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From Forbearance to Recognition and Recovery: Phases of Asset Quality Stress in India's Scheduled Commercial Banks, 1996–97 to 2024–25

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Abstract

This study traces the evolution of asset quality in India's Scheduled Commercial Banks (SCBs) over almost three decades, using annual data on gross advances, gross and net non-performing assets (NPAs), and the loan-asset classification for 1996–97 to 2024–25. The study examines the Provision Coverage Ratio (PCR) and phase-wise compound annual growth rates (CAGR) of advances and stressed assets to identify the major phases of stress and recovery. It deals with five phases: post-reform clean-up (1997–2005), a deceptive calm during the credit boom (2005–2008), a silent build-up of stress (2008–2013), recognition and peak stress following the Asset Quality Review (2013–2018), and resolution and recovery (2018–2025). The gross NPA ratio rose from 2.2 percent in 2008–09 to 11.2 percent in 2017–18, then fell to 2.2 percent in 2024–25, while the PCR increased from 42.8 percent in 2015–16 to 77.9 percent. Stress was higher in doubtful assets, and its share in advances fell from 7.8 per cent to 1.0 per cent. The study underlines the importance of early recognition, adequate provisioning, timely recapitalisation and credible resolution mechanisms.

Keywords: Scheduled Commercial Banks; Asset Quality; Non-Performing Assets; Provision Coverage Ratio; Asset Quality Review; Insolvency and Bankruptcy Code; India

JEL Classification: G21, G28, E58

1. Introduction

Indian Scheduled Commercial Banks have passed through turnarounds in the country's financial history. A sector weighed down by a bad-loan crisis that constrained lending has

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moved to multi-decade low NPA ratios, comfortable capital buffers and stronger earnings, supported by higher net interest income and lower provisioning costs (Reserve Bank of India, 2023). By analysing the interplay between policy interventions, macroeconomic shifts, and institutional behaviours across the structural mechanisms that transformed vulnerable banks in phases of the cycle, the lessons are central to judging how durable the recovery is.

The crisis began with the late-2000s credit expansion, when corporate lending to infrastructure projects slowed, and adverse global shocks hit (Sengupta and Vardhan, 2017). For several years, banks relied on restructuring and regulatory forbearance, which delayed recognising bad loans; evidence from India shows that such forbearance allowed stressed banks to keep supporting weak borrowers (Chari, Jain and Kulkarni, 2021). The turning point came in 2015, when the Reserve Bank of India (RBI) launched the Asset Quality Review (AQR) to bring previously unrecognised stress onto bank balance sheets. Reported delinquency rose sharply, and the ensuing clean-up affected bank capital and lending (Chopra, Subramanian and Tantri, 2021). Banking crises are commonly preceded by rapid credit growth and followed by long periods of balance-sheet repair (Demirgüç-Kunt and Detragiache, 1998; Reinhart and Rogoff, 2009). The Indian experience is useful because it offers a single, consistent annual series covering a boom, a bust, a regulatory shock, and a recovery.

This article addresses three key questions. First, how have gross and net non-performing assets (NPAs), and the provisions made against them, changed between 1996–97 and 2024–25? Second, which categories of stressed assets contributed most to the deterioration in asset quality, and how did the situation improve over time? Third, how did advances and stressed assets grow across the various phases of the banking cycle? The study adopts a descriptive approach to trace these developments, identify major turning points, and understand how India's scheduled commercial banks moved through periods of rising stress and subsequent recovery. The analysis examines whether asset-quality stress affected credit growth during the study period.

2. Conceptual Background

2.1 Asset quality and NPAs

Good asset quality means borrowers repay principal and interest on schedule, keeping non-performing loans low and helping the bank earn stable income with limited credit risk (Rose and Hudgins, 2013; Saunders and Cornett, 2018). In India, an asset is generally classified as an NPA when interest or principal remains overdue for more than 90 days, with different norms for certain agricultural loans and for overdraft and cash-credit accounts (Reserve Bank of India, 2025). Under prudential norms, banks further classify NPAs as substandard, doubtful, and loss assets based on how long they remain non-performing and whether collateral has been released.

Rising NPAs reduce income and require provisions, which draw down profits and capital (Bessis, 2015; Reserve Bank of India, 2023). Empirical work also links problem loans to weaker cost efficiency, as banks divert resources to monitoring and recovery (Berger and DeYoung, 1997), and to a mix of macroeconomic and bank-specific factors (Beck, Jakubik and Piloju, 2015). For India specifically, leverage has been shown to influence the level of bad loans (Ghosh, 2005).

2.2 Indicators used

The literature largely focuses on the Gross NPA (GNPA) ratio, which expresses gross NPAs as a percentage of gross advances and shows problem loans before any provision adjustments (Koch and MacDonald, 2015). The Net NPA (NNPA) ratio deducts provisions, indicating the remaining uncovered problem loans (Mishkin, 2019). The Provision Coverage

Ratio (PCR) measures the share of gross NPAs covered by provisions, and therefore the system's loss-absorption capacity. Because recoveries, write-offs, restructuring, and denominator growth affect reported ratios, read the indicators together rather than in isolation.

2.3 Asset quality in supervision

Asset quality is the 'A' in the CAMELS framework, which assesses capital adequacy, asset quality, management, earnings, liquidity and systems and controls. In India, CAMELS-based assessment followed the recommendations of the Working Group to Review the System of On-site Supervision over Banks (Chairman: S. Padmanabhan, 1995). The High-Level Steering Committee on supervisory processes (Chairman: K. C. Chakrabarty, 2012) later recommended a phased move to Risk-Based Supervision, which the Reserve Bank of India (2012) and Chakrabarty (2013) rolled out for select banks from the 2013 supervisory cycle. These developments set the stage for a supervisory approach that looks for risk early rather than reacting to defaults.

3. Policy and Institutional Context

The Indian banking system's recognition and resolution of stress rested on a sequence of policy actions.

Forbearance and restructuring (to 2015). After 2008, regulators permitted restructured loans to retain standard-asset status for a period. This allowed banks to hold stressed accounts without classifying them as NPAs (Chari, Jain and Kulkarni, 2021).

Asset Quality Review (2015). The AQR required banks to re-examine loan portfolios and classify accounts consistently. Reported GNPA's rose sharply, from 4.3 percent of advances in 2014–15 to 7.5 percent in 2015–16 and 11.2 percent in 2017–18 (Table 1). The review brought forward previously deferred losses.

Transparency and resolution infrastructure. The Central Repository of Information on Large Credits (CRILC) improved the visibility of large borrowers across lenders, and the Insolvency and Bankruptcy Code, 2016 (IBC) created a time-bound, creditor-led resolution process (Government of India, 2016). Together with tighter norms for resolving stressed assets, these measures strengthened asset classification and made resolution more credible (Acharya, 2017).

The '4Rs' strategy. The Government's Recognition, Resolution, Recapitalisation, and Reforms approach combined these supervisory and legal steps with capital support for public sector banks, so cleaning up balance sheets did not simply translate into a contraction of credit (Ministry of Finance, 2026). Public sector banks faced greater pressure from stressed assets, while private banks generally held stronger capital and maintained credit growth. The aggregate series analysed below therefore blends banks with different starting positions, but the direction of the cycle is common to the system.

4. Data and Methodology

The study uses annual data for all Scheduled Commercial Banks from 1996–97 to 2024–25 on gross and net advances, gross and net NPAs (amounts and ratios), and, for 2004–05 to 2024–25, the classification of loan assets into standard, substandard, doubtful and loss categories. Sources are bank annual reports and RBI publications; 2024–25 figures are provisional, and 2023–24 data include the effect of a non-bank-to-bank merger effective 1 July 2023. Amounts are in ₹ crore (1 lakh crore = ₹1,00,000 crore).

The analysis has three components:

- It tabulates and describes trends in advances, NPAs, and ratios.
- The implied Provision Coverage Ratio is computed from reported gross and net NPAs:

$$\text{PCR (\%)} = [(\text{Gross NPA} - \text{Net NPA}) \div \text{Gross NPA}] \times 100$$

This implied PCR may differ slightly from the PCR published by the RBI, which may include technical write-offs.

- Phase-wise compound annual growth rates (CAGR) are computed for total advances, gross NPAs, doubtful assets, and loss assets over the intervals 2005–08, 2008–13, 2013–18, and 2018–25, identified from turning points in the GNPA ratio.

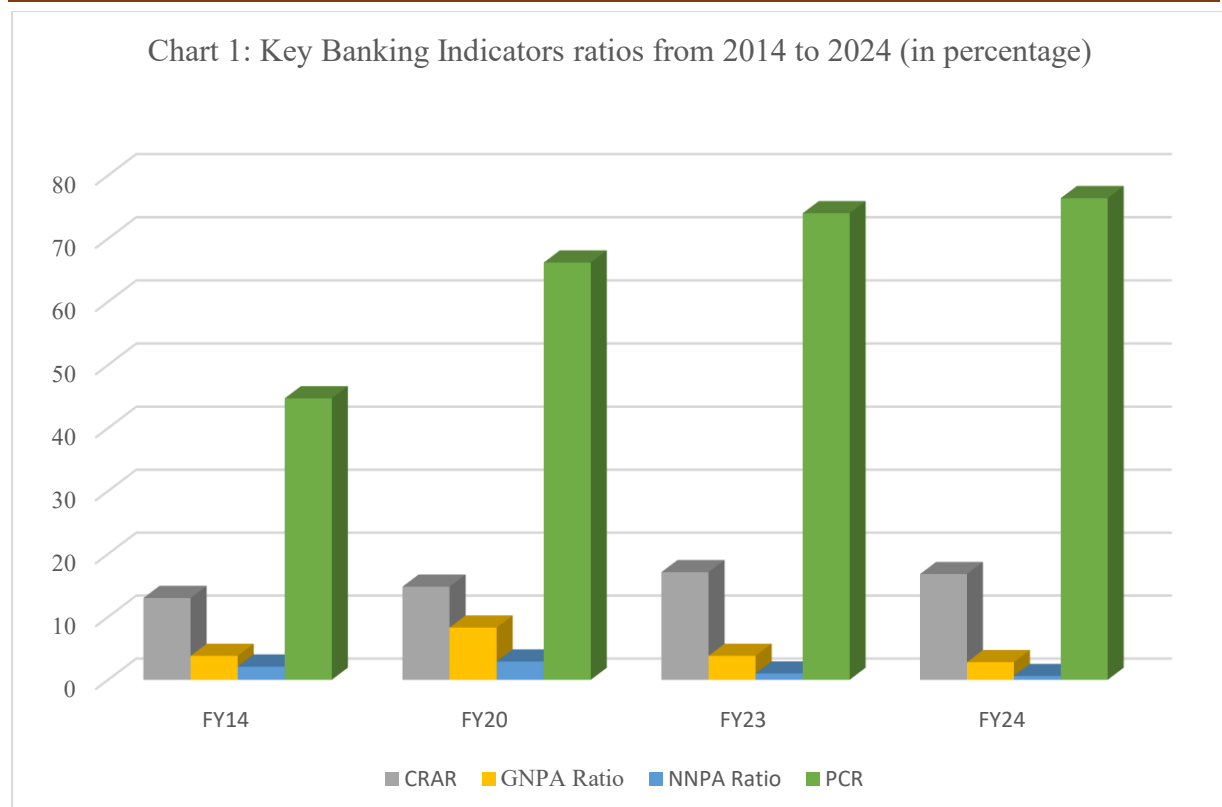
5. Long-Run Trends in Advances and NPAs

Table 1 shows the asset quality of Scheduled Commercial Banks from 1996-97 to 2024-25. During this period, gross advances increased from ₹3,01,698 crore in 1996–97 to ₹1,94,49,465 crore in 2024–25. However, lending growth was accompanied by changes in stressed assets.

Table 1: Advances, NPAs and Provision Coverage of SCBs – selected years

Year (end-March)	Gross advances (₹ lakh crore)	Gross NPAs (₹ lakh crore)	GNPA ratio (%)	NNPA ratio (%)	Implied PCR (%)
1996–97	3.02	0.47	15.7	8.1	52.8
2001–02	6.81	0.71	10.4	5.5	49.8
2004–05	11.68	0.59	5.1	1.9	63.4
2008–09	30.38	0.68	2.2	1.1	53.8
2010–11	43.58	0.98	2.2	1.0	57.3
2012–13	59.88	1.94	3.2	1.7	49.1
2014–15	75.60	3.23	4.3	2.4	45.6
2015–16	81.73	6.12	7.5	4.4	42.8
2017–18	92.66	10.40	11.2	6.0	49.9
2018–19	102.94	9.36	9.1	3.7	62.1
2020–21	114.00	8.35	7.3	2.4	69.1
2022–23	147.57	5.72	3.9	0.9	76.3
2023–24	175.09	4.81	2.7	0.6	77.8
2024–25	194.49	4.32	2.2	0.5	77.9

Source: Annual reports of banks and RBI publications; PCR computed by the author. 2024–25 provisional.



As seen in Table 1, the GNPA ratio was 15.7 percent in 1996–97 and stayed above 10 percent until 2001–02. It then declined to 5.1 percent by 2004–05 and 2.2 percent by 2008–09. Importantly, the denominator alone did not drive the improvement: gross NPAs fell in absolute terms from ₹0.71 lakh crore in 2001–02 to ₹0.50 lakh crore in 2006–07, even as gross advances nearly tripled over the same period.

In Chart 1, the GNPA ratio rose from 2.4 percent in 2009–10 to 4.3 percent in 2014–15, and then to 7.5 percent in 2015–16 and 11.2 percent in 2017–18, when gross NPAs reached ₹10.40 lakh crore, the highest in the series. The net NPA ratio reached 6.0 percent. This was by far the most severe deterioration in the series, and about two-thirds of the rise occurred in the three years after the AQR.

As seen in Chart 2, the Gross NPAs declined every year, from ₹9.36 lakh crore in 2018–19 to ₹4.32 lakh crore in 2024–25, a fall of about 58 percent from the peak. Net NPAs fell by almost 82 percent, from ₹5.21 lakh crore in 2017–18 to ₹0.95 lakh crore, taking the net NPA ratio to 0.5 percent. Notably, this occurred while gross advances more than doubled from ₹92.66 lakh crore to ₹194.49 lakh crore. In 2024–25 alone, gross NPAs fell by more than 10 percent in absolute terms, from ₹4.81 lakh crore to ₹4.32 lakh crore. Bank asset quality is thus at its cleanest in nearly three decades.

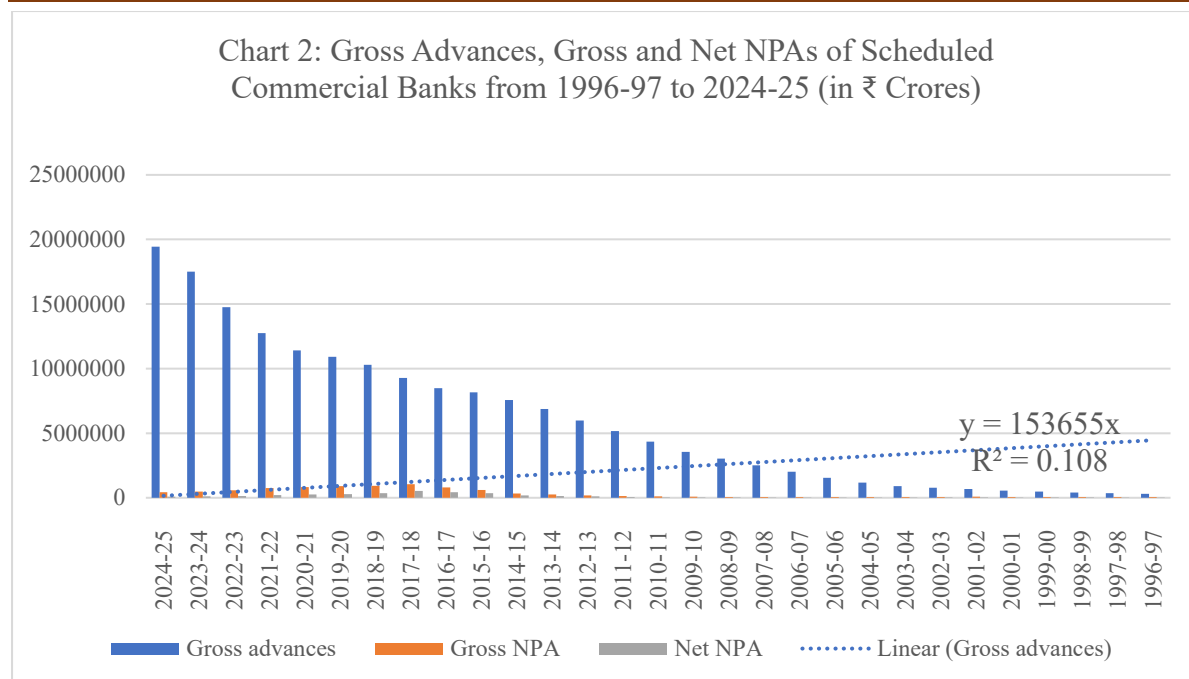


Table 1 data were used to compute the Provision Coverage Ratio (PCR), which measures the proportion of non-performing assets for which banks have set aside funds. It indicates the banking system's loss-absorption capacity and financial resilience. The formula and computation are given.

$$\text{PCR (percent)} = \left(\frac{\text{Gross NPA} - \text{Net NPA}}{\text{Gross NPA}} \right) \times 100$$

6. Provision Coverage Ratio (PCR)

The implied PCR fluctuated around 50 percent for much of the period (Table 1). It stood at 52.8 percent in 1996–97, peaked at 63.7 percent in 2005–06, when stress was low and profits healthy, and then fell to 49.1 percent in 2012–13 and 42.8 percent in 2015–16, precisely as gross NPAs were rising fastest. In other words, coverage was weakest when it was most needed, which is consistent with the view that forbearance and delayed recognition left banks under-provisioned when the credit cycle turned.

The pattern reversed after 2017–18. The implied PCR climbed to 62.1 percent in 2018–19, 69.1 percent in 2020–21, 76.3 percent in 2022–23 and 77.9 percent in 2024–25. The gap between gross and net NPAs, meaning provisions held, therefore widened even as gross NPAs contracted. Higher coverage means that remaining NPAs, if they turn into losses, would be absorbed by existing provisions rather than by fresh charges to profit and capital. The combination of falling gross NPAs and rising coverage is the clearest evidence of improved loss-absorption capacity in the recent period.

7. Composition of Stressed Assets

Table 2 shows how the composition of loan assets changed in selected years between 2005 and 2025.

Table 2: Classification of loan assets of SCBs (% of total advances) – selected years

Year	Standard	Sub-standard	Doubtful	Loss	Gross NPAs
2005	95.1	1.2	3.2	0.6	4.9
2008	97.8	1.1	1.0	0.2	2.3
2013	96.8	1.5	1.5	0.2	3.2
2016	92.5	2.8	4.4	0.3	7.5
2018	88.8	2.7	7.8	0.7	11.2
2020	91.8	1.8	4.9	1.4	8.2
2022	94.2	1.0	3.4	1.4	5.8
2025	97.8	0.6	1.0	0.6	2.2

Source: Annual reports of banks and RBI publications; domestic and global operations. Components may not sum exactly because of rounding. The GNPA ratios differ marginally from Table 1 because of differences in source coverage.

Table 2 highlights two features. First, doubtful assets dominated the build-up, loans that remained non-performing for a prolonged period. Doubtful assets rose from 1.5 percent of advances in 2013 to 7.8 percent in 2018, and in 2018 they accounted for about 70 percent of all gross NPAs. This aligns with a pattern in which stress was unrecognised for years and then moved through the classification ladder once forbearance ended. Second, the repair has been equally concentrated: doubtful assets fell to ₹1.91 lakh crore in 2025, nearly 74 percent below the 2018 level, and their share of advances returned to 1.0 percent.

Loss assets increased from ₹0.60 lakh crore (0.7 percent of advances) in 2018 to 1.78 lakh crore (1.4 percent) in 2022, as doubtful accounts turned into the loss category, and have fallen since, to ₹1.15 lakh crore (0.6 percent) in 2025. Their share in gross NPAs was about 27 percent in 2025 against roughly 6 percent in 2018, which suggests that the remaining stock is older and that cleaning up requires write-offs and recoveries rather than fresh recognition.

8. Phase-wise Growth of Advances and Stressed Assets

Table 3 reports compound annual growth rates over the phases identified above.

Table 3: Compound annual growth rate by phase (% per year)

Period	Total advances	Gross NPAs	Doubtful	Loss
2005–2025 (full)	15.0	10.5	8.5	14.7
2005–2008	28.3	–1.3	–13.3	–8.9
2008–2013	19.0	27.9	29.8	17.0
2013–2018	9.1	39.9	51.8	37.5
2018–2025	11.2	–11.8	–17.3	+9.6

Source: Computed from loan-asset classification data. Loss-asset growth for 2018–2025 is point-to-point and reflects the low 2018 base; loss assets peaked in 2022.

Table 3 shows that during the full twenty years advances increased at 15.0 per cent a year against 10.5 percent for gross NPAs, which is why the ratio ended well below where it began. Beneath this average are four very different phases. In 2005–08, advances grew at 28.3 percent a year while gross NPAs shrank, which rapid lending flattered the ratio. In 2008–13 stress built silently: gross NPAs grew at 27.9 percent a year, while advances grew at 19.0 percent. The sharpest phase was 2013–18, when advances slowed to 9.1 percent a year while gross NPAs grew at 39.9 percent, more than four times as fast, driven by a 51.8 percent annual increase in doubtful assets as the AQR exposed hidden stress. After 2018, advances recovered to 11.2 percent a year while gross NPAs fell by 11.8 percent a year and doubtful assets by 17.3

percent a year. The positive 2018–2025 loss-asset growth needs attention because loss assets were very low in 2018; the point-to-point CAGR is positive even though loss assets have been declining since 2022 (Section 7). It reflects the ageing of doubtful loans rather than a renewed deterioration.

9. Discussion: What Drove the Recovery?

It suggests four mutually reinforcing factors explain the recovery:

1. The first is recognition: the AQR and tighter classification norms ended the practice of carrying stressed accounts as standard assets, so that the reported peak of 11.2 per cent was the product of disclosure as much as of new defaults.
2. The second is provisioning: the rise in implied PCR from 42.8 percent to 77.9 percent shows that banks used the post-AQR years, aided by recovering profits, to build buffers.
3. The third is resolution: the IBC and the improved information environment made recoveries, upgrades and write-offs faster than under earlier mechanisms, as the steady fall in doubtful assets indicates.
4. The fourth is capital: recapitalisation of public sector banks and the generally strong capital position of private banks allowed lending to continue, and advances have grown at over 11 percent a year since 2018 even while the stock of NPAs was being cleaned up.

The record caution as the deterioration of 2013–18 followed a period in which low NPA ratios coexisted with very rapid lending (2005–08) and with lax recognition (2008–13). Favourable ratios during a boom therefore offer little guidance on underlying risk, and the lag between lending decisions and the emergence of stress can be long. This is also why the current low ratios indicate the quality of recent lending, particularly in fast-growing retail and services segments.

10. Conclusion

Asset quality in Indian Scheduled Commercial Banks has gone through a post-reform clean-up cycle that took the GNPA ratio from 15.7 percent to 2.2 percent by 2008–09, stress rebuilt behind forbearance, surfaced after the 2015 Asset Quality Review, and peaked at 11.2 percent in 2017–18. Since then, recognition, higher provisioning, better resolution mechanisms and recapitalisation have taken the ratio back to 2.2 percent in 2024–25, with implied coverage near 78 percent. The study suggests that recognising stressed assets early helps banks address problems before they become more serious and costly. The banks should make adequate provisions when their financial position is strong, rather than waiting until losses occur. The banks must resolve stressed assets promptly and effectively to prevent them from accumulating in the doubtful category. At the same time, banks must continue to exercise care in lending decisions and strengthen their risk management practices to sustain the improvements in asset quality.

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