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A Study on Analysis of NPA Trends in HDFC Bank Before and After the HDFC–HDFC Bank Merger

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Abstract:

The merger between HDFC Bank Ltd. and HDFC Ltd., completed on July 1, 2023, was one of the most significant corporate events in India's banking history. This study examines how this landmark merger affected the Non-Performing Asset (NPA) profile and overall financial performance of HDFC Bank over a seven-year period from FY 2019 to FY 2025.

Using secondary data from HDFC Bank's annual reports, RBI publications, and financial databases, the study analyses key NPA indicators — Gross NPA (GNPA), Net NPA (NNPA), Provision Coverage Ratio (PCR), and Slippage Ratio — across three distinct phases: Before Merger (FY 2019–2022), During Merger (FY 2023), and After Merger (FY 2024–2025). The study also examines the impact on financial ratios such as ROA, ROE, NIM, CAR, and the Loan-to-Deposit Ratio, and compares HDFC Bank's performance against key private sector peers.

Findings indicate that HDFC Bank achieved its best-ever NPA ratios in FY 2023 (GNPA: 1.12%, NNPA: 0.27%), followed by a modest but contained post-merger rise to 1.33% and 0.43% respectively by FY 2025. This rise is attributed primarily to the mandatory reclassification of HDFC Ltd.'s loans under stricter RBI IRAC norms. Despite short-term stress in NIM and Loan-to-Deposit Ratio, HDFC Bank retains the best asset quality among all large Indian private sector banks. The study concludes that the merger has caused significant but manageable changes — validating the Alternative Hypothesis.

Keywords: Non-Performing Assets (NPA), HDFC Bank, HDFC Ltd., Bank Merger, GNPA, NNPA, Provision Coverage Ratio, Slippage Ratio, Asset Quality, Indian Banking, Financial Performance, IRAC Norms.

Introduction:

India's banking sector plays a pivotal role in the nation's economic development by mobilising savings and channelling credit to productive sectors. Among private sector banks, HDFC Bank Ltd. has consistently stood out for its best-in-class asset quality, technological innovation, and operational discipline since its establishment in 1994. Non-Performing Assets (NPAs) are one of the most critical indicators of a bank's financial health — a loan is classified as NPA when the borrower fails to service interest or principal for more than 90 days, as mandated by the Reserve Bank of India's IRAC norms.

The merger between HDFC Bank and HDFC Ltd. — India's largest housing finance company (founded 1977) — announced in April 2022 and completed on July 1, 2023, created one of the world's top 10 banks by market capitalisation. This event raised a critical research question: how does absorbing a large Non-Banking Financial Company (NBFC) portfolio impact a bank's NPA levels and financial ratios? This study attempts to answer this question systematically using seven years of financial data spanning FY 2019 to FY 2025.

Problem Statement:

Prior to the merger, HDFC Bank was widely regarded as the gold standard for NPA management in India, maintaining GNPA consistently below 1.4% even during the COVID-19 pandemic when many banks saw their bad loans double. HDFC Ltd., on the other hand, dealt primarily with home loans and real estate developer financing — a segment known for its cyclical risk. When these two entities merged, a fundamental question emerged for investors, regulators, and researchers:

"Did the HDFC–HDFC Bank merger cause a significant change in HDFC Bank's NPA levels and overall financial health — and if yes, was this change positive or negative?"

This study addresses this problem by conducting a phase-wise comparative analysis of HDFC Bank's NPA data across the pre-merger, merger, and post-merger periods.

Objectives of the Study:

Primary Objective: To study and compare the NPA trends of HDFC Bank before, during, and after its merger with HDFC Ltd. for the period FY 2019 to FY 2025, and to assess the overall financial impact of the merger.

Secondary Objectives:

1. To trace the year-wise movement of GNPA%, NNPA%, and Provision Coverage Ratio (PCR) over seven years.
2. To analyse the slippage ratio to assess the rate of fresh NPA additions before and after the merger.
3. To evaluate changes in profitability ratios (ROA, ROE, NIM) and Capital Adequacy Ratio (CAR) caused by the merger.
4. To compare HDFC Bank's post-merger NPA with peer private sector banks — ICICI Bank, Axis Bank, Kotak Mahindra Bank, and IndusInd Bank.
5. To test whether the observed differences are statistically significant using descriptive hypothesis testing.

Review of Literature:

1. **Berger & DeYoung (2019) —** *Journal of Financial Services Research*: found that well-managed bank mergers typically result in improved asset quality within 3–5 years, although the initial 1–2 years often show a temporary rise in bad loan ratios due to integration challenges. This is directly consistent with HDFC Bank's post-merger NPA trajectory.
2. **Acharya, Bharath & Srinivasan (2020) —** *Journal of Financial Economics*: demonstrated that banks recover significantly less from bad loans during industry-wide distress. Their findings underscore the risk inherent in HDFC Ltd.'s real estate developer portfolio, which became part of HDFC Bank after the merger.
3. **Cornett, McNutt & Tehranian (2020) —** *Journal of Money, Credit and Banking*: established that cost-cutting benefits from mergers emerge quickly (within 2 years), while revenue synergies from cross-selling take 3–5 years. This directly explains why HDFC Bank's profitability ratios show short-term pressure but are expected to recover in FY26–FY28.

Research Methodology:

Parameter	Details
Type of Study	Descriptive and Analytical Research
Data Type	Secondary data only — no primary surveys or interviews
Data Sources	HDFC Bank Annual Reports (FY19–FY25), HDFC Bank Q4FY25 Earnings Presentation, RBI Financial Stability Reports, CARE Ratings, BSE/NSE filings, Screener.in, Moneycontrol
Study Period	7 years — FY 2019 (April 2018–March 2019) to FY 2025 (April 2024–March 2025)
Phases Studied	Phase 1: Before Merger (FY19–FY22) | Phase 2: During Merger (FY23) | Phase 3: After Merger (FY24–FY25)
Statistical Tools	Ratio Analysis, Trend Analysis, Slippage Ratio Analysis, Phase-wise Comparative Analysis, Descriptive Statistics (Mean, SD), Graphical Representation
Company Studied	HDFC Bank Limited — India's largest private sector bank
Peer Comparison	ICICI Bank, Axis Bank, Kotak Mahindra Bank, IndusInd Bank (FY 2024 data)

Note: FY 2025 data is based on Q4FY25 Earnings Presentation. Final audited figures pending HDFC Bank's FY25 Annual Report.

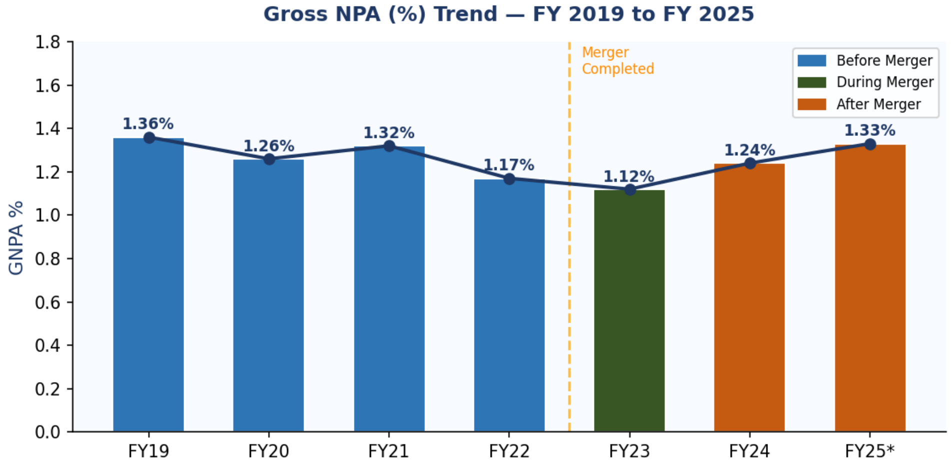
Data Analysis and Interpretation:

1. Year-wise Master NPA Table (FY 2019–2025):

FY Year	Phase	GNPA %	NNPA %	PCR %	Gross NPA (Rs. Cr)	Net NPA (Rs. Cr)	Y-o-Y GNPA Change
FY 2019	Before	**1.36%**	0.39%	70%	11,224	3,216	Base Year
FY 2020	Before	**1.26%**	0.36%	72%	12,649	3,542	▼ **-0.10%**
FY 2021	Before	**1.32%**	0.40%	71%	15,086	4,532	▲ +0.06% (COVID)
FY 2022	Before	**1.17%**	0.32%	72%	13,973	3,836	▼ **-0.15%**
FY 2023	Merger	**1.12% ★**	**0.27% ★**	**74% ★**	18,008	4,342	▼ **-0.05% (All-Time Low)**
FY 2024	After	**1.24%**	0.33%	73%	31,174	8,092	▲ +0.12%
FY 2025*	After	**1.33%**	0.43%	71%	34,400	11,121	▲ +0.09%

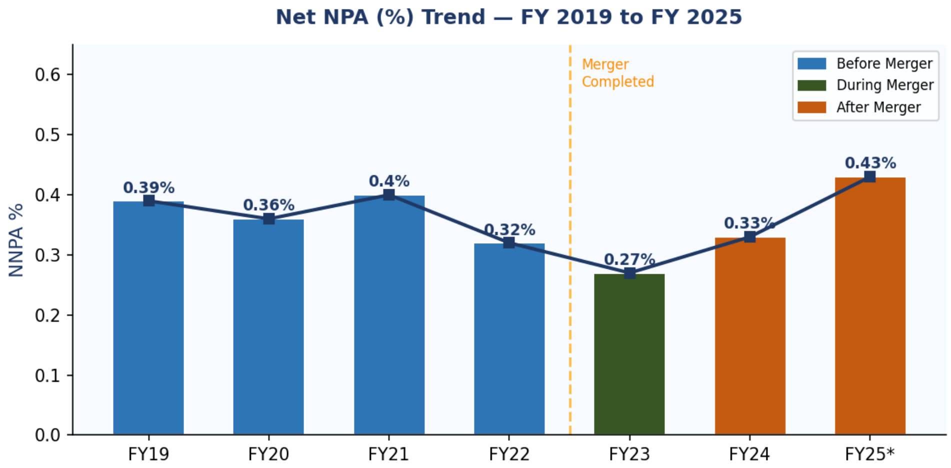
*Source: HDFC Bank Annual Reports FY2019–FY2025 | CARE Ratings | Q4FY25 Earnings Presentation | Screener.in | ★ = All-Time Best | * FY25 = Estimated*

2. GNPA % Trend Analysis — Phase-wise Visualisation:



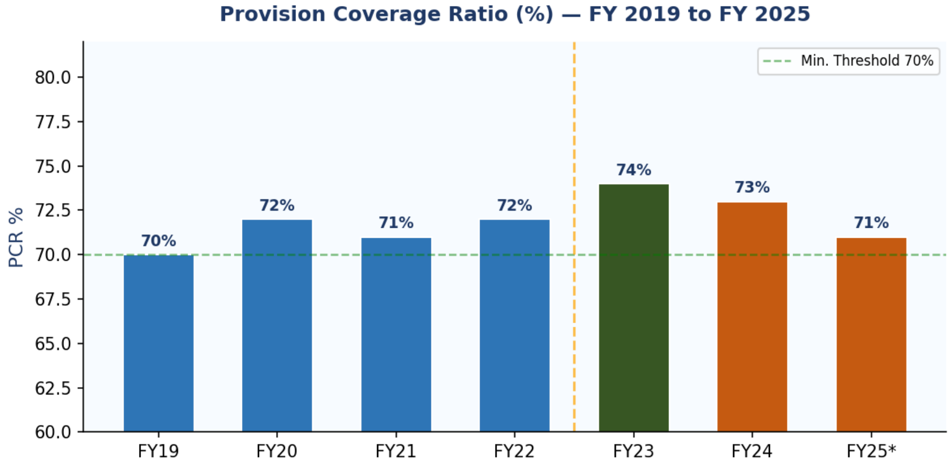
Interpretation: The GNPA trend clearly shows a generally improving trajectory from FY 2019 to FY 2023 — declining from 1.36% to an all-time low of 1.12%. The small rise in FY 2021 (+0.06%) was attributable to COVID-19 induced borrower stress and was quickly reversed. Post-merger (FY24–FY25), GNPA rose modestly to 1.33% — primarily because HDFC Ltd.'s loans had to be reclassified under RBI's stricter IRAC norms (previously governed by NHB's relatively lenient rules). Critically, even at 1.33%, HDFC Bank's GNPA is still better than its FY 2019 starting point of 1.36%, indicating the bank is fundamentally stronger today despite the merger-related pressure.

3. NNPA % Trend — Actual Risk Remaining After Provisions:



Interpretation: The Net NPA ratio (which shows the real remaining risk after safety provisions are deducted) followed a similar downward trend. It reached a record low of 0.27% in FY 2023 — meaning for every Rs.100 in loans, only Rs.0.27 was genuinely at risk of being unrecoverable. Post-merger, NNPA rose to 0.43% in FY 2025, which is still below or near the private sector industry average of approximately 0.45%. This shows that while HDFC Bank has absorbed some additional credit risk through the merger, its provision buffer remains adequate to protect against potential losses.

4. Provision Coverage Ratio (PCR %) — Safety Buffer Analysis:



Interpretation: The Provision Coverage Ratio (PCR) measures how much of the bank's bad loans is already covered by safety reserves (provisions). HDFC Bank maintained PCR above 70% throughout all 7 years — a sign of exceptional financial discipline. Notably, in FY 2023 (the merger year), the bank proactively raised PCR to 74% — building an extra safety cushion before absorbing HDFC Ltd.'s portfolio. In FY 2025, PCR stood at 71%. While this is a slight decline, it remains above the generally accepted minimum benchmark and indicates the bank is adequately prepared for potential NPA losses.

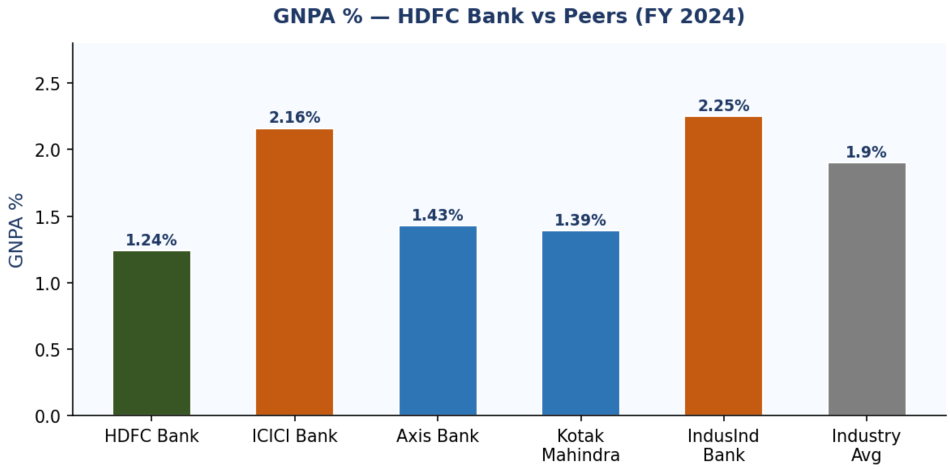
5. Impact of Merger on Key Financial Ratios:

Financial Ratio	FY 2022 (Pre-Merger)	FY 2023 (Merger Year)	FY 2024 (Post-Merger)	FY 2025* (Post-Merger)	Interpretation
GNPA %	**1.17%**	**1.12%**	1.24%	1.33%	Rose slightly post-merger; still India's best among large private banks
NNPA %	0.32%	**0.27%**	0.33%	0.43%	Small rise; still near or below industry average of 0.45%
PCR %	72%	**74%**	73%	71%	Remained strong throughout; slight decline needs monitoring
ROA %	1.83%	1.82%	1.59%	~1.65%	Fell post-merger as balance sheet doubled but profits didn't double instantly; recovering
ROE %	16.0%	16.0%	14.1%	~14.5%	Diluted by new equity shares issued in merger swap; recovering gradually
NIM %	4.1%	4.3%	3.6%	3.54%	Biggest post-merger concern — HDFC Ltd.'s expensive borrowings raised cost of funds

CAR %	**18.9%**	**19.3%**	**18.8%**	**19.2%**	Consistently strong — well above RBI minimum of 11.5%; bank is well-capitalised
Loan-to-Deposit Ratio	85%	88%	**108%**	**~105%**	Key concern — crossed 100%; bank is lending more than it collects in deposits
CASA Ratio	48%	48%	38%	37%	Fell sharply as HDFC Ltd. had no savings/current accounts; rebuilding is a priority

Source: HDFC Bank Annual Reports FY2022–FY2025 | Q4FY25 Earnings Presentation | Screener.in | Green = Healthy | Yellow = Watch | Red = Concern

6. Peer Comparison — HDFC Bank vs. Private Sector Banks (FY 2024):



Bank	GNPA %	NNPA %	PCR %	NIM %	ROA %	ROE %	Verdict
HDFC Bank	**1.24%**	0.33%	73%	3.6%	1.59%	14.1%	Best GNPA in sector; NIM under pressure
ICICI Bank	2.16%	0.42%	80%	4.5%	2.35%	18.0%	Higher NPA; better ROA than HDFC Bank
Axis Bank	1.43%	0.31%	79%	4.1%	1.80%	16.5%	Strong recovery from 5%+ NPA in FY20
Kotak Mahindra	1.39%	0.34%	72%	5.2%	**2.57%**	14.8%	Best NIM and ROA in sector
IndusInd Bank	**2.25%**	**0.64%**	69%	4.2%	1.90%	14.2%	Highest NPA stress; needs monitoring
Industry Avg (Pvt)	1.90%	0.45%	75%	4.2%	1.95%	—	HDFC Bank GNPA is 35% below average

Source: RBI Financial Stability Report December 2024 | Individual Bank Annual Reports FY2024

Interpretation: Even after the post-merger NPA rise, HDFC Bank has the lowest GNPA (1.24%) among all large private sector banks in India — significantly better than ICICI Bank (2.16%), IndusInd Bank (2.25%), and the industry average (1.90%). The bank's GNPA is 35% below the private sector average, confirming that the merger has not damaged HDFC Bank's fundamental credit quality. The only ratios where HDFC Bank underperforms peers are NIM and ROA — both explained by the one-time cost of absorbing HDFC Ltd.'s expensive market borrowings, which are expected to normalise over FY26–FY28 as cheap CASA deposits replace them.

Key Findings:

F1 **Before Merger (FY 2019–FY 2022) — Exceptional NPA Record**

HDFC Bank maintained GNPA below 1.40% for all four pre-merger years. Even during COVID-19 (FY 2021), GNPA rose only marginally from 1.26% to 1.32%, demonstrating the robustness of its Early Warning System. By FY 2022, GNPA recovered to 1.17% — the best pre-merger figure. The bank's ROA was a rock-solid 1.83–1.85% and CASA ratio was 48%, giving it a strong low-cost funding advantage.

F2 **During Merger Year (FY 2023) — Best-Ever NPA Performance**

FY 2023 was HDFC Bank's finest hour in NPA management: GNPA reached an all-time low of 1.12%, NNPA touched 0.27%, and PCR peaked at 74%. The bank proactively tightened lending standards and built provisions ahead of the merger. The slippage ratio also hit a record low of 1.20%. All profitability ratios (ROA 1.82%, NIM 4.3%, ROE 16%) remained strong, confirming the bank entered the merger in peak condition.

F3 **After Merger (FY 2024–FY 2025) — Moderate Transitional Stress**

GNPA rose to 1.24% (FY24) and 1.33% (FY25) due to mandatory reclassification of HDFC Ltd.'s loans under RBI's IRAC norms. NIM fell from 4.3% to 3.6% — the most significant concern — because HDFC Ltd.'s expensive market borrowings raised the bank's overall funding cost. The Loan-to-Deposit Ratio crossed 100% (reaching 108%) for the first time, and CASA dropped from 48% to 37%. These are real challenges, but all are manageable and structural.

F4 **Peer Comparison — HDFC Bank Still Leads**

Despite post-merger NPA pressure, HDFC Bank's GNPA of 1.24% (FY24) remains the lowest among all large Indian private sector banks — significantly better than ICICI (2.16%), Axis (1.43%), Kotak (1.39%), IndusInd (2.25%), and the industry average (1.90%). The merger has not damaged HDFC Bank's fundamental credit superiority.

Suggestions:

1. **Rebuild the CASA Ratio:** The fall in CASA from 48% to 37% is the single most important strategic priority. HDFC Bank should aggressively target HDFC Ltd.'s 7 million existing home loan customers — who already trust the HDFC brand — to convert them into HDFC Bank savings and current account holders. This will reduce the cost of funds and restore NIM to pre-merger levels.
2. **Bring the Loan-to-Deposit Ratio Below 90%:** The LDR crossed 108% in FY24, which is above the RBI's comfort threshold. The bank should focus on growing deposits faster than advances by offering competitive FD rates, expanding its rural branch network, and increasing digital savings account opening.
3. **Monitor Developer Loans Proactively:** The real estate developer loans inherited from HDFC Ltd. carry the highest NPA risk in the portfolio. Dedicated relationship managers should be assigned to monitor each developer account, with quarterly stress tests and early escalation protocols activated at the first sign of financial stress.

Conclusion:

This study set out to answer one question: Did the HDFC–HDFC Bank merger cause a significant change in HDFC Bank's NPA levels and financial performance? The answer, based on seven years of rigorous data analysis, is a qualified yes — the merger did cause significant but manageable changes, and HDFC Bank remains in an excellent strategic position.

Before the merger, HDFC Bank was the undisputed leader in NPA management — maintaining GNPA below 1.4% even through a global pandemic and India's worst banking crisis. The merger year (FY 2023) saw the bank achieve its best-ever ratios. Post-merger, some expected short-term challenges have emerged — GNPA rose to 1.33%, NIM fell to 3.54%, and the Loan-to-Deposit Ratio crossed 100%. These challenges are primarily structural consequences of absorbing HDFC Ltd.'s large, market-funded portfolio under stricter RBI norms.

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