COMPARATIVE STUDY ON NON-PERFORMING ASSETS OF PUBLIC SECTOR BANKS AND PRIVATE SECTOR BANKS

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ABSTRACT

Non-Performing Assets (NPAs) are a central indicator of bank asset quality because they represent advances that no longer generate scheduled interest or principal. This article compares the Gross NPA and Net NPA ratios of five public sector banks—State Bank of India, Bank of Baroda, Canara Bank, Union Bank of India and Punjab National Bank—and five private sector banks—HDFC Bank, ICICI Bank, Axis Bank, Kotak Mahindra Bank and IndusInd Bank—over FY2020–21 to FY2025–26.

The study uses secondary data from audited annual reports, year-end financial results, investor presentations and Reserve Bank of India publications. Simple averages are used only as descriptive sector indicators; they are not weighted by advances. The results show substantial improvement in public-sector asset quality through the period, while private banks maintained lower and more stable NPA ratios overall.

The findings of the study reveal that public sector banks recorded higher Gross NPA and Net NPA ratios than private sector banks during the study period. However, both sectors showed a significant decline in NPAs over the years, indicating improvements in loan recovery, credit appraisal systems, and risk management practices. Private sector banks consistently maintained lower NPA levels, reflecting better asset quality and operational efficiency. The research is descriptive and comparative in nature and is based entirely on secondary data collected from annual reports of banks, Reserve Bank of India (RBI) publications, research journals, books, and official websites. Gross NPA and Net NPA ratios were used as the primary indicators for evaluating and comparing the asset quality of the selected banks.

The study concludes that effective management of NPAs is essential for ensuring the profitability, stability, and sustainable growth of banks. The overall declining trend in NPAs demonstrates the positive impact of banking reforms, improved recovery mechanisms, and stronger regulatory measures on the Indian banking sector.

Keywords: Non-Performing Assets, Gross NPA, Net NPA, Public Sector Banks, Private Sector Banks, Asset Quality, Provisioning, Indian Banking, Credit Risk Management, Loan Recovery, Banking Performance, Financial Stability.

1.1 INTRODUCTION

Banks mobilize deposits and convert savings into productive credit. The quality of those advances affects profitability, capital adequacy, liquidity and public confidence. Under prudential norms, a term loan generally becomes non-performing when interest or instalment of principal remains overdue for more than 90 days. Once classified as an NPA, income recognition becomes conservative and the bank must create provisions based on the asset's category and security coverage.

Gross NPA is the total stock of non-performing advances before deducting provisions. The Gross NPA ratio expresses that stock as a percentage of gross advances. Net NPA deducts eligible provisions and related adjustments; the Net NPA ratio therefore reflects the residual credit risk carried on the balance sheet relative to net advances.

Public sector banks historically carried a heavier legacy burden from infrastructure, industry and consortium lending. Private sector banks generally entered the period with lower ratios, stronger retail orientation and faster technology-led monitoring. However, sector ownership alone does not determine asset quality: underwriting discipline, portfolio mix, recoveries, write-offs, economic cycles and recognition practices all matter.

In India, both public sector banks and private sector banks play a significant role in financial intermediation. However, differences in ownership, lending policies, credit appraisal systems, and risk management practices often result in variations in their NPA levels. Public sector banks generally face higher NPAs due to their larger exposure to priority sectors and corporate lending, whereas private sector banks tend to maintain lower NPAs through stricter credit evaluation and efficient recovery mechanisms.

1.2 SCOPE OF THE STUDY

- Period: financial years ended 31 March 2021 to 31 March 2026.
- Coverage: five large public sector and five large private sector banks.
- Measures: year-end Gross NPA ratio and Net NPA ratio.
- Comparison: bank-wise trends and simple sector averages.
- It compares the NPA performance of public sector banks and private sector banks.
- The study evaluates the effectiveness of NPA management and loan recovery practices of the selected banks.
- It analyzes the trends and changes in NPAs during the study period.
- The study is based entirely on secondary data collected from annual reports, RBI publications, journals, books, and official websites.
- The findings help in understanding the financial health, asset quality, and operational efficiency of the selected banks.

FY2026 figures refer to the year ended 31 March 2026 and were drawn from Q4/FY26 result releases available by June 2026.

1.3 NEED FOR THE STUDY

- NPAs reduce interest income and require provisions, directly influencing bank profitability.
- Persistent NPAs constrain fresh lending and can weaken the transmission of credit to productive sectors.
- A comparison across ownership groups helps identify whether the historical asset-quality gap is narrowing.
- Six years capture the post-pandemic stress cycle, recovery measures and recent normalization.
- Bank-wise analysis avoids treating all institutions within one ownership group as identical.
- To analyze the trends in Gross NPA and Net NPA ratios during the study period.
- To assess the asset quality and financial health of the selected banks.
- To evaluate the effectiveness of credit appraisal and risk management practices.
- To examine the impact of NPAs on the profitability and performance of banks.
- To identify the differences in NPA management between public and private sector banks.
- To study the recovery measures adopted by banks to reduce bad loans.
- To understand the role of NPAs in determining the efficiency of banking operations.

1.4 OBJECTIVES OF THE STUDY

- To examine Gross NPA ratios of the selected public and private sector banks from 2021 to 2026.
- To examine Net NPA ratios over the same period.
- To compare the pace and consistency of asset-quality improvement across banks.
- To compare simple average Gross and Net NPA ratios for the two sectors.
- To offer findings and practical suggestions for continued NPA control.
- To study the impact of NPAs on the profitability and financial performance of banks.
- To analyze the loan recovery performance of the selected banks.
- To examine the measures taken by banks and regulatory authorities to control NPAs.
- To evaluate the comparative financial health of public and private sector banks.
- To provide suitable suggestions for improving NPA management and asset quality.
- To understand the role of effective credit appraisal and monitoring in reducing NPAs.

1.5 HYPOTHESES

H_0: There is no meaningful descriptive difference between the Gross and Net NPA ratios of the selected public and private sector banks during the study period.

H_1: Public sector banks exhibit higher Gross and Net NPA ratios than private sector banks during most of the study period, although the gap narrows over time.

2.1 REVIEW OF LITERATURE

1. Reserve Bank of India, Financial Stability Reports: RBI's periodic assessments link the decline in scheduled commercial bank GNPA ratios to stronger balance sheets, recoveries, write-offs and improved credit discipline, while continuing to stress the importance of forward-looking provisioning.

2. Reserve Bank of India, Report on Trend and Progress of Banking in India: The reports document changes in slippages, recoveries, provisioning and stressed assets across bank groups and provide the regulatory context for NPA recognition and resolution.

3. Rajaraman, Bhaumik and Bhatia (1999): Their work on Indian public sector banks emphasized that problem loans are connected with operational and institutional factors and cannot be understood only through ownership.

4. Das and Ghosh (2007): The authors examined determinants of problem loans in Indian banking and highlighted the roles of bank-specific characteristics, macroeconomic conditions and credit growth.

5. Kaur and Singh (2011): Their comparative analysis reported that the NPA burden affected profitability and operating efficiency and underlined the need for better recovery management.

6. Bank annual reports and investor presentations: Institution-level disclosures supply the most comparable year-end GNPA and NNPA ratios and explain movements caused by slippages, upgrades, recoveries, write-offs and portfolio changes.

RESEARCH GAP

Many studies end before the sharp post-pandemic improvement or compare sectors only at an aggregate level. This article extends the descriptive comparison through FY2026 and presents all ten banks together, making the convergence and bank-specific deviations visible.A review of the existing literature reveals that several studies have examined Non-Performing Assets (NPAs) in the Indian banking sector. Most of the previous studies focused either on public sector banks or private sector banks separately, while only a limited number of studies have made a comprehensive comparison between the two sectors. Furthermore, many studies were conducted using data from earlier periods and do not reflect the recent changes in asset quality and NPA management practices. There is also limited research covering the post-pandemic period and the latest financial years up to FY 2024–25.Therefore, the present study attempts to fill this gap by providing a comparative analysis of Gross NPA and Net NPA ratios of selected public and private sector banks during the period from FY 2020–21 to FY 2024–25, thereby offering updated insights into the trends, performance, and effectiveness of NPA management in the Indian banking sector.

2.2 RESEARCH METHODOLOGY

RESEARCH DESIGN

The study follows a descriptive and comparative research design. It observes published year-end ratios without attempting to establish causality. The collected data are organized, classified, tabulated, and analyzed using statistical tools such as percentages, tables, graphs, and comparative analysis. This research design enables a systematic evaluation of asset quality, loan recovery performance, and NPA management practices of the selected banks and facilitates meaningful comparisons between public sector and private sector banks.

DATA SOURCES

- Annual reports and audited year-end financial statements of the ten selected banks.
- Q4/FY26 earnings releases and investor presentations.
- RBI Financial Stability Reports and the Report on Trend and Progress of Banking in India.
- Published Articles and Magazines.
- Newspapers containing banking and financial information.
- Official Websites of the selected banks.
- Official RBI Website.
- Government publications and reports related to the banking sector.
- Online databases and financial information portals.

SAMPLING

Purposive sampling is used. The sample includes ten systemically important and widely followed Indian banks, equally divided between public and private ownership.

TOOLS OF ANALYSIS

- Trend analysis of GNPA and NNPA ratios.
- Bank-wise and sector-wise comparison.
- Simple arithmetic mean for each five-bank group.
- Percentage-point gap between public and private group averages.

LIMITATIONS

- Ratios are affected by portfolio mix, write-offs, recoveries and merger-related changes.
- Simple averages give each bank equal weight and do not represent the system-wide weighted ratio.
- The study uses published ratios rounded to two decimals; minor differences can arise from restatements or rounding.
- FY2026 figures are based on year-end results available by June 2026.
- Changes in government policies and economic conditions during the study period may influence the results.
- The study does not include primary data collected from bank officials or customers.

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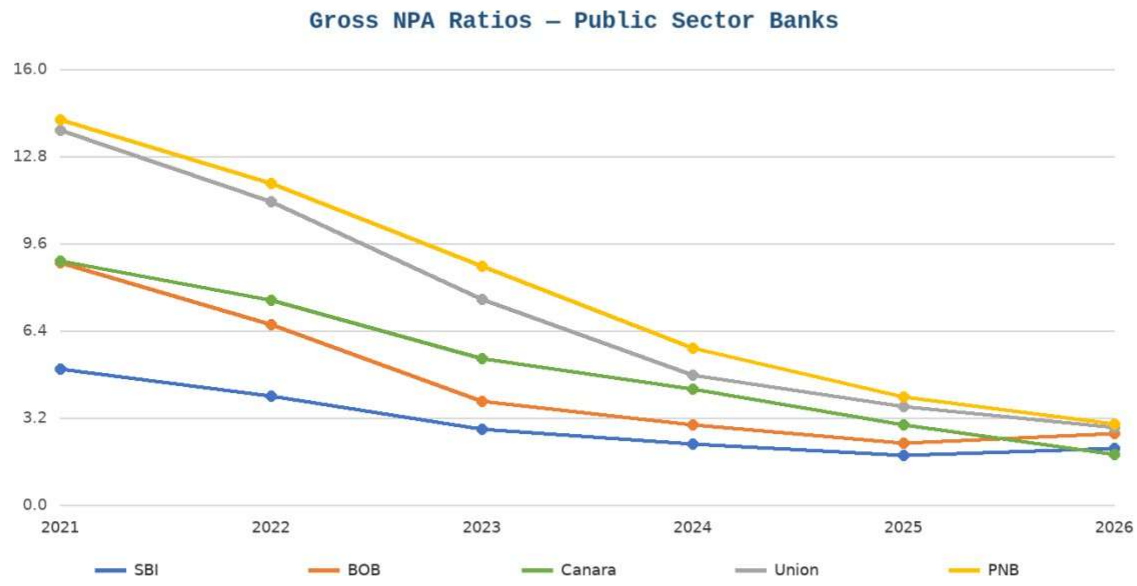
2.3 DATA ANALYSIS AND INTERPRETATION

Table 3.1: Public Sector Banks—Gross and Net NPA Ratios (%)

Bank	2021 G	2021 N	2022 G	2022 N	2023 G	2023 N	2024 G	2024 N	2025 G	2025 N	2026 G	2026 N
SBI	4.98	1.50	3.97	1.02	2.78	0.67	2.24	0.57	1.82	0.47	2.05	0.48
BOB	8.87	3.09	6.61	1.72	3.79	0.89	2.92	0.68	2.26	0.58	2.62	0.53
Canara	8.93	3.82	7.51	2.65	5.35	1.73	4.23	1.27	2.94	0.70	1.84	0.42
Union	13.74	4.62	11.11	3.68	7.53	1.70	4.76	1.03	3.60	0.63	2.82	0.61
PNB	14.12	5.73	11.78	4.80	8.74	2.72	5.73	0.73	3.95	0.40	2.95	0.60

G = Gross NPA ratio; N = Net NPA ratio. Years denote financial years ended 31 March.



ANALYSIS:

- All five public sector banks recorded a large multi-year reduction in Gross NPA ratios. PNB and Union Bank began with the highest ratios in 2021, whereas SBI remained the lowest among the public banks for most years.

INTERPRETATION:

The broad fall indicates stronger recoveries, upgrades, write-offs, provisioning and underwriting discipline. Small increases for SBI and BOB in FY2026 should be read as year-specific movements rather than a reversal of the six-year improvement.

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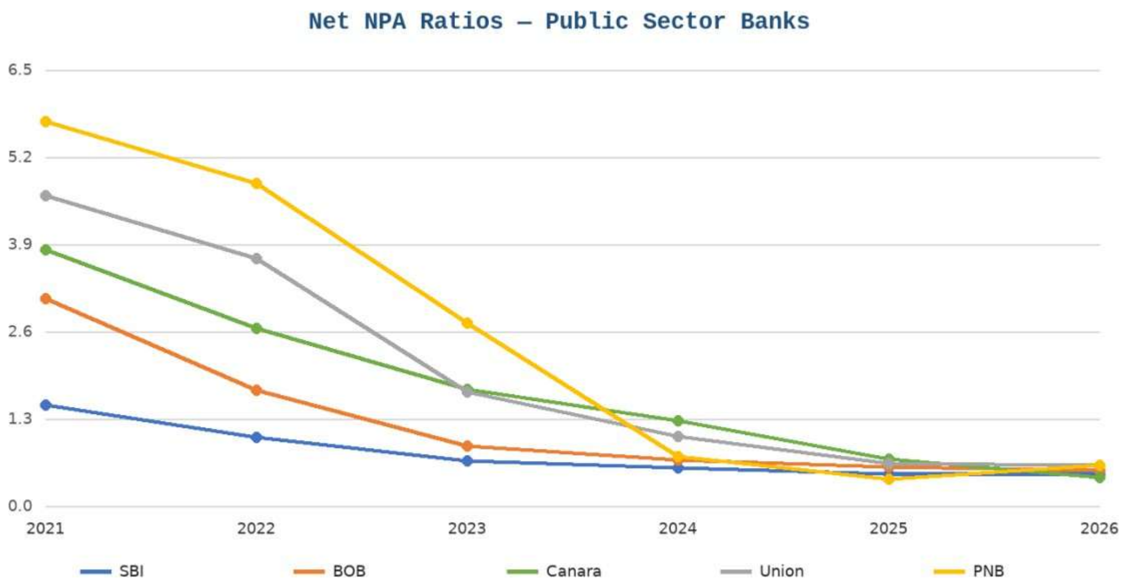
3.1 PUBLIC SECTOR BANKS—NET NPA ANALYSIS



ANALYSIS:

- Net NPA ratios declined even more sharply than Gross NPA ratios. PNB moved from 5.73% in 2021 to 0.60% in 2026; Union Bank moved from 4.62% to 0.61%; and Canara Bank moved from 3.82% to 0.42%.

INTERPRETATION:

The narrowing gap between gross and net ratios reflects the cumulative impact of provisions and recoveries. By FY2025–26, the selected public banks had brought residual NPA risk below 1%, a material strengthening of balance-sheet resilience.

BANK-WISE OBSERVATIONS

- SBI: consistently strongest public-bank asset quality, with GNPA around 2% by FY2026.
- BOB: major reduction from 8.87% GNPA in 2021; modest FY2026 uptick.
- Canara Bank: continued improvement in FY2026, reaching the sample's lowest public-bank GNPA and NNPA.
- Union Bank: rapid clean-up from double-digit GNPA to below 3%.
- PNB: largest absolute improvement, though FY2026 NNPA rose from the unusually low FY2025 level.

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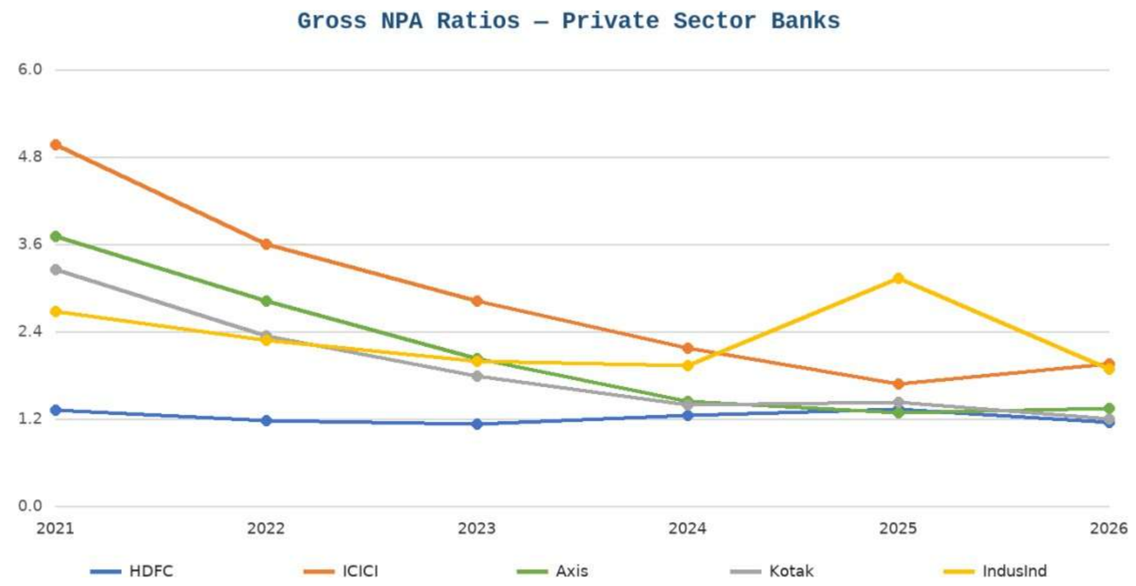
3.2 PRIVATE SECTOR BANKS—GROSS AND NET NPA RATIOS (%)

Bank	2021 G	2021 N	2022 G	2022 N	2023 G	2023 N	2024 G	2024 N	2025 G	2025 N	2026 G	2026 N
HDFC	1.32	0.40	1.17	0.32	1.12	0.27	1.24	0.33	1.33	0.43	1.15	0.31
ICICI	4.96	1.14	3.60	0.76	2.81	0.48	2.16	0.42	1.67	0.39	1.95	0.39
Axis	3.70	1.05	2.82	0.73	2.02	0.39	1.43	0.31	1.28	0.33	1.34	0.30
Kotak	3.25	1.21	2.34	0.64	1.78	0.37	1.39	0.34	1.42	0.31	1.20	0.25
IndusInd	2.67	0.69	2.27	0.64	1.98	0.59	1.92	0.57	3.13	0.95	1.88	0.54

Source: respective bank annual reports and year-end result disclosures.



ANALYSIS:

- Private-bank GNPA ratios were lower and less dispersed than those of public banks. HDFC remained close to 1.1–1.3%; Axis and Kotak improved steadily; ICICI declined markedly through FY2025 before rising in FY2026; IndusInd showed a visible FY2025 spike.

INTERPRETATION:

The sector's lower starting point limits the scale of possible decline. Stable low ratios suggest stronger portfolio granularity and monitoring, but the IndusInd movement demonstrates that private ownership does not remove institution-specific asset-quality risk.

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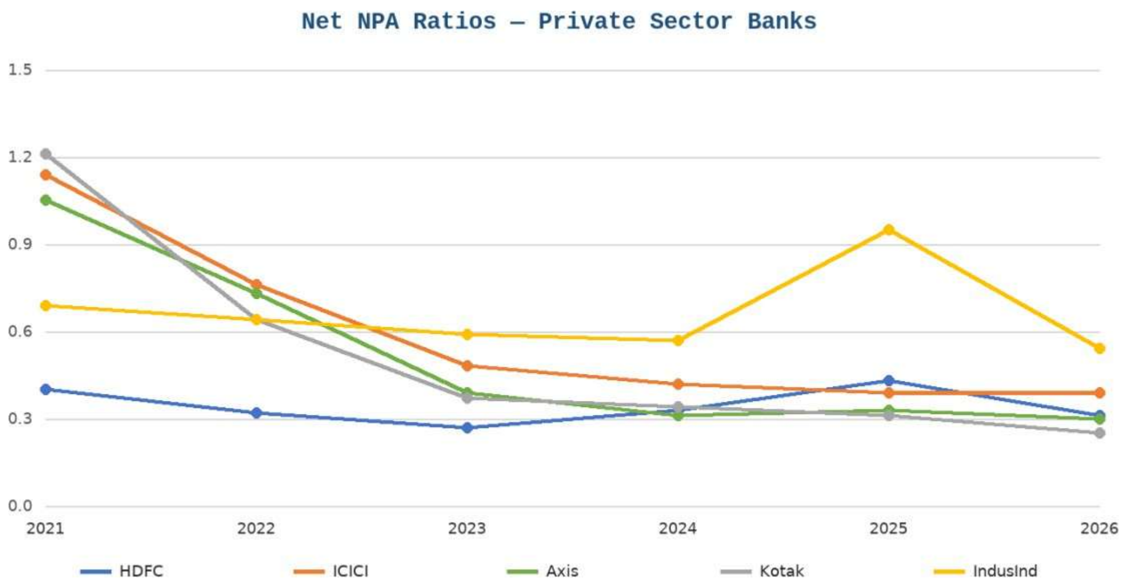
3.3 PRIVATE SECTOR BANKS—NET NPA ANALYSIS



ANALYSIS:

- Private-bank NNPA ratios remained near or below 1% throughout most observations. ICICI, Axis and Kotak achieved sustained reductions. IndusInd rose to 0.95% in FY2025 and improved to 0.54% in FY2026.

INTERPRETATION:

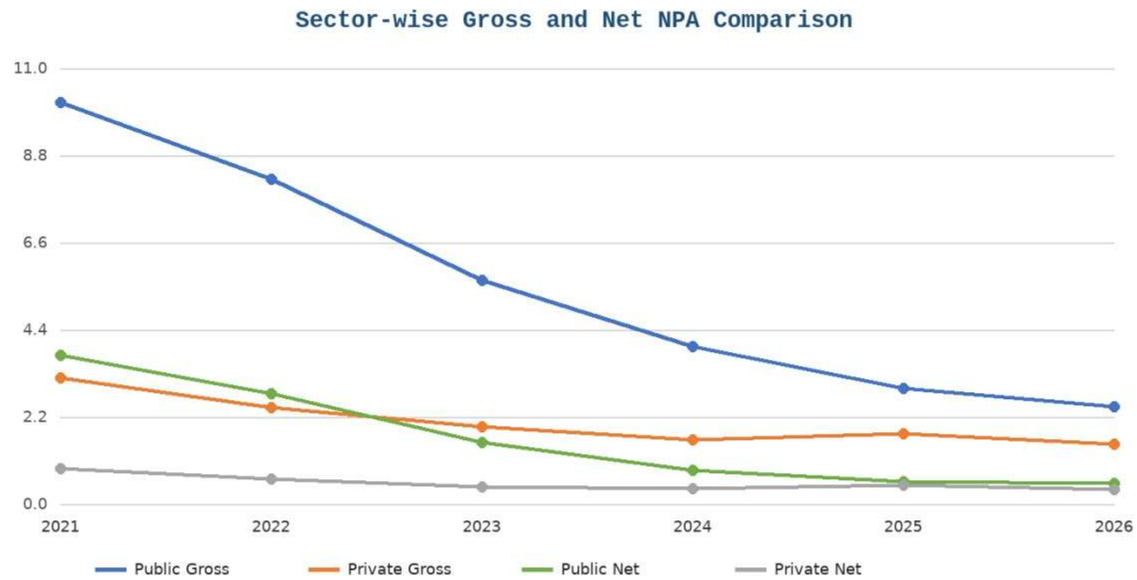
Low Net NPA ratios indicate that provisions substantially absorb recognized stress. HDFC, Axis and Kotak closed FY2026 at 0.31%, 0.30% and 0.25% respectively. However, Gross NPA trends must also be examined because a low NNPA can coexist with meaningful gross stress if provision coverage is high.

BANK-WISE OBSERVATIONS

- HDFC: low and stable ratios throughout the period.
- ICICI: substantial long-run improvement, despite a FY2026 GNPA increase.
- Axis: consistent reduction to 1.34% GNPA and 0.30% NNPA in FY2026.
- Kotak: lowest FY2026 NNPA in the selected sample.
- IndusInd: higher volatility, with marked deterioration in FY2025 followed by improvement in FY2026.

3.4 SECTOR COMPARISON—GROSS NPA

Year	Public sector	Private sector	Gap
2021	10.13	3.18	6.95
2022	8.20	2.44	5.76
2023	5.64	1.94	3.70
2024	3.98	1.63	2.35
2025	2.91	1.77	1.15
2026	2.46	1.50	0.95



ANALYSIS:

- The simple average public-sector GNPA declined from 10.13% in 2021 to 2.46% in 2026. The private-sector average declined from 3.18% to 1.50%. The sector gap therefore narrowed from 6.95 percentage points to 0.96 percentage points.

INTERPRETATION:

Public banks improved faster because they started with a much larger stock of legacy stress. By FY2026, public-bank averages remained higher, but the gap was far smaller. This supports convergence in recognized asset quality without implying that the sectors have identical portfolios or risk profiles.

3.5 SECTOR COMPARISON—NET NPA

Year	Public sector	Private sector	Gap
2021	3.75	0.90	2.85
2022	2.77	0.62	2.16
2023	1.54	0.42	1.12
2024	0.86	0.39	0.46
2025	0.56	0.48	0.07
2026	0.53	0.36	0.17

YEAR-WISE INTERPRETATION

- 2021: Public banks carried much higher residual stress, averaging 3.75% NNPA against 0.90% for private banks.
- 2022: Both groups improved; the public average remained more than three times the private average.
- 2023: Faster clean-up reduced the public average to 1.54%, while private banks averaged 0.42%.
- 2024: Public NNPA reached 0.86% and the gap narrowed below half a percentage point.
- 2025: Public and private simple averages were 0.56% and 0.47%, respectively—the closest point in the series.
- 2026: Public NNPA averaged 0.53% versus 0.36% for private banks; both remained comfortably below 1%.

ANALYSIS:

- Net ratios converge more quickly than gross ratios because provisioning cushions the residual exposure after an account is recognized as non-performing.

INTERPRETATION:

By the end of the period, both groups display strong provision-adjusted asset quality. The remaining public-private difference is small in absolute terms but still visible on an equal-weighted basis.

3.6 COMPARATIVE TREND SUMMARY

Measure	Public 2021	Public 2026	Change	Private 2021	Private 2026	Change
Average GNPA	10.13	2.46	−7.67	3.18	1.50	−1.68
Average NNPA	3.75	0.53	−3.22	0.90	0.36	−0.54
GNPA–NNPA spread	6.38	1.93	−4.45	2.28	1.14	−1.14

MAJOR PATTERNS

- Convergence: the ownership-group difference reduced substantially between 2021 and 2026.
- Provisioning effect: NNPA ratios are substantially lower than GNPA ratios in every bank and year.

- Public-bank turnaround: the largest absolute reductions occurred at PNB, Union Bank and Canara Bank.
- Private-bank stability: HDFC, Axis and Kotak remained low and comparatively stable.
- Institution-specific risk: IndusInd's FY2025 rise and isolated FY2026 increases show that aggregate sector trends can conceal bank-level variation.

4.1 FINDINGS

- The selected public banks' average GNPA fell by 7.67 percentage points, compared with 1.68 points for private banks.
- The public-bank average NNPA fell from 3.75% to 0.53%; the private-bank average fell from 0.90% to 0.36%.
- Private banks maintained lower average Gross and Net NPA ratios in all six years.
- The GNPA gap reduced from 6.95 points in 2021 to 0.96 points in 2026.
- The NNPA gap reduced from 2.85 points to 0.17 points.
- PNB and Union Bank recorded the largest clean-up from elevated starting levels.
- Canara Bank reported the lowest FY2026 GNPA among selected public banks.
- Kotak reported the lowest FY2026 NNPA in the total sample.
- HDFC displayed the most stable low GNPA profile.
- IndusInd showed the greatest recent volatility among selected private banks.

4.2 SUGGESTIONS

- Continue cash-flow-based lending and independent credit appraisal.
- Expand real-time early-warning systems and portfolio stress testing.
- Prioritize recoveries and upgrades over reliance on technical write-offs.
- Monitor unsecured retail, MSME and sectoral concentrations closely.
- Maintain prudent provisioning buffers through the credit cycle.
- Standardize public disclosures to improve comparability across banks.
- Public sector banks should focus on improving asset quality through stricter loan monitoring and recovery practices.
- Employee training programs should be conducted to enhance credit evaluation and risk management skills.
- Banks should make greater use of technology and digital tools for tracking and managing loan accounts.
- Adequate provisions should be maintained against non-performing assets to strengthen financial stability.

CONCLUSION

The six-year evidence presents a clear story of improvement in Indian bank asset quality. Public sector banks began FY2021 with substantially higher Gross and Net NPA ratios, reflecting a larger legacy stressed-asset stock. Their ratios then declined rapidly, producing a pronounced convergence with private sector banks. Private banks retained the lower average in every year but experienced less dramatic improvement because their starting ratios were already comparatively low.

By FY2026, the selected public banks averaged 2.46% GNPA and 0.53% NNPA, compared with 1.50% and 0.36% for the private banks. The difference remains, particularly at the gross level, but it is no longer of the magnitude observed in 2021. This indicates stronger recognition, provisioning and resolution capacity across the banking system.

The findings should not be interpreted as proof that ownership alone causes asset-quality outcomes. Portfolio structure, risk appetite, growth rates, provisions, write-offs and recovery strategies differ materially across banks. The most useful conclusion is that disciplined underwriting, early detection, adequate provisioning and effective resolution are common requirements for both groups.

Continued vigilance is essential. A benign headline NPA ratio can deteriorate when rapid credit growth, concentration or weak borrower cash flows are not identified early. Banks should therefore sustain the systems and governance improvements that produced the observed clean-up.

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