overall, the findings suggest that respondents recognize the importance of effective NPA management, technological innovation, and strong credit monitoring systems in improving the financial performance and asset quality of banks.

8.2 Data Analysis and interpretation of Secondary Data

In this subtopic of data analysis and interpretation of secondary data. The Financial performance, Assets quality and non-performing assets of selected banks of public and the private sector are analyzed and Interprete the data of the bank. To conduct a study four banks are selected, two from public sector banks and two from private sector banks. the observations are analyzed and interpreted in a SPSS software. For the testing of hypothesis, Descriptive Statistics and Independent Sample t-test sample has chosen and conducted by the SPSS software.

8.3 Trend Analysis

Gross Non-Performing Assets: The trend for Gross NPA of selected Public and Private Sector Banks from FY2000 till FY2025 is shown below in X. It is observed from the results that Public Sector Banks had consistently been observed to have higher Gross NPA than Private Sector Banks in the study period. The Gross NPA of Public Banks as well as Private Banks decreased from 13.60% in FY2000 to 2.96% and 1.46% respectively in FY2025. Both types showed decreases over the last several years although there were some fluctuations that occurred, the downward trend in the last several years in both types of banks is due to improved asset quality and credit risk management practices.

Net Non-Performing Assets: The trends of the net non-performing assets of the selected private and public sector bank. The data is from financial year2000 to 2025. As a result of this data indicates that public sector bank has high NPA as compare to the private sector bank. The NPA of the public sector bank in 2000 was 7.10% and it decreased in year 2025 to 0.69%, whereas the NPA of the private sector bank in 2010 was 2.10%, and it declined in year 2025 to 0.36%. It indicates that the both categories of banks have worked in credit Risk management, recovery mechanism and provisions of the bank.

8.4 Descriptive statistics

Table 5.16: Descriptive Statistics

| Variables | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Gross NPA % | 104 | 0.93% | 15.75% | 5.1161% | 3.90309% |
| Net NPA % | 104 | 0.18% | 8.42% | 2.3082% | 2.12829% |
| ROA % | 104 | -0.63% | 2.20% | 0.8445% | 0.55097% |
| NIM % | 104 | 2.30% | 4.90% | 3.3167% | 0.66444% |
| CAR % | 104 | 10.36% | 19.54% | 14.3089% | 2.63951% |

Sources – Evaluated by the help of SPSS software.

The results reveal considerable variation among the selected banks. Lower average Net NPA values indicate effective provisioning and credit risk management. The positive average ROA reflects overall profitability, while the average NIM suggests satisfactory earning efficiency from lending operations. Furthermore, the average CAR of 14.31% indicates adequate capital strength and financial stability among the selected banks.

8.5 Independent Sample t-test

Table 5.17: Group Statistics

| Variables | TYPE | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Gross NPA % | PRIVATE | 52 | 3.2042% | 2.47247% | 0.34287% |
| | PUBLIC | 52 | 7.0279% | 4.14733% | 0.57513% |
| Net NPA % | PRIVATE | 52 | 1.3263% | 1.51634% | 0.21028% |
| | PUBLIC | 52 | 3.2900% | 2.20975% | 0.30644% |
| ROA % | PRIVATE | 52 | 1.2063% | 0.46654% | 0.06470% |
| | PUBLIC | 52 | 0.4827% | 0.35840% | 0.04970% |
| NIM % | PRIVATE | 52 | 3.6529% | 0.75010% | 0.10402% |
| | PUBLIC | 52 | 2.9806% | 0.31388% | 0.04353% |
| CAR % | PRIVATE | 52 | 15.8348% | 2.69218% | 0.37334% |
| | PUBLIC | 52 | 12.7831% | 1.44046% | 0.19976% |

Source – Secondary data, Analyzed by the SPSS Software.

The group statistics table highlights the differences between public and private sector banks in terms of asset quality, non-performing assets, and financial performance. Private sector banks reported lower Gross NPA (3.20%) and Net NPA (1.33%) compared to public sector banks (7.03% and 3.29% respectively), indicating better asset quality and credit risk management. Private banks also performed better in profitability and efficiency, as reflected by their higher ROA (1.21%) and NIM (3.65%) compared to public banks (0.48% and 2.98%). Similarly, the average CAR of private banks (15.83%) was higher than that of public banks (12.78%), suggesting a stronger capital position and greater ability to absorb financial risks. Overall, the results indicate that private sector banks outperformed public sector banks across all selected indicators.

8.6 Decision

All variables showed p values $< 0.05$, which is the level of significance so the Null Hypothesis ($H_0$) is rejected, the alternative hypothesis ($H_1$) is accepted.

## IX. ACHIVEMENT OF RESEARCH OBJECTIVE

In the present study, all the three research objectives were successfully accomplished by analyzing the secondary data collected from the selected banks both public and private sector banks for the period of 2000 to 2025.

The first Objective is “To analyse trend of NPA in the last 25 years” which has been fulfilled by Trend analysis of Gross NPA and Net NPA Ratios. It revealed that there was a negative trend in terms of NPAs in both public and private sector banks during the study period. The average Gross NPA of public sector banks has declined from around 13.60% in FY2000 to 2.96% in FY2025 and has further improved to 1.46% for private sector banks in the same period. Likewise, there was a notable fall in both sectors NPA ratios. Based on these results, it is observed that there is still a positive improvement in the asset quality, and that the purpose of studying the trend of non-performing assets has been achieved.

The second goal, “To compare the financial performances of selected private banks and public banks”, was accomplished through the analysis of selected financial indicators including: Return on Assets (ROA), Net Interest Margin (NIM), and Capital Adequacy Ratio (CAR). The results showed that among all the banks, the private sector banks had higher average ROA (1.21%), NIM (3.65%) and CAR (15.83%) than public sector banks (0.48%, 2.98% and 12.78%) respectively. In addition, the Independent Sample t-test showed there were significant differences between the two sectors ($p < 0.001$). Thus the study was able to make a successful comparison between the financial performance of public sector banks and private sector banks.

The third objective, “To evaluate the effectiveness of NPA management”, was also achived. The Gross NPA and Net NPA ratios in all the banks have been declining steadily, reflecting the strengthening of credit policies, recovery processes, provisioning policies, and risk appraisal and management. The Gross NPA and Net NPA have decreased during the study period, which reflects the better operational efficiency of the banks to manage NPA. Therefore, it has been concluded that the NPA management practices have enhanced significantly with time.

From the results, the three research objectives were achieved. The study gives a definite picture about the long-term trend of NPAs, financial performance of public sector banks compared to private sector banks and effectiveness of NPA Management Practices in Indian banking sector.

## X. FINDINGS, SUGGESTIONS AND CONCLUSION

The study compared the Non-Performing Assets (NPAs), asset quality, and financial performance of selected Public Sector Banks (SBI and Union Bank of India) and Private Sector Banks (HDFC Bank and ICICI Bank) during the period 2000–2025. The findings revealed that Public Sector Banks had higher Gross NPA and Net NPA levels than Private Sector Banks, indicating weaker asset quality and higher credit risk. Although both sectors improved their NPA position in recent years, Private Sector Banks showed better performance in controlling bad loans. Financial indicators such as Return on Assets (ROA), Net Interest Margin (NIM), and Capital Adequacy Ratio (CAR) were also higher in Private Sector Banks, reflecting superior profitability, operational efficiency, and financial stability. Statistical analysis confirmed significant differences between Public and Private Sector Banks, leading to the rejection of the null hypothesis. The study further established that higher NPAs adversely affect profitability, operational efficiency, and asset quality.

Based on the findings, it is suggested that banks should strengthen their credit appraisal systems, improve loan monitoring mechanisms, and adopt advanced technologies such as Artificial Intelligence, Data Analytics, and Machine Learning for effective credit risk management. Banks should also enhance recovery mechanisms, strengthen internal controls, promote financial literacy among borrowers, and maintain adequate capital positions. Special attention should be given to Public Sector Banks to improve their NPA management practices. RBI should continue introducing effective policies and regulatory measures to support asset quality improvement and NPA reduction.

In conclusion, effective management of NPAs is essential for improving profitability, maintaining asset quality, and ensuring the long-term sustainability of banks. The study concludes that Private Sector Banks outperformed Public Sector Banks in terms of asset quality, profitability, operational efficiency, and capital adequacy. Therefore, strong credit risk management, efficient recovery systems, technological advancement, and responsible lending practices are crucial for reducing NPAs and promoting sustainable growth and financial stability in the Indian banking sector.

## REFERENCES

[1] N. K. M. Swandewi and N. K. Purnawati, “Capital adequacy ratio mediates the effect of non-performing loan on returns on assets in public commercial banks,” American Journal of Humanities and Social Sciences Research (AJHSSR), vol. 5, no. 1, pp. 651–656, 2021.

[2] M. V. Kumar and R. Khosla, “Implementation and impact of SARFAESI Act, 2002,” ACADEMICA: An International Multidisciplinary Research Journal, vol. 10, no. 8, p. 446, 2020.

[3] K. Sharma and A. Sharma, “A study of non-performing assets of commercial banks and its recovery in India,” International Journal of Research in Engineering, IT and Social Sciences, vol. 9, pp. 121–132, Apr. 2019.

[4] C. Rana and H. Desai, “An empirical analysis of the causal relationship between NPA and its determinants in Yes Bank,” International Journal of Research in Humanities, Arts and Literature, vol. 7, no. 4, pp. 403–418, 2019.

[5] V. R. Singh, “A study of non-performing assets of commercial banks and its recovery in India,” Annual Research Journal of SCMS, Pune, vol. 4, no. 1, pp. 110–125, 2016.

[6] V. Agarwala and N. Agarwala, “A critical review of non-performing assets in the Indian banking industry,” Rajagiri Management Journal, vol. 13, no. 2, pp. 12–23, 2019.

[7] M. Karunakar, K. Vasuki, and S. Saravanan, “Are non-performing assets gloomy or greedy from Indian perspective,” Research Journal of Social Sciences, vol. 3, no. 1, pp. 4–12, 2008.

[8] A. N. Berger, G. A. Hanweck, and D. B. Humphrey, “Competitive viability in banking: Scale, scope, and product mix economies,” Journal of Monetary Economics, vol. 20, pp. 501–520, 1987.

[9] M. N. Mishra, “Evaluated the profitability of scheduled commercial banks,” Indian Journal of

Banking and Finance, vol. 5, no. 9, pp. 124–128, 1992.

[10] S. R. Shinde and V. S. Kaveri, "Management of non-performing advances," The Journal of the Indian Institute of Bankers, vol. 63, no. 2, pp. 67–74, 1992.

[11] H. Kaur and N. K., "A comparative study of NPA of public and private sector banks," International Journal of Research in Commerce and Management, vol. 2, no. 9, p. 161, 2011.

[12] S. Poongavanam, "Non-performing assets: Issues, causes and remedial solution," Asian Journal of Management Research, vol. 2, no. 1, 2011.

[13] C. Balasubramaniam, "Non-performing assets and profitability of commercial banks in India: Assessment and emerging issues," Abhinav National Monthly Refereed Journal of Research in Commerce and Management, vol. 1, no. 7, 2012.

[14] C. Chattergee and J. M., "Management of NPA—A current scenario," National Journal of Social Science and Interdisciplinary Research, vol. 1, no. II, 2012.

[15] S. Das and A. Dutta, "A study on NPA of public sector banks in India," 2014.

[16] R. Wadhwa, K. Ramaswamy, and S. M. Fin, "Impact of NPA on profitability of banks," International Journal of Engineering Technology and Management Sciences, vol. 4, no. 3, pp. 1–8, 2020.

[17] A. Khairi, B. Bahri, and B. Artha, "A literature review of non-performing loan," Journal of Business and Management Review, vol. 2, no. 5, pp. 366–373, 2021.

[18] M. R. Patel, "A study on NPA management with reference to public sector banks, private sector banks and foreign banks in India," Journal of Management and Science, vol. 5, no. 1, 2015.

[19] R. Tondon, "Globalization: Impact on Indian banking," Chartered Financial Analyst, pp. 91–92, 2006.