

A COMPARATIVE STUDY OF NON-PERFORMING ASSETS IN PUBLIC AND PRIVATE SECTOR BANK

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Abstract: One way to check how well banks are doing is by looking at non-performing assets. These bad loans tell a lot about the health of the banking industry. In India, who owns the bank often makes a difference in how many NPAs show up. This work looks closely at those differences between government-run and privately owned banks using basic money numbers. A group of ten lenders was picked - five state-owned ones like BOB, CNB, UNB, PNB, SBI; five others run privately such as AXIS, KOTAK, INDUSIND, HDFC, ICICI - all chosen due to their size in the market. Five years of existing records shape the investigation, pulling details from 2021 through 2025. Numbers drive the core of this work, focusing on measurable patterns rather than opinions. For sorting the figures, basic summaries describe overall trends; beyond that, a Welch method along with follow-up checks using Games Howell spot contrasts between financial institutions. Results tilt toward state-run lenders showing wider swings in bad loan shares when compared to privately held ones. Among government-backed names, PNB stands out with steeper non-performing asset levels. When it comes to private players, ICICI consistently logs greater NPAs each year reviewed.

Index Terms - Non-Performing Assets (NPAs), Public Sector Banks, Private Sector Banks, Indian Banking Sector, Gross NPA Ratio, Net NPA Ratio.

I. INTRODUCTION

One law shapes how banks operate across India - it started back in 1949. Not just any firm counts as a bank; only those doing actual banking work make the list, says part five A. Meanwhile, section five B spells out what real banking looks like: taking money from people, then using it to lend or invest, with payback possible anytime via check, draft, or similar ways. After markets opened up, everything shifted fast inside the finance world here. With fresh policies arriving, institutions now face growing demands - they must do more with less while tackling mounting problem loans. Stuck accounts that stop paying back mess things up for lenders throughout the country. When cash stops moving on a loan - no interest, no main amount returned - it turns into something known as an NPA. Once a loan turns bad, banks can't count the interest it might bring. That money, if collected later, still won't stay booked. Instead of smooth operations, problem loans demand constant oversight - draining effort without return. Profits dip when reserves eat into earnings. Carrying these weak accounts lifts overall costs too. When bad debt piles up, building enough capital becomes harder. Without strong profits, the bank leans on its own base to cover requirements. Over months, that pressure wears down what the bank truly own.

Defining Non-Performing Assets:

A borrower's account might sit quietly until payments miss the mark past thirty days. At that point, banks start calling it overdue. If things stay unsettled, labels shift - substandard creeps in first. Over time, doubt grows; the category may slide toward doubtful. In worst cases, institutions tag it as a full loss. These steps follow rules set by the RBI on how loans get grouped. Any asset falling into these buckets earns the name non-performing Starting March 31, 2001, the idea of being "past due" got dropped - better tech in payments played a part. Banking updates helped too, along with smoother settlements and stronger economic times shaping that shift. Because of these changes, from that point on, a loan counts as non-performing if it meets certain conditions interest and/or a principal instalment are past due for a period of more than 180 days in relation to a term loan;

I. A gap longer than 180 days shows up when an OD or CC goes inactive. That stretch without activity flags it as out of order. When such a halt lasts past half a year, the status shifts. Time beyond that mark changes how the account stands. Silence across six months pulls it off track

II. Even when bills are bought and discounted, they might remain unpaid beyond 180 days. Past due doesn't always mean forgotten - some linger much longer. Ownership changes hands, yet the balance stays unsettled. Time passes, but the debt does not vanish with it. More than half a year gone, still marked overdue.

III. A single overdue payment on farm-related credit counts after missing two full growing cycles - though never stretching beyond thirty months. Late fees pile up only if both interest and repayment lag across those seasons, yet still stop short of two and a half years. Time running past that mark shifts the status entirely. What matters is timing within this narrow window. Duration defines whether it stays classified as delayed or becomes something worse.

IV. Money owed on additional accounts has gone unpaid for more than half a year. Past-due amounts sit long unresolved across separate lines. Over six months have passed without payment on these balances. These debts remain unsettled far past their deadline. Extended delays mark what's still owing elsewhere.

By March 31, 2004, the decision came down to use a "90 days past due" standard when spotting bad loans - this shift lines up with global norms while sharpening clarity. Overdue by three months? That's when a loan or advance gets flagged

I. When overdue by over ninety days on either interest or principal for a term loan,

II. After ninety days, if money owed on an overdraft or cash credit isn't settled, the account gets marked inactive. A long gap past due triggers this status automatically. When balances remain unsettled beyond three months, systems flag it. More than twelve weeks without payment shifts its standing. Once the timeline crosses ninety days, updates occur inside records.

III. Even when a bill has been purchased and discounted, it might remain overdue beyond ninety days. Sometimes payments lag despite the transaction being handled early. Past due status sticks around longer than expected in these cases.

IV. A payment linked to farming support falls behind schedule after missing repayments across two growing cycles - yet stays within a window of thirty months. Late charges or chunks of the original sum go unpaid through that span. Money that hasn't been paid sits overdue - more than three months gone.

V. A gap like that marks old balances left behind. Time stretches well past ninety days without movement. What was owed lingers, untouched and late. Long delays signal deeper holdups. Payments missing for months show patterns hard to fix. Overdue amounts pile up when ignored too long.

The Non-Performing Assets can be classified into the following Four broad groups:

1) Sub Standard Assets: Not considered an NPA, it carries only common industry-level risks. Receiving regular payments means the bank gets both loan capital and interest without issue. Only when overdue amounts stretch beyond three months does concern arise by year-end. If delays exceed 90 days, such holdings must shift out of standard grouping. Sorting these requires breaking them into finer types once they miss the threshold.

2) Sub-standard asset: An asset counts as sub-standard when it became a non-performing loan by March 31, 2005, and stayed that way under twelve months. Because of this, what the borrower or guarantor now owns - after debts - isn't enough to cover what's owed to banks. When weaknesses in lending go uncorrected, problems emerge fast: repayment becomes shaky. Losses start looking likely instead of remote, simply because recovery falls short on paper and in reality.

3) Doubtful Assets: A shaky status hits an asset when it stays nonperforming past twelve months by March 31, 2005. Since then, every weakness found in a subpar label drags into the doubtful zone too - reality checks confirm its fragility. Three steps split this space apart. One full year deep? That is stage D-I. Slide further, through years two and three, you land in D-II. Beyond that mark sits D-III, hanging without clear outcome.

4) Loss Assets: A chunk of value once trusted now sits idle, flagged as damaged by the bank, its own checkers, outside reviewers, or a central watchdog - though no official cut has happened yet. Heavy piles of these frozen loans linger across lenders, warping how money moves and who gets it. Talks about such dead weight have stretched years into the present. One early look at them painted non-working holdings as things stuck in place, unable to flow back into use, bringing nothing in return; overdue debts, stalled cases caught in court, odd gaps in records, leftover funds parked elsewhere, sums lost inside scams.

- **Profitability**

A stalled loan shows up when someone who should repay fails to do so, often because they were picked without enough care. When cash sits stuck like this, the bank loses more than just that sum - it misses chances to grow those funds elsewhere. Picture what could have been earned had the amount gone into something useful instead. Each blocked rupee means less room for gains today, plus fewer options tomorrow. Profits shrink now, while promising paths fade quietly. Weak returns follow, tugging down what the bank makes each quarter.

- **Liquidity**

When earnings drop, cash gets stuck. Without enough on hand, firms often take short loans - each bringing extra charges. Running day-to-day becomes harder when incoming funds lag behind payouts. Missed collections add strain too. Unpaid balances pile up, slowing everything down.

- **Involvement of Management**

Spending hours on bad loans takes focus away from growth. Instead of fixing problems caused by defaults, leaders could build new opportunities. Handling these failures means more work for teams who might otherwise serve customers. Experts hired just to chase losses increase daily expenses without expanding services.

- **Credit Loss**

Should a bank face bad loans, confidence begins to slip. Reputation fades slowly, then faster. Trust in the name weakens just as quickly. Depositors feel uneasy without saying much. The value tied to borrowing drops off. People notice before charts do. Money stays elsewhere when stories spread.

OBJECTIVES OF THE STUDY

- 1.To Know and Understand the Concept of NPA in Banking Sector.
2. To compare the NPA Position of Public and Private Sector Bank.

RESEARCH METHODOLOGY

Starting off, the poll pulls straight from original data spots - meaning a clear approach must already exist before moving forward. Because the design spells out each step ahead of time, gathering answers and sharing results fits under descriptive research. This way, every piece follows a fixed route without drifting.

LITERATURE REVIEW

Midway through 2002, Reddy took a close look at bad loans across banks in Asia. Not only India came under his lens, but also China and Thailand were part of it. Economic conditions played a big role in shaping those trends. Nine full years of data on gross and net NPAs went into the analysis. What stood out was how countries handled similar problems differently. Some responses worked better than others when tested globally. Comparisons uncovered patterns few had noticed before. Still, each nation's approach carried its own marks.

- Ms. Asha Singh. (2013), "Performance of Non-Performing Assets (NPAs) in Indian Commercial Banks", IJMFSMR Journal, Volume No.9, Issue No.2
- Ms. Asha Singh. (2013), "Performance of Non-Performing Assets (NPAs) in Indian Commercial Banks", IJMFSMR Journal, Volume No.9, Issue No.2
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(Singh, 2013)MS. Asha Singh has researched about "Role of recovery channels in managing non-performing assets in scheduled commercial banks the total and net non-performing assets (NPAs) of Indian commercial banks for ten years". She claimed that the effectiveness of the banks is reflected in the NPAs. Public sector banks have relatively greater levels of NPAs. According to

her study, NPAs are regarded as a key indicator of credit risk. Therefore, the NPAs needed to be structured in the right ways in order to increase their effectiveness and gain. Possession of a zero share of NPAs is essentially impossible. Indian banks should, at the very least, take care to ensure that only responsible borrowers receive loans.

One look at Murari.k's 2014 research and it becomes clear - non-performing assets weigh heavier in Indian public sector banks. The work examined 39 lenders: 13 state-run, 13 older private ones, 13 newer private players. Results? Both total and net NPAs climbed across both bank types over time. Here's what stood out - the link between gross NPAs and total lending weakened, hinting at deeper issues. Because of this shift, better handling of bad debts is now critical for government-owned banks. Numbers alone suggest they're trailing behind.

One finding stands out - public banks showed higher non-performing assets than private ones (Sharma A., 2013). Despite various efforts by authorities to bring these numbers down, progress remains limited. Steps were introduced, yet gaps remain wide. Without clear timelines for resolving bad loans, gains in efficiency and income seem unlikely. This paper underlines an urgent need: tackling NPAs head-on. Left unchecked, they could keep weakening bank outcomes. That kind of drag harms growth prospects for India's broader economy. Much depends on how quickly real solutions take shape.

A report by Sharma and Srivastava from 2019 looks at non-performing loans in India's government-run banks. Right now, change is sweeping across the country's banking landscape. Public institutions manage more than three-fourths of all financial assets, forming the backbone of India's monetary network. Yet these organizations carry heavy loads of bad debt. Outdated machinery slows things down, along with oversized workforces. Such issues chip away at profits, public trust, and cost efficiency. Their grip on large-scale operations weakens under pressure.

Looking at Saraswat, 2018, we see an analysis on bad loans in state-run versus privately owned banks. Because differences exist between these institutions, one idea is using distinct rating groups focused only on judging if borrowers can handle debt. Instead of a shared system, each bank might benefit from its own evaluators trained specifically in money matters tied to lending. Since loan defaults strongly reflect how well a bank manages risk, ongoing checks on customer finances become essential - not occasional ones. While handling rising NPAs, forming expert panels made up of seasoned finance workers could bring sharper oversight. Although numbers differ across banks, tracking repayment health regularly helps spot issues early. Given how much depends on accurate borrower assessment, staying alert to changes in income or spending makes sense.

One look at the numbers shows how gross and net NPAs move together. Though total bad loans climbed early in the review window, they began falling only after 2018-19. That shift suggests some banks pushed harder for borrowers to pay back money owed. Yet trouble remains at several lenders, since stubborn NPAs eat into profits, scare off investors, raise borrowing costs, and make credit officers cautious about issuing new debt.

A look at bad loans across Indian banks - public versus private - shows differences. Not every bank faces the same level of risk. Type of ownership plus economic field does not jointly raise loan defaults. Government-run banks carry higher stressed assets, whether in required lending areas or others. Across nearly all state-owned lenders studied, overall problem loans stayed above five percent. Private ones averaged below that mark through the same period. Despite what many assume, performance edges appear more often in private banks when measuring key financial health signs. Where public institutions struggle, their private counterparts manage obligations with tighter control. Debt coverage stays stronger across private setups, suggesting a grip on repayment flows. Trouble spots pile up more visibly in state-run banking arms. Non-performing assets climb notably where government ownership holds sway.

Stuck funds in bad loans mean less cash for useful things. That drags down bank profits over time. Loans to private businesses show much higher levels of defaulted debt. If banks want better results, they need smarter plans for these problem assets. Steps taken by the central bank and national authorities aim at reducing such losses across state-run lenders. One study looked into how risky lending differs between required and non-required areas in public banks (Nagarajan, N, & A, 2013). Fewer bad loans now sit on Indian bank balance sheets since then. Still, plenty remains undone. Compared to worldwide peers, our lenders carry heavier loads of these problem debts. Reaching zero such defaults feels almost impossible. Yet matching foreign banks' performance should stay within reach for India's financial players.

One study by Agarwala, V., and N. (2019) looked closely at bad loans in India's banks. What stands out is how serious things have become across the sector. Since NPAs keep rising, even major names face pressure - small lenders do too. This problem isn't isolated; it spreads through public and private institutions alike. Because of rules set by the RBI, shaky assets force banks to reserve more funds. Less profit follows naturally when capital gets locked up this way.

One reason public sector banks in India face high non-performing assets lies in loose lending habits. Instead of spreading risk, these banks often lend big amounts to just a few major companies. Sectors like infrastructure, power, steel, mining, and telecom get most of the funds. That concentration increases vulnerability when defaults happen. Compared to private lenders, public banks show weaker control over loan quality. Building stronger skills across every level of banking operations could help balance this gap. To draw better leadership, pay structures for top officials need room to adjust based on performance. Flexibility in salary design might encourage sharper decision-making. Rules set by the Reserve Bank should apply equally - no matter who owns the bank. Power shapes policy less if oversight stays neutral.

Starting off, Banana, KRISHNA, Chepuri, and V.'s 2016 research looked into how recovery methods help handle bad loans in India's regular banks. Because these banks count on income from lending, funds stuck in non-performing assets drag down profits sharply. Public sector lenders face a particularly heavy burden here. Compared to international peers, Indian institutions continue to struggle with higher NPA levels. Most years, the SARFAESI route proves more effective than alternative paths - except during 2008-09, when it dipped behind. Still, one thing remains clear: delays hurt outcomes. Speeding up collection efforts sits firmly within management's control. Progress depends less on new rules, more on faster execution. When big borrowers fail to pay, collections suffer; that's why stricter rules need to follow. Fixing NPAs won't happen without serious work behind the scenes.

Back in 2020, Hafsal, Suvvari, and Durai took a close look at how bad loans affect bank performance across India. Their work focused on data from 46 banks during the financial year 2016, aiming to measure just how much waste stems from those troubled debts. Instead of treating banks as one single unit, they broke things down using an intermediary method that separates operations into distinct stages. Starting off with Kao and Hwang's original two-part DEA structure, the analysis then shifted toward a broader version developed by Kao - this time factoring non-performing assets as harmful outputs sitting outside normal activity. By comparing outcomes between both frameworks, it became clear that around 16.2 percent of inefficiency seen in Indian banks ties directly to NPAs.

Looking at Sahu, K., and Maharana's 2017 research brings up how corporate governance affects bad loans in India's state and privately run banks. To keep loan portfolios stable, one solid way is building strong early warning systems that actively watch for trouble spots. Though better governance helps, other hidden factors also shape the rise or fall of NPAs - these need attention too. Sharp upgrades in how banks handle and track defaulted loans make a difference. Setting clear rules for checking credit quality matters, especially when tiny but vital signs get reviewed closely. Evaluating a borrower's financial habits and their ability to manage risk plays a big role here. Instead of guessing, each bank should build its own accurate method to judge how risky a loan really is.

One look at Divya and Ranjith Kumar's 2017 work shows how public and private banks stack up when dealing with bad loans. Speed matters - banks ought to move fast when handling shaky assets, pricing them so real buyers step in. Delaying brings higher tab payers later on. What counts most is whether the fix lasts, not just what price pops up today; chasing big numbers now might hide deeper flaws waiting to return. Losses from messy sell-offs? They shouldn't land only on taxpayers. Shareholders who own stakes in these banks also have space to pitch in.

DATA ANALYSIS

Table:1: % Gross NPA of a selection of Indian public Bank from 2021 to 2025.

One step back reveals how gross non-performing assets show loans still on record yet treated as lost due to set-aside funds. Less weight here means a healthier ratio overall. A look across chosen banks showed small improvements in these figures during the past half-decade. Shifts became visible when comparing public sector lenders - their numbers dipped just slightly over time.

Year	Public Sector Bank				
	SBI	PNB	BOB	CNR	UNB
2020-21	5.00%	14.00%	9.00%	9.00%	3.85%
2021-22	3.97%	12.00%	7.00%	8.00%	3.60%
2022-23	2.78%	8.74%	3.79%	5.35%	3.52%
2023-24	2.24%	5.73%	2.92%	4.23%	3.29%
2024-25	1.82%	3.95%	2.26%	2.94%	3.06%
MEAN	3.16%	8.88%	4.99%	5.90%	3%

Interpretation: Still dropping, the share of bad loans in big state-run banks stays under five percent now. Down from 14% back in 2020–21, PNB's messy loan chunk shrank to only 3.95% by 2024–25. Not far behind, SBI cut its rough debt slice sharply - started at 5%, ended up at a lean 1.82%. This past year, both UNB and PNB carried more than 3% junk loans on their books. That kind of number? It drags them both down.

Table:2: % Gross NPA of a selection of Indian Private Bank from 2021 to 2025.

Year	Private Sector Bank				
	HDFC	ICICI	AXIS	INDUSIND	KOTAK
2020-21	1.00%	8.00%	4.00%	3.00%	3.25%
2021-22	1.00%	4.00%	2.82%	2.27%	2.34%
2022-23	1.12%	2.87%	2.02%	1.98%	1.80%
2023-24	1.24%	2.26%	1.43%	1.92%	1.39%
2024-25	1.33%	1.73%	1.28%	3.13%	1.40%
MEAN	1.14%	3.77%	2.31%	2.46%	2.04%

Interpretation: HDFC, ICICI, AXIS, INDUSIND, and KOTAK BANK - all show gross non-performing assets in private banking. One percent marks HDFC Bank’s Gross NPA across that timeframe. ICICI Bank hit its peak at 8% during 2020–21. Axis Bank started at 4%, yet by 2024–25 it settled near 2.31%. Over half a decade, INDUSIND Bank sees fluctuations between 1% and 3%. KOTAK Bank holds steady - anywhere from 2% up to 3% through those years.

Table:3: Table 1 & 2 Analysis of Mean, Standard Deviation, Coefficient of Variation.

	MEN	STANDARD DEVIATION	COEFFICIENT VARIATION
SBI	3%	1%	41.32%
PNB	9%	4%	47.15%
BOB	5%	3%	57.77%
CNR	6%	3%	43.08%
UNB	3%	0%	8.71%
HDFC	1%	0%	12.86%
ICICI	4%	35%	66.54%
AXIS	2%	1%	48.75%
INDUSIND	2%	1%	23.16%
KOTAK	2%	1%	38.39%

Interpretation: Looking at Table 3, you see gross nonperforming assets for selected banks along with averages, spreads, and relative variability. ICICI Bank turns up numbers like 4% on average, swings by 35%, then lands at a variation rate of 66.54%. HDFC Bank shows smaller figures - its center point is just 1%, barely moves with 0% spread, varying relatively by 12.86%. SBI Bank sits mid-way: 3% as typical value, tight scatter of 1%, and a fluctuation measure hitting 41.32%. PNB Bank shows a 9% average, alongside a 4% spread, so its consistency level lands at 47.15%. On the flip side, KOTAK Bank runs with a smaller average - just 2% - paired with a 1% fluctuation, making its stability measure sit at 38.39%.

Table:4: % Net NPA of a selection of Indian public Bank from 2021 to 2025.

From the Gross NPA, Net NPA is calculated by subtracting items like unpaid interest, partial payments collected, and accounts held in detention. Table 5 shows that during the studied period, the Net Non -Performing assets ratio of all selected banks has somewhat decreased.

Year	Public Sector Bank				
	SBI	PNB	BOB	CNR	UNB
2020-21	1.50%	5.73%	3.09%	3.82%	4.62%
2021-22	1.02%	4.80%	1.72%	2.65%	3.68%
2022-23	0.67%	2.72%	0.89%	1.73%	1.70%
2023-24	0.57%	0.73%	0.68%	1.27%	1.03%
2024-25	0.47%	0.40%	0.58%	0.70%	0.63%
MEAN	0.85%	2.88%	1.39%	2.03%	2.33%

Interpretation: Five percent still marks a high point for public sector bank Net NPAs - yet the numbers keep dropping. Down from 5.73% in 2020-21, PNB Bank ended at 0.40% by 2024-25. At SBI Bank, things look tighter - starting from 1.50%, now only 0.47% remains. UNB and PNB both hover beyond comfort this year; one past 0.63%, the other above 0.40%. Trouble lingers where ratios stay elevated.

Table:5: % Net NPA of a selection of Indian Private Bank from 2021 to 2025.

Year	Private Sector Bank				
	HDFC	ICICI	AXIS	INDUSIND	KOTAK
2020-21	0.40%	2.10%	1.05%	0.69%	1.21%
2021-22	0.32%	0.81%	0.73%	0.64%	0.64%
2022-23	0.27%	0.51%	0.39%	0.59%	0.40%
2023-24	0.33%	0.45%	0.31%	0.57%	0.34%
2024-25	0.43%	0.42%	0.33%	0.95%	0.04%
MEAN	0.35%	0.86%	0.56%	0.69%	0.53%

Interpretation: HDFC, ICICI, AXIS, INDUSIND, and KOTAK BANK are private lenders showing gross non-performing assets. Below 0.43% - that's where HDFC Bank holds its Net NPA across the measured timeframe. ICICI Bank sees its peak Net NPA land at 2.10%. Axis Bank started 2020–21 at 1.05%, yet by 2024–25, it settled near 0.56%. Over half a decade, INDUSIND Bank's Net NPA moves between 0.57% and 0.95%. KOTAK BANK's figure shifts from 0.04% up to 1.21% when viewed across those same five years.

Table:6: Table 4 & 5 Analysis of Mean, Standard Deviation, Coefficient of Variation

	MEAN	STANDARD DEVIATION	COEFFICIENT VARIATION
SBI	0.85%	0.42%	49.68%
PNB	2.88%	2.38%	82.66%
BOB	1.39%	1.05%	75.42%
CNR	2.03%	1.23%	60.34%
UNB	2.33%	1.74%	74.41%
HDFC	0.35%	0.06%	18.41%
ICICI	0.86%	0.71%	82.91%
AXIS	0.56%	0.32%	57.19%
INDUSIND	0.69%	0.15%	22.34%
KOTAK	0.53%	0.44%	83.28%

Interpretation: Table 6 displays net nonperforming assets for selected banks, along with averages, spreads, and relative variability measures. Starting off, ICICI Bank posts an average of 0.86%, a spread of 0.71%, while its variability measure hits 82.91%. HDFC Bank brings up the rear - its figures sit at 0.35% on average, just 0.06% in spread, showing only 18.41% fluctuation intensity. SBI Bank runs close behind ICICI: 0.85% average, volatility level at 0.42, paired with nearly half the swing rate - 49.68%. PNB stands out sharply; it carries a high base reading of 2.88%, swings widely by 2.38%, resulting in a jumpiness score near 83%. Starting off, KOTAK Bank shows a mean of 0.53%, with its standard deviation at 0.44%; here, the spread is wide - evident in an 83.28% coefficient of variation. Then there's INDUSID Bank: it holds a higher average return, sitting on 0.69%, yet swings far less day to day - that tight movement comes through clearly in its low volatility, just 0.15%. Because of that steadiness, its relative dispersion drops sharply, ending up at only 22.34%.

❖ **Problem Assets Ratio**

This measure - how much bad debt sits against total holdings - tells part of the story. A larger share means weaker lending choices were made earlier on. Looking across nine and ten, most selected lenders saw a modest dip in troubled loans through the years noted. Compared directly, performance at P&S Bank stands apart when it comes to shrinking those risky balances.

Table:7: % Problem Assets Ratio of a selection of Indian public Bank from 2021 to 2025.

Year	Public Sector Bank				
	SBI	PNB	BOB	CNR	UNB
2020-21	2.61%	8.16%	5.54%	5.11%	3.38%
2021-22	2.09%	6.90%	4.78%	4.43%	2.96%
2022-23	1.53%	5.18%	2.41%	3.34%	2.66%

2023-24	1.25%	3.52%	1.93%	2.65%	2.29%
2024-25	1.05%	2.37%	1.50%	1.82%	2.06%
Mean	1.71%	5.23%	3.23%	3.47%	2.67%

Interpretation: Still dropping, the share of bad loans in state-run banks stays over five percent. PNB saw its worst stretch back in 2020–21 with troubled assets hitting 8.16%, yet by 2024–25 that number had shrunk sharply to only 2.37%. Behind these shifts, one finds tighter oversight linking overall holdings to gross problem loans. Come 2024–25, SBI posts the leanest ratio across peers - just 1.05%, compared to 2.61% four years earlier. This round, both UNB and PNB report ratios past the 2% mark. Not far off from now, clearer patterns emerge in how lenders handle weak spots.

Table:8: % Problem Assets Ratio of a selection of Indian Private Bank from 2021 to 2025.

Year	Private Sector Bank				
	HDFC	ICICI	AXIS	INDUSIND	KOTAK
2020-21	0.84%	2.60%	2.51%	1.60%	1.55%
2021-22	0.76%	1.90%	1.83%	1.37%	1.18%
2022-23	0.71%	15.31%	2.71%	1.27%	1.03%
2023-24	0.77%	1.16%	2.18%	1.30%	0.69%
2024-25	0.80%	0.91%	0.87%	1.99%	0.81%
Mean	0.78%	4.38%	2.02%	1.51%	1.05%

Interpretation: One way to look at bank health is through problem loans. HDFC, ICICI, AXIS, INDUSIND, and KOTAK BANK are private lenders where these numbers matter. Though others struggled, HDFC stayed under 1% in bad loan share recently. At its worst point, ICICI faced more than fifteen percent in troubled debt during 2022–23. Years ago, AXIS carried nearly two and a half percent in weak assets; now it sits near zero point eight seven. Over half a decade, INDUSIND held steady between one and two percent. KOTAK’s ratio shifted too - starting just above two thirds then reaching up toward one and a half five years later.

Table:9: Table 7 & 8 Analysis of Mean, Standard Deviation, Coefficient of Variation

Bank	Mean	Standard Deviation	Coefficient of variation
SBI	1.71%	0.64%	37.43%
PNB	5.23%	2.37%	45.32%
BOB	3.23%	2%	56.04%
CNR	3.47%	1.33%	38.33%
UNB	2.67%	0.53%	19.85%
HDFC	0.78%	0.05%	6.41%
ICICI	4.38%	6.15%	140.41%
AXIS	2.02%	0.72%	35.64%
INDUSIND	1.51%	0.30%	19.87%
KOTAK	1.05%	0.34%	32.38%

Interpretation: Table 9 displays net nonperforming assets for selected banks, along with averages, spreads, and relative variability. ICICI Bank stands out - its numbers come in at 4.38% on average, swings by 6.15%, varying relatively by 140.41%. HDFC Bank shows tighter figures: a central point of 0.78%, fluctuation of just 0.05%, and a narrow spread ratio of 6.41%. SBI Bank records an average of 1.71%, moves within 0.64%, with its variation proportion reaching 37.43%. PNB Bank holds a midpoint of 5.23%, ranges across 2.37%, and varies comparatively by 45.32%. Mean, standard deviation, and coefficient of variation for KOTAK Bank are 1.05%, 0.34%, and 32.98%, respectively. Mean, standard deviation, and coefficient of variation for INDUSID Bank are 1.51%, 0.30%, and 19.87%, respectively.

CONCLUSION

Although banks gather information between 2021 and 2025, non-performing assets still drop across both state-run and privately owned institutions. Yet here lies a twist - public lenders face heavier defaults than their counterparts. Because of that, tighter rules around lending seem necessary. Before handing out funds, each financial institution must dig deep into the firm’s operations. Without caution, cash meant for strong ventures gets stuck in collapsing businesses. One idea floats up: publish names of those who fail to repay. Fear builds when consequences are visible, changing how people behave. Once credit moves

forward, watching growth patterns helps spot danger early. Failure might show long before it actually happens. So the bank sells off its property while payments still come in. Or else someone buys the whole bank to fix bad debt.

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