



## Role of Banks on Economic Development: A Special Reference to Management of NPA in Public and Private Sector Banks

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### Abstract

Non-performing assets are advances e been past due over more than 90 days in terms of interest and/or principal payments. A substandard asset remains non-performing for a period of less than or equal to 12 months. An asset is as doubtful if it has been in the substandard category for 12 months. A loss asset is one in which the bank has identified a loss or external auditors, or an RBI inspection but the amount has not been fully written off. The study focused mainly on the comparison of NPAs and Bank performance across public and private sector banks, To discuss trends in bank performance concerning public sector and private sector banks- descriptive statistics comparison. To analyse trends of NPA in public sector bank and private sector bank- Descriptive Statistics Comparison. The study focused on scope, significance, and methodology. The study regarded Axis Bank as a public sector bank representative and Bank of Baroda as a private sector bank. Correlation analysis is a statistical technique used to determine the direction and strength of a relationship between two variables. Correlation analysis can be used to assess the relationship between nonperforming assets (NPAs) and key economic metrics such as financial stability, credit growth, and profitability. The study can find differences in how public and private sector banks affect economic development by comparing correlation patterns between them. The basis for focused policy interventions is this analysis, which offers insightful information about how NPAs and more general economic factors are interconnected. Finally, the study analyzed the data and interpreted the results. Suggestions also discussed in the study.

**Keywords:** Non-Performing Assets, Private Sector bank, Public Sector bank.

### 1. Introduction

Non-performing assets (NPAs) in the Indian banking system have sparked serious concern and scrutiny from industry circles, financial experts, and policymakers (Rajesham & Rajender, 2007). The banks' lending power is weakened and their profitability is eroded by the growing amount of non-performing assets (Garg, 2016). The Reserve Bank of India, or RBI, has been giving all banks ongoing guidance on how to manage and control the growing non-performing asset (NPA) issue (Goswami & Gulati, 2022). The assets are classified as either (i) a standard asset (a loan for which the borrower is making regular repayments) or (ii) a non-performing asset based on the loanee's payment. NPAs are advances and loans for which the borrower has not made principal or interest payments for more than ninety days (HS, 2013). The Reserve Bank of India's (RBI) Master Circular<sup>1</sup> defines non-performing assets (NPA) as an asset that ceases to generate income for the bank and states that an account that remains overdue/out of order for more than 90 days can be classified as NPA (Ibrahim & Thangavelu, 2014). In other words, Non-Performing Assets is defined as an advance where interest and/or instalment of principal remains overdue for more than 90 days (Gaur & Mohapatra, 2021). An asset is considered as Non-Performing Assets when:

- A term loan's interest and/or principal payments are more than 90 days late.
- The account has been out of order for over 90 days due to an overdraft or cash credit.
- Purchased and discounted bills can be overdue for over 90 days.
- Interest and/or principal payments are past due for two harvest seasons for short-term loans and one harvest season for long-term crop agricultural loans.
- Received amounts are overdue for over 90 days in other accounts (Chakraborty, 2017).

Clause 4.1 defines the different types of non-performing assets. An asset is classified as doubtful if it has been in the substandard category for 12 months. A loss asset is one in which a loss has been identified by the bank, internal or external auditors, or an RBI inspection, but the amount has not been completely written off (Bawa et al. 2019). In other words, such an asset is considered uncollectable and of such little value that its continuation as a bankable asset is not warranted, despite the possibility of some salvage or recovery value. A substandard asset remains NPA for a period of less than or equal to 12 months (Bhuyan & Rath, 2013). Bardhan & Mukherjee (2016).

## 2. Review of Literature

Aurora (2010) In their study titled A study on nonperforming assets management concerning public sector banks, private sector banks, and foreign banks in India, the authors examine aggregate data from public, private, and foreign banks in order to compare, analyse, and interpret NPA management from 2009 to 2013. This study reveals that the percentage of Gross NPA to Gross Advances is increasing for public banks, the ratio of Loss Advances to Gross Advances is higher in foreign banks, and the Estimated Gross NPA for 2014 is also higher in public banks as compared to private and foreign banks. Based on the ANOVA test, it is concluded that the ratio of Gross NPA to Gross Advances for the public sector, private sector, and foreign banks does not differ significantly from 2009 to 2013. Another study by Balasubramaniam (2012). The study, Comparative Evaluation of Non-Performing Assets of Indian Banks: A Study of Public and Private Sector Banks, examines the effective management of non-performing assets (NPAs) by public and private sector banks. The study's findings show that the mean gross and net NPAs of public and private category Indian banks differ statistically significantly, and that public sector banks have seen a continuous increasing trend in gross and net NPAs compared to private sector banks over a thirteen-year period, from 2001 to 2013. Bajaj et al., (2024). Higher NPA indicates inefficiency of the bank, while lower NPA indicates better performance and fund management, according to the article A Study on Analysing the Trend of NPA Level in Private Sector Banks and Public Sector Banks. According to Bardhan & Mukherjee (2016), lowering and controlling the NPA is necessary to increase banks' productivity and profitability. In essence, this paper discusses the trends in non-performing assets (NPAs) in the banking sector, the primary causes of rising NPAs in the sector, and some recommendations for mitigating the impact of NPAs on the sector.

## 3. Research Gaps

As pointed out earlier, Non-Performing Assets (NPAs) have remained a favorable research problem among academicians as well as researchers since its appearance in the banking scenario as a menace Bhuyan & Rath, (2013). Accordingly, several research works have been undertaken from time to time in the form of papers, working papers, committee reports, and research reports leading to PhD and M.Phil. Dissertations, and commission recommendations to look into the various dimensions of NPAs. Planners, policymakers, government, the Reserve Bank of India and commercial banks are also keen on developing curative and preventive strategies to curb the problem of NPA. Therefore, literature in the field of NPA both at the international and national level is plenty and varied almost touching every possible dimension. Still, the research gap in the area continues to exist because once an old problem is tackled a new problem crops up. Moreover, NPA as a problem can be curbed to an extent but not eliminated.

- A bulk of the earlier research works on NPA is short period based i.e. covering a period of 5/6 years and comparison of one or two private-public sector banks. Therefore, they lacked long-term coverage as well as limited bank coverage. A larger sample and long-term NPA analysis are almost missed in earlier studies.
- The study has its objectives and therefore unique in its approach. The findings, conclusion and suggestions of each such study therefore enjoy significance, both from academic and policy formulation standpoint. In other words, each such finding has its unique value and applicability besides adding to the existing store of knowledge, therefore neither the earlier studies can be sidelined nor further studies can be undervalued.
- The present study has been designed to evaluate the NPA management of selected commercial banks, which is relevant to the contemporary banking environment.

## 4. Research Questions:

1. How do public and private sector banks compare NPAs (non-performing assets) and bank performance?
2. What patterns in bank performance can be found by comparing descriptive statistics for banks in the public and private sectors.

## 5. Objectives of the study:

Based on the above study the present article throws light on the following objectives:

1. To study Comparison of NPAs and Bank performance across public and private sector banks
2. To discuss trends in Bank Performance concerning public sector and private sector banks- Descriptive Statistics Comparison (Mean, Median, Standard Deviation, Range)
3. To analyse trends of NPA in public sector bank and private sector banks- Descriptive Statistics Comparison (Mean, Median, Standard Deviation, Range)

## 6. Research Methodology

Secondary data is the main source of information used in this study. To ensure accuracy and applicability, the information was gathered from reputable and comprehensive sources, such as Moneycontrol.com. To examine how banks contribute to economic growth, a descriptive research design has been used, with a focus on how public and private sector banks handle non-performing assets (NPAs). To get useful insights, the study carefully examines the financial reports, performance indicators, and non-performing asset (NPA) trends of a few chosen banks. The methods used by these banks to handle non-performing assets (NPAs) and the ensuing effects on economic growth are evaluated using statistical tools and comparative analysis techniques. Because it gives access to the vast amounts of historical and current financial data required for thorough analysis, the secondary data collection approach is justified and allows for a more comprehensive understanding of the subject at issue.

**Table 1.** Comparison of NPAs and Bank performance across public and private sector Banks.

	Gross NPA		Net NPA		NI		ROE		ROA	
	Axis Bank	Bank of Baroda	Axis Bank	Bank of Baroda	Axis Bank	Bank of Baroda	Axis Bank	Bank of Baroda	Axis Bank	Bank of Baroda
Mean	19069.5	45623.4	6366.35	16253.9	37.62545	15.84545	9.634545	4.271818	0.938182	0.273636
Median	21280.5	42718.7	5512.16	18080.2	31.04	5.99	7.63	3.43	0.72	0.19
Standard Deviation	10876.8	15534.8	4798.69	6122.54	37.96631	33.73842	5.900531	8.864939	0.602392	0.560647
Range	31102.2	53120	15567.1	16269.3	131.26	128.79	16.03	29.27	1.65	1.92

## 7. Significance of the Study

The biggest source of concern for the Indian banking industry in recent years has continued to be non-performing assets (NPAs). The Narsimham Committee (I) had come to the general conclusion that priority sector lending, which fuelled the accumulation of bank non-performing assets (NPAs), was the primary cause of the commercial banking industry's declining profitability and losses in India. The Narsimham Committee (II) then emphasised the necessity of gradually achieving "Zero" non-performing assets for all Indian banks. The 1998 Report also attributed the accumulation of bank non-performing assets (NPAs) to uncomfortably high levels to several factors, including bad credit decisions, bad lending practices, and cyclical economic conditions. The Committee proceeded to suggest the establishment of Asset Reconstruction Funds or Asset Reconstruction Companies to assume banks' bad debts and give them a fresh start. The possibility of using budgetary provisions to recapitalise public sector banks was rejected. In general, the Committee sought an independent loan review mechanism for better loan portfolio management as well as a suitable system for identifying and categorising non-performing assets (NPAs).

## 8. Data Analysis and Interpretation

Correlation analysis is a statistical technique for determining the direction and strength of a relationship between two variables. According to the study "Role of Banks on Economic Development: A Special Reference to Management of NPA in Public and Private Sector Banks," correlation analysis can evaluate the relationship between NPAs and important economic metrics like financial stability, credit growth, and profitability. The study can find differences in how public and private sector banks affect economic development by comparing correlation patterns between them. The basis for focused policy interventions is this analysis, which offers insightful information about how NPAs and more general economic factors are interconnected.

The data analysis and interpretation section focuses on examining the empirical evidence to understand the role of banks in economic development with a special emphasis on the management of Non-Performing Assets (NPAs) in public and private sector banks. By analyzing quantitative and qualitative data, this section aims to uncover trends, patterns, and the underlying factors contributing to the NPA burden and its impact on the financial performance and operational efficiency of banks. Through a comparative analysis of public and private sector banks, the study seeks to highlight the variations in NPA levels, recovery mechanisms, and risk management practices. The findings from this analysis will provide actionable insights into the effectiveness of existing policies and strategies, offering a basis for improving NPA management and reinforcing the banking sector's contribution to economic growth.

The descriptive statistics for Axis Bank and Bank of Baroda provide a comparative analysis of five key financial performance indicators: Gross NPA, Net NPA, Net Income (NI), Return on Equity (ROE), and Return on Assets (ROA). For Gross NPA, Bank of Baroda exhibits a higher mean (45,623.4) and median (42,718.7) compared to Axis Bank (mean = 19,069.5, median = 21,280.5), indicating a larger amount of non-performing assets. In terms of Net NPA, Bank of Baroda again has a higher mean (16,253.9) and median (18,080.2) than Axis Bank (mean = 6,366.35, median = 5,512.16), along with a wider range and higher standard deviation. For Net Income (NI), Axis Bank shows a higher mean (37.63) compared to Bank of Baroda (15.85). However, Axis Bank also displays greater variability, as indicated by its higher standard deviation (37.97) and range (131.26). The Return on Equity (ROE) is consistently higher for Axis Bank, with a mean of 9.63 compared to 4.27 for Bank of Baroda. Finally, for Return on Assets (ROA), Axis Bank outperforms the Bank of Baroda with a higher mean (0.938) compared to the Bank of Baroda (0.273).

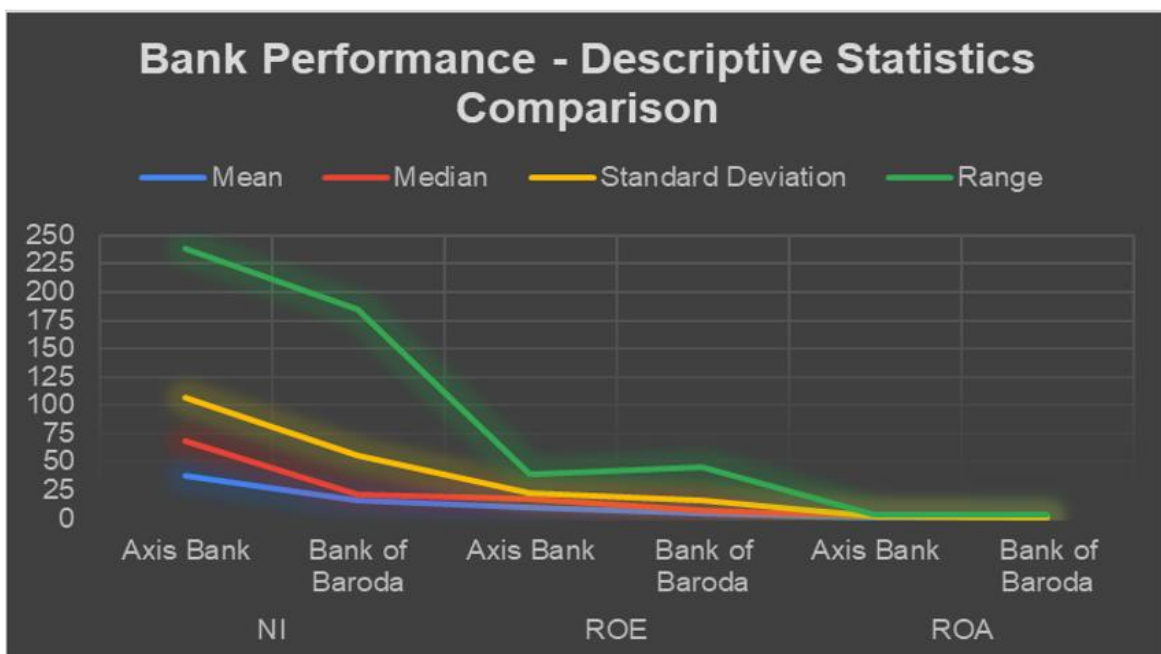
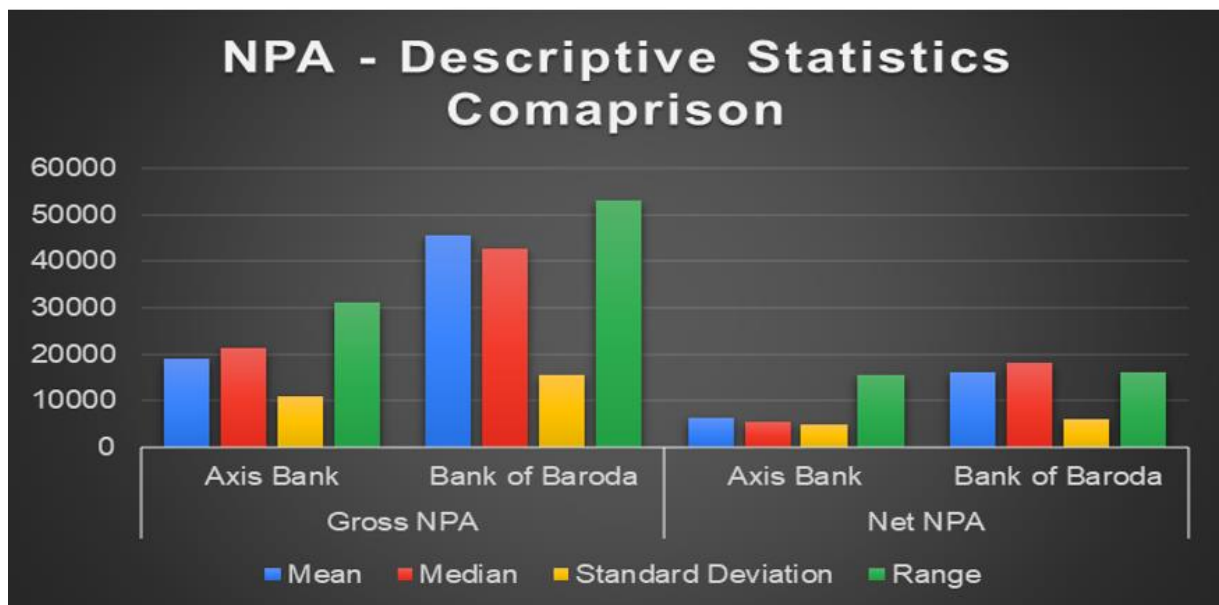


Figure 1. Trends in Public Sector and Private Sector Bank Performance- Descriptive Statistics Comparison.

The chart compares the descriptive statistics of bank performance for Axis Bank and Bank of Baroda across three financial metrics: Net Income (NI), Return on Equity (ROE), and Return on Assets (ROA). The descriptive statistics include the mean, median, standard deviation, and range for Net Income (NI). In terms of ROE, both banks show a lower range and standard deviation compared to NI, highlighting less variability. For ROA, both banks exhibit minimal variability, with low range and standard deviation values. This suggests consistent performance in terms of asset returns. The mean and median values for ROA are nearly identical for both banks,

reflecting stability and uniformity in this metric. Further statistical analysis could provide insights into the implications of these variations on financial decision-making. Trends in NPA in Private sector and public sector banks.



**Figure 2.** NPA- Descriptive Statistics Comparison.

The figure titled "NPA - Descriptive Statistics Comparison" illustrates the descriptive statistics (mean, median, standard deviation, and range) for Gross Non-Performing Assets (Gross NPA) and Net Non-Performing Assets (Net NPA) for Axis Bank and Bank of Baroda. The graph highlights key differences in the management of non-performing assets between the private sector (Axis Bank) and the public sector (Bank of Baroda).

## 9. Findings

- The standard deviation and range are also higher for Bank of Baroda, reflecting greater variability in its Gross NPA values.
- Bank of Baroda's Net NPA values fluctuate more significantly.
- The median value for Bank of Baroda (5.99) is much lower, indicating potential outliers or uneven distribution.
- Axis Bank also demonstrates a narrower range and lower standard deviation, suggesting more stable performance.
- While both banks have minimal variation in ROA (as evidenced by low standard deviations and ranges), the disparity in means highlights Axis Bank's stronger efficiency in generating returns from assets.
- .Despite occasional slightly higher variability, Axis Bank exhibits stronger financial performance across the majority of indicators, with higher averages for NI, ROE, and ROA. On the other hand, Bank of Baroda shows noticeably higher Gross and Net NPAs, suggesting more issues with asset quality.
- Compared to Bank of Baroda, Axis Bank shows a higher range and standard deviation, suggesting more performance variability. The two banks' mean and median values, however, are rather comparable, indicating that despite the variability, central tendency measures do not differ significantly.
- Axis Bank exhibits superior performance in equity returns, as evidenced by slightly higher values for these metrics compared to Bank of Baroda. The main performance indicators are not significantly impacted by Axis Bank's somewhat greater overall performance metrics variability than Bank of Baroda, especially when it comes to Net Income.
- A higher percentage of non-performing loans in Bank of Baroda's portfolio is indicated by the bank's consistently higher mean and median gross non-performing loan (NPA) values when compared to Axis Bank. Furthermore, Bank of Baroda's standard deviation and range are noticeably higher, indicating greater variability and broader variations in Gross Non-Performing Asset levels over time. As an illustration of superior control and reliable asset quality management, Axis Bank exhibits lower and more stable Gross Non-Performing Asset (NPA) values. Likewise, the Bank of Baroda shows higher mean and median values for Net NPA, indicating more difficulties in handling loan defaults after provisioning

## 10. Suggestions

Management of non-performing assets is well managed in private sector banks compared to public sector banks. Therefore, measures shall take to manage the non-performing assets in public sector banks i.e. Continuous follow-up, Pre-loan eligibility appraisal and post-follow-up. Provide assistance to loan holders relating to their business/enterprises etc. to run the business properly and receive loan instalments in time.

1. The public and private sectors to find differences and determine how regulatory tools like the Insolvency and Bankruptcy Code (IBC) and stress asset management techniques work to lessen the effects of non-performing assets.
2. According to the assessment, private-sector banks' NPA growth rate is low compared to public-sector banks.
3. To develop strategies for enhancing the management of non-performing assets (NPAs), including improved borrower due diligence, strong recovery methods, and improved credit appraisal systems.

4. The growth of NPAs affects both large and small banks, reducing profitability and shareholder wealth due to mandatory provisioning under RBI guidelines. To address this, the RBI has implemented stricter regulations to curb NPA growth and improve asset quality.
5. Organizational strategies, economic conditions, and policy interventions influence systemic changes. Analyzing these factors and their interdependencies can help identify triggers and guide strategies to enhance stability.
6. The potential of technology to improve NPA monitoring and recovery procedures should be investigated to bolster research on the role of banks in economic development with an emphasis on NPA management in public and private sector banks. Using technologies like blockchain, AI, and machine learning can result in more precise risk assessments, early default detection, and more efficient recovery processes. Targeted and useful insights can also be obtained by examining sector-specific NPA issues and creating tailored solutions for high-risk industries. By providing banking institutions and policymakers with useful guidance, these findings can facilitate more efficient NPA management and strengthen banks' role in promoting sustainable economic growth.
7. To Evaluate the impact of current regulations and policies on managing non-performing assets (NPAs) and recommend changes to enhance banking stability and motivate economic expansion.

## 11. Conclusion

Banking sector has been the hub of the financial sector and is the most important institutional and functional vehicle for economic transformation. It is an indispensable medium in everyday transactions of millions of people. Impact of Digital banking also influenced on operations of banking system. Banks in our country have been playing their role as growth facilitators and the banking sector has undergone far-reaching changes in the post liberalization period. The objective of banking sector reforms initiated in the present period is to make the banking system both viable and effective is very necessary.

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