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Non-Performing Assets of Public and Private Sector Banks in India

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Abstract

Banks constitute the backbone of an economy, acting as key financial intermediaries that mobilize savings, facilitate investment, and support national development. Their performance is therefore closely linked with economic stability and growth. However, the rising incidence of Non-Performing Assets (NPAs) poses a serious challenge to the soundness and efficiency of the banking system, particularly in developing economies such as India. High NPAs erode profitability, constrain lending capacity, weaken capital formation, and undermine public confidence in the financial system.

Keywords: Non-Performing Assets, Public Sector Banks, Private Sector Banks, Advances

1. Introduction

A bank is a financial institution that deals with money and credit, accepting deposits from the public and providing loans and advances to earn profit. Banks can also be defined as monetary organizations that facilitate the flow of funds and act as manufacturers of credit, enabling the exchange of money. Initially referred to as money traders, banks' functions have expanded significantly over time, making it difficult to offer a single universally accepted definition. According to Section 5(1) (b) of the Banking Regulation Act, 1949 "Banking means accepting, for the purpose of the lending of Investment, of deposits of money from the public, repayable on demand or otherwise, and withdrawable by cheques, draft, order or otherwise."

Rao, A., & Reddy, K. (2025)[1] mentioned that non-Performing Assets (NPAs) remain a major challenge to the stability and efficiency of the Indian banking sector, particularly within Public Sector Banks (PSBs). Kothari, S. (2024)[2] concluded that non-performing assets (NPAs) are an inherent part of the banking sector, and virtually all banks have some level of NPAs in their loan portfolios. Arunsankar, N., & Santhoshkumar, R. (2024)[3] intimated that non-Performing Assets (NPAs) serve as a key indicator of a bank's financial health, as they have a direct impact on both profitability and operational efficiency.

Non-Performing Assets (NPAs) are loans or advances that no longer generate income for a bank because the borrower has failed to make interest or principal payments for 90 days or more. NPAs are a major concern for banks as they reduce profitability, increase the risk of losses, and require banks to set aside provisions to cover potential future losses.

Types of Non-Performing Assets:
NPAs are classified based on the duration they remain non-performing:
a) Sub-Standard Assets: Assets that have remained as NPAs for up to 12 months.
b) Doubtful Assets: Assets that have been NPAs for more than 12 months.
c) Loss Assets: Assets considered uncollectible or of such little value that their continuation as a bankable asset is not recommended, although some recovery value may remain, as the asset has not been fully written off.

2. Objectives of the Research

The objectives of this research are as follows:
1. To analyse non-performing assets of public and private sector banks
2. To evaluate the various components of non-performing assets of banks.

3. Research Methodology

The research methodology associated with this study is as follows:

1. **Secondary Data:** This research paper is based on secondary data and were being collected form annual reports of banks, Reserve Bank of India database, published articles, journals and relevant text books.

2. **Sample:** The study is a sample-based study. Banks are initially classified into public sector and private sector banks. Criteria based sampling is used to select banks. A sample of 6 banks has been selected. Mean of the net profit of both public as well as private sector banks for 3 years i.e. from financial year 2022-2023 to 2024-2025 are calculated for ranking purpose. Top three banks from each sector are selected based on these criteria.

3. **Period of Study:** The study covers a period of three years i.e. from financial year 2022-2023 to 2024-2025.

4. **Tools of Analysis:** Ratios and mean are calculated initially and ranking is done on bank wise as well as sector wise. Finally overall ranking on parameter wise is done for banks as well as sectors. Multivariate Analysis of Co-variance (MANCOVA) is used to measure the possible changes over time period due to the influence of trend. Graphs are used to present data.

4. Results and Discussion

Under this analysis category, the non-performing assets of public and private sector banks are evaluated.

A. Ratios, Mean and Rank

1. Gross Non-Performing Assets to Total Assets:

Table 1 – Gross Non-Performing Assets to Total Assets Mean and Rank

Particulars	2023	2024	2025	Mean	Rank
State Bank of India (SBI)	1.65	1.36	1.15	1.37	3
Bank of Baroda	2.52	2.01	1.56	2.00	5
Canara Bank	3.43	2.72	1.87	2.62	6
Public Sector Banks	2.09	1.69	1.34	1.68	2
HDFC Bank Ltd.	0.73	0.86	0.90	0.84	1
ICICI Bank Ltd.	1.97	1.49	1.14	1.49	4
Axis Bank Ltd.	1.41	1.02	0.90	1.09	2
Private Sector Banks	1.26	1.07	0.97	1.08	1

Source: Computed from Secondary Data

HDFC Bank Ltd. has the lowest mean ratio (0.84) and the highest rank whereas Canara Bank has the highest mean ratio (2.62) and the lowest rank. Private Sector Banks have the lowest mean ratio (1.08) and the highest rank whereas Public Sector Banks have the highest mean ratio (1.68) and the lowest rank

2. Net Non-Performing Assets to Total Assets:

Table 2 – Net Non-Performing Assets to Total Assets Mean and Rank

Particulars	2023	2024	2025	Mean	Rank
State Bank of India (SBI)	0.39	0.34	0.29	0.34	4
Bank of Baroda	0.57	0.45	0.39	0.47	5
Canara Bank	1.07	0.79	0.44	0.74	6
Public Sector Banks	0.53	0.43	0.34	0.43	2
HDFC Bank Ltd.	0.18	0.22	0.29	0.2380	1
ICICI Bank Ltd.	0.33	0.29	0.26	0.29	3
Axis Bank Ltd.	0.27	0.22	0.23	0.2382	2
Private Sector Banks	0.24	0.24	0.27	0.25	1

Source: Computed from Secondary Data

HDFC Bank Ltd. has the lowest mean ratio (0.2380) and the highest rank whereas Canara Bank has the highest mean ratio (0.74) and the lowest rank. Private Sector Banks have the lowest mean ratio (0.25) and the highest rank whereas Public Sector Banks have the highest mean ratio (0.43) and the lowest rank

3. **Gross Non-Performing Assets to Advances:**

Table 3 – Gross Non-Performing Assets to Advances Mean and Rank

Particulars	**2023**	**2024**	**2025**	**Mean**	**Rank**
State Bank of India (SBI)	2.84	2.28	1.85	2.28	4
Bank of Baroda	3.91	2.99	2.30	3.00	5
Canara Bank	5.56	4.36	3.01	4.21	6
Public Sector Banks	3.50	2.75	2.12	2.73	2
HDFC Bank Ltd.	1.13	1.25	1.34	1.26	1
ICICI Bank Ltd.	3.06	2.36	1.80	2.35	3
Axis Bank Ltd.	2.20	1.57	1.39	1.69	2
Private Sector Banks	1.96	1.60	1.48	1.65	1

Source: Computed from Secondary Data

HDFC Bank Ltd. has the lowest mean ratio (1.26) and the highest rank whereas Canara Bank has the highest mean ratio (4.21) and the lowest rank. Private Sector Banks have the lowest mean ratio (1.65) and the highest rank whereas Public Sector Banks have the highest mean ratio (2.73) and the lowest rank .

4. **Net Non-Performing Assets to Advances:**

Table 4 – Net Non-Performing Assets to Advances Mean and Rank

Particulars	**2023**	**2024**	**2025**	**Mean**	**Rank**
State Bank of India (SBI)	0.0067	0.0057	0.0047	0.56	4
Bank of Baroda	0.0089	0.0068	0.0058	0.70	5
Canara Bank	0.0173	0.0127	0.0070	1.19	6
Public Sector Banks	0.0089	0.0070	0.0053	0.69	2
HDFC Bank Ltd.	0.0027	0.0033	0.0043	0.35	1
ICICI Bank Ltd.	0.0051	0.0045	0.0042	0.45	3
Axis Bank Ltd.	0.0042	0.0034	0.0035	0.37	2
Private Sector Banks	0.0038	0.0036	0.0041	0.38	1

Source: Computed from Secondary Data

HDFC Bank Ltd. has the lowest mean ratio (0.35) and the highest rank whereas Canara Bank has the highest mean ratio (1.19) and the lowest rank. Private Sector Banks have the lowest mean ratio (0.38) and the highest rank whereas Public Sector Banks have the highest mean ratio (0.69) and the lowest rank.

5. Net Non-Performing Assets to Net Advances:

Table 5 – Net Non-Performing Assets to Net Advances Mean and Rank

Particulars	**2023**	**2024**	**2025**	**Mean**	**Rank**
State Bank of India (SBI)	0.67	0.57	0.47	0.57	4
Bank of Baroda	0.89	0.68	0.58	0.72	5
Canara Bank	1.73	1.27	0.70	1.23	6
Public Sector Banks	1.10	0.84	0.58	0.84	2
HDFC Bank Ltd.	0.27	0.33	0.43	0.3429	1
ICICI Bank Ltd.	0.48	0.42	0.39	0.43	3
Axis Bank Ltd.	0.39	0.31	0.33	0.3433	2
Private Sector Banks	0.38	0.35	0.38	0.37	1

Source: Computed from Secondary Data

HDFC Bank Ltd. has the lowest mean ratio (0.3429) and the highest rank whereas Canara Bank has the highest mean ratio (1.23) and the lowest rank. Private Sector Banks have the lowest mean ratio (0.37) and the highest rank whereas Public Sector Banks have the highest mean ratio (0.84) and the lowest rank.

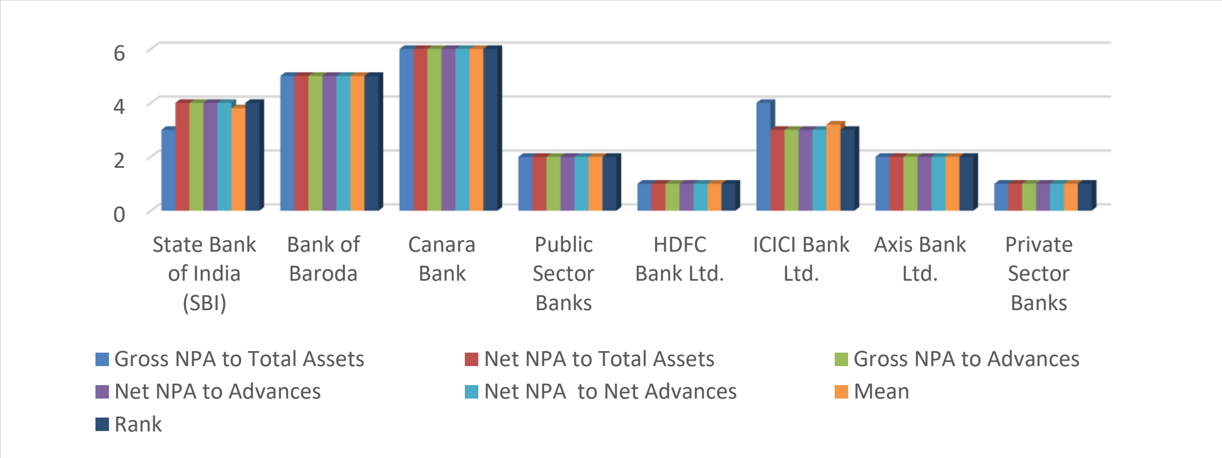
A. **Non-Performing Assets- Parameter Wise Ranking:**

Table 6 – Non-Performing Assets- Parameter Wise Ranking

Particulars	**Gross NPA to Total Assets**	**Net NPA to Total Assets**	**Gross NPA to Advances**	**Net NPA to Advances**	**Net NPA to Net Advances**	**Mean**	**Rank**
State Bank of India	3	4	4	4	4	3.80	4
Bank of Baroda	5	5	5	5	5	5.00	5
Canara Bank	6	6	6	6	6	6.00	6
Public Sector Banks	2	2	2	2	2	2.00	2
HDFC Bank Ltd.	1	1	1	1	1	1.00	1
ICICI Bank Ltd.	4	3	3	3	3	3.20	3
Axis Bank Ltd.	2	2	2	2	2	2.00	2
Private Sector Banks	1	1	1	1	1	1.00	1

Source: Computed from Secondary Data

Figure 1 – Non-Performing Assets- Parameter Wise Ranking



In non-performing assets parameter, HDFC Bank Ltd. has the lowest mean of ranks of sub parameters (1) and the highest rank whereas Canara Bank has the highest mean (6) and the lowest rank. Private Sector Banks have the lowest mean (1) and the highest rank whereas Public Sector Banks have the highest mean ratio (2) and the lowest rank.

B. Analysis After Controlling for Possible Trend Over Time

Analysis after controlling for possible trend over time associated with each of the parameter considered in this model is depicted below.

1. Non-Performing Assets: Multivariate Analysis of Co-variance (MANCOVA) is used to measure the possible changes over time period due to the influence of trend on the five ratios of non-performing assets among banks.

H0: There is no significant difference in the non-performing assets of public and private sector banks after controlling for possible trend over time.

Table No.: 7 – Non-Performing Assets – Difference between banks over time period

Effect		**Value**	**F**	**Df**	**Sig**	**Partial Eta Squared**
Time	Pillai's Trace	.630	17.346	5	.000	.690
	Wilks' Lambda	.381	17.346	5	.000	.690

Source: Computed from Secondary Data

Table No.: 8 – Non-Performing Assets–Ratio wise difference between banks over time period

Sl. No.	**Ratios**	**F**	**Sig**	**Partial Eta Squared**
1	Gross NPA to Total Assets	18.49	0	0.521
2	Net NPA to Total Assets	25.81	0.001	0.677
3	Gross NPA to Advances	13.81	0.003	0.329
4	Net NPA to Advances	16.89	0	0.427
5	Net NPA to Net Advances	57.37	0.005	0.710

Source: Computed from Secondary Data

The results revealed that there is a significant difference in non-performing assets related ratios due to time as per Pillai's Trace F value 17.346 which is significant at 5 percent level of significance (P value less than 0.05) and associated Partial Eta Squared is 0.690 which is very high. It is found that while considering the five aspects of non-performing assets ratios, there is a variation in each ratio and it is significant as the P value is less than 0.05. Among the five aspects of non-performing assets ratios, Net NPA to Net Advances seems to vary more as the associated Partial Eta Squared is high (0.710) than other ratios. Hence, there is significant difference in the non-performing assets ratios of banks after controlling for possible variations due to time and hence the null hypothesis is rejected.

Appropriate credit risk administration policies must be executed by the banks. Public sector banks must consider the new gainful venture avenues for positioning the unutilised assets in an operative custom. Asset reconstruction strategies must be scientifically outlined so as to logically manage non-performing assets. Solid recovery procedures should be implemented by both sector banks which will lead to added profitability of banks. Systematic valuation must be done for loans and advances so as to lessen Non-Performing Assets.

5. Conclusion

Post liberalization period and reforms have created novel aspects of growth and progress in India along with many challenges and competition. The banking sector in India has assumed a calculated response to the reforms. Banks must reengineer their tactics by bearing in mind their strengths and weakness. There is a necessity to reflect the opportunities and challenges to advance parameters of the banks. Public sector banks, owned and managed by the government, are forced to function within the thin context of solid and inflexible strategies whereas flexibility in performance is awarded to private sector banks. These have great impact on most of the parameters. All banks should refine their policies according to the changes in the market for guaranteeing development and enhancing capability because the parameters are constantly touching new heights and this state is anticipated in future also.

References

1. Rao, A., & Reddy, K. (2025). Non-performing assets: Status and trends of the select public and private sector banks in India. Journal of Economics, Management and Trade, 31, 20–29. https://doi.org/10.9734/jemt/2025/v31i101360
2. Kothari, S. (2024). Critical analysis on non-performing assets in public and private sector banks. Social Science Research Network (SSRN). https://doi.org/10.2139/ssrn.4752846
3. Arunsankar, N., & Santhoshkumar, R. (2024). A study on recovery of non-performing assets of scheduled commercial banks in India. ShodhKosh: Journal of Visual and Performing Arts, 5(6). https://doi.org/10.29121/shodhkosh.v5.i6.2024.5805
4. Collins, B. (2024). Banking Industry and Non-Performing Assets (NPAs). Venus.
5. Goswami, D. P. (2021). Legal aspects of recovery & reduction of non-performing assets. (SSRN)
6. Misra, S. K., & Puri, V. K. (2020). Indian banking system. Himalaya Publishing House.
7. Kumar, R. (2019). Non-performing assets in Indian banking industry. Regal Publications.

8. Khan, M. Y., & Jain, P. K. (2018). Financial management: Text, problems and cases (8th ed.). McGraw Hill Education.
9. Mishkin, F. S., & Eakins, S. G. (2018). Financial markets and institutions (9th ed.). Pearson.
10. Gupta, R. (2017). Non-performing assets in Indian banks: Issues and perspectives. Atlantic Publishers & Distributors.