

# Non-Performing Asset Management in Indian Banking: A Comparative Study of Public & Private Sector Banks

Madhu Bhartia<sup>1</sup>, Anjaneer Kumar Rai<sup>2</sup>

<sup>1</sup>Assistant Professor, Institute of Computer Science & Technology, SHEPA, Varanasi.

<sup>2</sup>Assistant Professor, School of Management Sciences, Varanasi.

## Abstract

NPAs represent a major hurdle for the banks, posing substantial threats to financial stability. Often described as a double-edged sword, NPAs fail to produce revenue while simultaneously weakening a bank's financial health. Instead, they compel banks to allocate provisions, thereby eroding profitability. The escalating levels of NPAs in banks carry wide-ranging consequences for the economy, disrupting credit flow and hindering overall economic growth. Using aggregate data from 2020 to 2024, this study attempts to investigate NPA management practices at selected banking sectors. The study integrates both theoretical and empirical perspectives on NPAs. It delves into the classifications and root causes of NPAs while analysing essential financial ratios associated with NPA performance. Gross nonperforming assets to Advances ratio is also examined using an ANOVA test to determine whether there is a notable distinction between the various selected banking sectors. The study's findings indicate that over the analysis period, gross NPAs at government owned banks increased steadily. According to projections for 2025, government owned banks are anticipated to face more challenges in managing NPAs than private and international banks. However, the results of the ANOVA test indicate that 2020 to 2024, there was no difference between selected banks' gross non-performing asset to gross advance ratios.

**Keywords:** NPA, Public bank, Private bank, Advances.

**Corresponding Author:** Madhu Bhartia, Assistant Professor, Institute of Computer Science & Technology, SHEPA, Varanasi, India.

Email: madhubhartia11@gmail.com

**How to cite this article:** Bhartia Madhu., Rai A.K., (2024), Non-Performing Asset Management in Indian Banking: A Comparative Study of Public & Private Sector Banks, Commerce Research Review 2(1) 36-43.

DOI: <https://doi.org/10.21844/crr.v2i01.1120>

**Source of support:** Nil

**Conflict of Interest:** None

**Received:** 12-09-2024; **Accepted:** 16-12-2024; **Published:** 20-12-2024

## Introduction

NPAs continue to be a major problem for the Indian banking industry, having a significant effect on both bank profitability and financial stability. An asset is considered non-performing if it does not bring in money for the bank, because either the borrower defaulted or the payments were not made on time. The accretion of NPAs not only damages the bank's financial stability but also upends the larger credit system, making it more challenging for the lenders to make new loans and promote economic growth. public and private banks are essential to promoting financial inclusion and advancing the economy in India. The structure, governance methods, and risk management techniques of banks vary greatly, and these variations affect how they influence to approach NPAs. Because they are government-owned, banks are frequently tasked with funding development projects, exposing them to riskier assets and raising their NPAs ratios. Private Banks, on the other hand, typically have smaller NPAs because they follow stricter lending standards and possess superior risk management frameworks in place. The rising number of NPAs in India has expressed worry

about the stability of the banking industry. Corporate loan defaults, insufficient credit evaluations, and shoddy recovery procedures are some of the causes of the sharp rise in in NPAs in government owned banks over time. Despite their own struggles with NPAs, private banks have managed to better control asset quality.

### **Concept of NPAs**

The RBI's criteria state that an asset are categories as NPAs if any of the following conditions apply:

- if the principle or interest on a term loan is not repaid within 90 days.
- When an account is inactive or remain out of order for the period more than 90 days whether it comes to overdraft or cash credit facilities.
- For agricultural loans, assets are considered as non-performing if the repayment is pending for one and two crop season for long-term crops and short-term crops respectively.

### **Classification of NPAs**

Based on the time of the default period, NPAs are typically classified as follows:

#### *Sub-Standard Asset*

- An asset that stays non-performing for a duration of up to 12 months.
- These assets have a high default likelihood and show a clear credit vulnerability.

#### *Doubtful Asset*

- An asset is regarded as dubious if it is categorized as sub-standard for the period of more than one year.
- It is unlikely that banks will be able to collect the entire amount owed from the borrower.

#### *Loss Asset*

- assets which is identified as unrecoverable by the auditors.
- Although the asset may remain on the books, its recoverability is considered negligible.

### **Literature Review**

*Afreen and Gopinath (2021)* carried out an extensive analysis of NPAs in Indian banks, highlighting the difficulties the COVID-19 pandemic has caused with regard to asset quality. They emphasized NPAs have a substantial impact on banks' financial performance, necessitating the implementation of strong management measures.

*Rajesh and Venkatraman (2022)* carried out a thorough investigation on the reasons, patterns, and effects of NPAs in banks. The role of regulatory frameworks, specifically the IBC, in effectively addressing and managing NPAs was highlighted in their study.

*Mishra and Sharma (2023)* investigated the patterns and underlying reasons for NPAs in banking sector between 2018 and 2023. According to their results, historical NPAs are remain a problem for PSBs, especially in sectors like steel, power, and infrastructure. However, because of their stricter loan evaluation processes and stronger risk management techniques, private banks have shown greater resilience. The study emphasized how crucial it is for government banks to implement proactive asset monitoring techniques to lower the probability of future non-performing assets.

*Kumar and Rajan (2024)* compared the approaches taken by public and private banks to managing non-performing assets. According to their research, the main tools used by public sector banks to settle problematic loans include legal frameworks such as the DRTs and the IBC. To recover non-performing loans faster, private banks, on the other hand, concentrate on early intervention and direct talks with debtors.

### **Objective of Study**

- To evaluate and interpret important financial measures pertaining to NPAs for the aggregated data of public and private banks between 2020 and 2024.
- To conduct a statistical research in order to determine whether the Gross NPA to Gross Advances ratios of public and private banks throughout the 2020–2024 timeframe differ noticeably.
- To gather and present a conclusion of the primary findings from the analysis.

### **Hypothesis**

*H<sub>0</sub>*: There is no difference between gross Nonperforming assets to Gross-advances ratio of selected banks during 2020 to 2024.

*H<sub>1</sub>*: There is difference between gross nonperforming assets to Gross-advances ratio of selected banks during 2020 to 2024.

### **Research Methodology**

The analysis in this study, which compares NPAs between public and private banks, is based on aggregated data collected during a five-year period from 2020 to 2024. The sample of this paper is the various banks, with an emphasis on the combined NPAs statistics from public and private banks. The data is systematically analysed and interpreted using a descriptive research strategy. Secondary data for this paper was collected from various related literature and the RBIs official website. To evaluate the data, a number of tools and techniques used, such as ANOVA and ratio analysis. Over a five-year period, the study uses aggregated data from 2020 to 2024 to draw insightful conclusions and compare different sectors.

## Analysis and Interpretation of Data

**Table 1: Total Gross NPA to Total Gross Advances (Rs in Cr.) as on 31st March**

Bank	Year	Gross NPAs	Total Gross Advances	Gross NPAs to Total Gross Advances(%)
Public Sector Bank	2020	440.32	20986.33	2.1
	2021	572.93	25124.39	2.28
	2022	710.8	30599.53	2.32
	2023	1124.89	35503.89	3.17
	2024	1558.90	40558.74	3.84
Private Sector Bank	2020	168.9	5200.77	3.25
	2021	173.87	5851.10	2.97
	2022	179.75	7329.53	2.45
	2023	183.21	8812.16	2.08
	2024	199.92	10466.65	1.91

Source: <https://www.iba.org.in>

### Interpretation:

As per the data, between 2020 and 2024, Public Banks saw a steady rise in both Gross NPAs and Total Gross Advances. The gross nonperforming assets ratio hiked from 2.10% to 3.84%, showing a worsening in asset quality. However, over the selected time frame, the gross nonperforming assets ratio of Private Banks decreased from 3.25% to 1.91%, indicating better credit risk management. According to this comparison, private banks are better at handling NPAs, whereas public banks need stronger recovery systems to address their escalating NPA problems.

**Table 2: Sub Standard Advance to Total Gross Advances (Rs. in Cr.) Ason 31st March**

Bank	Year	Sub-Standars Advance	Total Gross Advances	Sub-Standars Advance to Total Gross Advances(%)
Public Sector Bank	2020	195.21	20986.33	0.93
	2021	276.85	25124.39	1.1
	2022	336.12	30599.53	1.1
	2023	603.76	35503.89	1.7
	2024	765.89	40558.74	1.89
Private Sector Bank	2020	105.27	5200.77	2.02
	2021	86.78	5871.10	1.48
	2022	44	7329.53	0.6
	2023	51.33	8812.16	0.58
	2024	58.54	10466.65	0.56

Source: <https://www.iba.org.in>

*Interpretation:*

As per the the data, sub-standard advances have steadily increased for Public Banks; the ratio rose from 0.93% in 2020 to 1.89% in 2024, indicating a downfall in asset quality. The biggest increase was from 2022 to 2023, which reflect that credit risk has increased. Because of better credit management and recovery techniques than their Public banks counterparts, Private Banks have successfully decreased their sub-standard advances ratio from 2.02% to 0.56% over the same period.

**Table 3: Double Advance to Total Gross Advances (Rs. in Cr.) As on 31st March**

Bank	Year	Doubtful Advance	Total Gross Advances	Doubtful Advance to Total Gross Advances (%)
Public Sector Bank	2020	207.08	20986.33	0.99
	2021	246.79	25124.39	0.98
	2022	319.55	30599.53	1.04
	2023	470.75	35503.89	1.33
	2024	734.85	40558.74	1.81
Private Sector Bank	2020	50.18	5200.77	0.96
	2021	65.43	5851.10	1.12
	2022	107.36	7329.53	1.46
	2023	103.16	8812.16	1.17
	2024	110.69	10466.65	1.06

Source: <https://www.iba.org.in>

*Interpretation:*

Table indicates that the percentage of doubtful advances in public banks has steadily increased, from 0.99% in 2020 to 1.81% in 2024, indicating a decreasing trend in the loan portfolio and an increase in credit risk. The largest increase, which showed an increasing proportion of questionable loans, happened between 2022 and 2024. However, ratio for private banks fluctuated, rising from 0.96% in 2020 to 1.46% in 2022 before stabilizing at 1.06% by 2024, indicating improved risk management and more robust recovery efforts. Private Banks have been efficient in handling dubious advances, while public banks are generally on the decline.

**Table 4: Loss Advance to Total Gross Advances (Rs. in Cr.) As on 31st March**

Bank	Year	Doubtful Advance	Total Gross Advances	Loss Advance Advance to Total Gross Advances (%)
Public Sector Bank	2020	38.03	20986.33	0.18
	2021	49.28	25124.39	0.2
	2022	55.14	30599.53	0.18
	2023	50.37	35503.89	0.14
	2024	58.15	40558.74	0.14
Private Sector Bank	2020	13.45	5200.77	0.26
	2021	21.66	5851.10	0.37
	2022	28.39	7329.53	0.39
	2023	28.72	8812.16	0.33
	2024	30.69	10466.65	0.29

Source: <https://www.iba.org.in>

#### Interpretation:

According to the data, Public Banks have managed loss advances consistently, keeping their percentage of loss advances low and steady. It decreased slightly from 0.18% in 2020 to 0.14% in 2024. However, ratio of private banks was higher and more erratic, peaking at 0.39% in 2022 and then improving to 0.29% in 2024, indicating better management and a decrease in loss advances in recent years.

#### Analysis of Variance (ANOVA)

**Table 5 Ratio of Total Gross NPA to Total Gross Advances**

Year	Public Sector Bank	Private Sector Bank
2020	2.1	3.25
2021	2.28	2.97
2022	2.32	2.45
2023	3.17	2.08
2024	3.84	1.91

Source: <https://www.iba.org.in>

**Table 6. ANOVA for Ratio of Total Gross NPA to Total Gross Advances**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.805	2	0.902	1.672	0.229
Within Groups	6.478	12	0.540		
Total	8.283	14			

Source: primary

*Interpretation of ANOVA Results:*

The ANOVA findings indicate that, with a sum of squares of 1.805, the difference between the group means (Public Banks and Private Banks) is not very significant. There are two degrees of freedom between the three groups under comparison. The variance between the groups seems to be very small when in contrast to the variance within the groups, as shown by the mean square between groups of 0.902 and the F-statistic of 1.672. The observed variations in the Gross nonperforming assets to Gross Advances ratios across groups are not significant, according to the p-value (Sig.) of 0.229, which is more than the typical significance threshold of 0.05. With a mean square of 0.540 and a sum of squares of 6.478, the within-group variation accounts for 8.283 of the total variance. Given these results, we are unable to rule out the null hypothesis ( $H_0$ ) and come to the result that groups' Gross nonperforming assets to Gross Advances ratios do not differ significantly.

**Conclusion**

Despite the fact that private banks able to successfully lower their NPA ratios and public banks have seen a steady increase in these ratios over time, the statistical analysis shows no discernible difference in the Gross nonperforming assets to Gross Advances ratio between the two sectors between 2020 and 2024. The  $H_0$  is supported by the ANOVA test, which shows a p-value of 0.229, indicating that the observed changes in NPA ratios might be the result of chance rather than underlying structural differences between the sectors. This implies that despite the differences in trends, managing NPAs presents both the banks with comparable possibilities and problems, and both industries need to keep improving their approaches to credit risk management and recovery.

**References**

- Begenau, J., Piazzesi, M. & Schneider, M. (2015). Banks' Risk Exposure, National Bureau of Economic Research, NBER Working Paper No. 21334.
- Bhuyan, R., & Rath, A. K. (2013). Management perspective of Non-performing Assets: A challenge for Indian Banking sector in the post economic reform Era, *The Orissa Journal of Commerce*, Vol. 34, No. 1, pp. 93-107.
- Borango, M. W. (2013). Factors contributing to Non-Performing loans in nonbanking institution in Tanzania: A case study of national social security fund, Thesis submitted to University of Tanzania.
- Boyazny, M. (2005). Taming the Asian Tiger: Revival of Non-Performing Assets on the Asian Continent, *The Journal of Private Equity in EPW*, Vol. 8, No. 2, pp. 104- 109.
- Chipalkatti, N., & Rishi, M. (2007). Do Indian Banks Understate their Bad Loans, *The Journal of Developing Areas*, Vol. 40, No. 2, pp. 75-91.
- Dhal, S., Kumar, P., & Ansari, J. (2011). Financial Stability, Economic growth, Inflation and Monetary Policy Linkage in India: An Empirical Reflection, *Reserve Bank of India Occasional Papers*, Vol. 32, No. 3, pp. 1-82.
- Dubey, D.D., & Kumara, P. (2016). Impact of Non-Performing Assets on Stock market performance of listed bank stocks in India: An empirical assessment of how the two stocks- Non-Performing Assets and share are related, *IQSR Journal of Economics and Finance*, Vol. 1, No. 1, pp. 16-22.

Gupta, N., & Kesari, M. (2016). A Study of Non-Performing Assets of Public and Private Sectors Banks India, *International Journal of Engineering Technology, Management and Applied Sciences*, Vol. 4, Issue. 9, pp. 174-180.

Jain, S., Parida, K. T., & Ghosh. K. S. (2015). Rethinking Priority Sector Lending For Banks In India, IIBF macro research paper for the year 2014-15, *Indian Institute of Banking and Finance*, Vol. 1, pp. 1-94. Khosla, R., & Kumar, V. (2017). Implementation and Impact of SARFASEI act 2000, *International Education and Research Journal*, Vol. 3, Issue 5, pp. 244-247. 18

Malhotra, M., & Laveena. (2014). Empirical Analysis of Non-Performing Assets Related to Private Sector Banks of India, *International Journal of Management Excellence*, Vol. 3, No. 1, pp. 386-391.

Mishra, K. M. (2016). An Analysis of NPAs in Priority and Non-Priority Sectors with respect to Public Sector Banks in India, *IQSR Journal of Business and Management*, Issue. 16, pp. 87-92.

Mishra, U., & Sharma, L. K. (2016). Priority Sector Lending and Emergence of NonPerforming Assets in Public Sector Banks: A Case Study of State Bank of India, Madhubani District: Post Liberation, *International Journal of Arts, Humanities and Management Studies*, Vol. 2, No. 5, pp. 98-108.

<https://www.iba.org.in/depart-res-stcs/key-bus-stcs.html>

<https://www.rbi.org.in/Scripts/Publications.aspx?publication=Annual>

<https://www.moneycontrol.com/>