



A COMPARATIVE STUDY ON NON PERFORMING ASSETS (NPA) IN PUBLIC SECTOR BANKS AND PRIVATE SECTOR BANKS

Rubika L M¹, Sivakanni S², Dr. Sam Bodunrin³

¹*MBA Student, Jerusalem College of Engineering, Chennai, Tamil Nadu, India*

²*Assistant Professor Department of Management Studies, Jerusalem College of Engineering, Chennai, Tamil Nadu, India*

³*Distinguished Professor from the Human Resources Department, Faculty of Business and Economics, Algoma University, Toronto-Canada.*

Abstract - The banking sector is the backbone of a country's financial system and plays a crucial role in economic development by mobilizing savings and providing credit for productive activities. However, one of the major challenges faced by the banking industry today is the problem of Non-Performing Assets (NPAs). The study focuses on a comparative analysis of Non-Performing Assets (NPAs) between public sector banks (PSBs) and private sector banks (PVBs) in India. The primary aim is to evaluate the asset quality of banks using Gross NPA (GNPA) and Net NPA (NNPA) ratios. The research further examines the relationship between GNPA and NNPA to understand how provisioning reflects the real level of financial stress in banks. It also analyses the impact of NPAs on the profitability and overall performance of both public and private sector banks. The findings reveal that public sector banks generally face higher NPAs due to weak credit appraisal and policy constraints, while private banks maintain better control through improved monitoring and technology-driven management. The study concludes with suggestions to minimize NPAs and enhance the overall efficiency of the banking system.

Key Words: Non performing Assets, Gross Non performing Assets, Net Non performing Assets, Provision Coverage Ratio, Return on Asset.

1. INTRODUCTION

The banking sector plays a crucial role in the economic development. The performance and stability of the banking sector are closely linked to the quality of its assets, which is often measured through indicators such as the Gross Non-Performing Asset (GNPA) and Net Non-Performing Asset (NNPA) ratios. In recent years, Non-Performing Assets (NPAs) have emerged as a major challenge for both public and private sector banks in India, affecting their profitability and overall financial health. While Public Sector Banks (PSBs) have

traditionally carried a higher burden of NPAs due to factors such as priority sector lending and policy obligations, Private Sector Banks (PVBs) have generally maintained better asset quality through efficient credit monitoring and risk management practices.

GNPA represents the total bad loans (defaulted assets) as a percentage of total advances. A lower GNPA indicates better asset quality and credit management. NNPA represents bad loans after deducting provisions. It shows the actual burden of non-performing assets on the bank's balance sheet. PCR measures the extent to which banks have provided for their non-performing assets (NPAs). A higher PCR indicates better risk management and stronger financial health. ROA indicates how efficiently a bank uses its assets to generate profit.

This study aims to compare the asset quality of public and private sector banks using GNPA and NNPA ratios, examine the relationship between these two indicators to understand the effect of provisioning on actual stress levels, and analyses how NPAs influence the profitability and performance of banks in the Indian banking system.

NEED AND SCOPE OF THE STUDY

The present study focuses on analyses and comparing the Non-Performing Assets (NPAs) of selected public sector and private sector banks in India. It covers a specific period to examine the trend, causes, and impact of NPAs on the financial performance of banks. The study evaluates the asset quality using GNPA and NNPA ratios and assesses how NPAs influence the profitability and operational efficiency of banks. The research is based on secondary data collected from annual reports, RBI publications, and financial journals. This study will help understand the effectiveness of NPA management practices adopted by both sectors and provide useful insights for policymakers, financial institutions, and researchers to strengthen the banking system.



THE STUDY IS CONDUCTED ON SELECTED PUBLIC AND PRIVATE SECTOR BANKS:

PUBLIC BANKS:

- State Bank of India
- Punjab National Bank
- Bank of Baroda

PRIVATE BANKS:

- HDFC Bank
- ICICI Bank
- IDFC FIRST Bank

OBJECTIVE OF THE STUDY:

- To evaluate the asset quality of banks using the GNPA ratio and NNPA ratio.
- To analyses the impact of NPA on the profitability of public sector banks and private sector

METHODOLOGY:

The present study is based on a descriptive and analytical research design to examine and compare the Non-Performing Assets (NPAs) of selected public sector and private sector banks. The study relies entirely on secondary data collected from the annual reports of each selected bank. To analyses the data, ratio analysis and comparison charts are used to evaluate the trends and differences in asset quality and performance between both sectors. The period of the study covers five years, from 2020 to 2025, focusing on identifying patterns, causes, and the impact of NPAs on the profitability of banks.

REVIEW OF LITERATURE:

Avinash Bondu's (2022) study examines how Non-Performing Assets (NPAs) affect the profitability of public and private sector banks in India, revealing that public sector banks experience higher NPAs and lower profitability than private banks.

V. Deepa (2024) study focuses on comparing the overall business performance of selected public and private sector banks in India. It analyses key financial indicators such as profitability, productivity, efficiency, and growth to understand how these two categories of banks perform in a competitive environment. The research highlights differences in management practices, operational efficiency, and customer service strategies that influence the banks' performance.

Zameer Ahmad Rizvi (2021) This research examines and compares the level of non-performing assets (NPAs) in selected public and private sector banks. The study aims to identify the reasons for rising NPAs and their impact on banks' financial health and profitability. It also provides insights into how effectively both sectors manage credit risk and recovery processes, emphasizing the need for better asset quality management.

Harish Kumar & Anchal Bansal (2022) This paper explores the trend and causes of NPAs in selected Indian banks from both the public and private sectors. It evaluates how NPAs affect banking operations and financial stability while comparing the performance and recovery mechanisms used by these banks. The study offers recommendations for improving credit appraisal and risk management to reduce NPAs.

S. Meena and T. Thirumal (2020) compared the NPA levels of public and private banks in India over a five-year period. The research found that private sector banks consistently maintained lower NPAs due to efficient risk control and digital tracking systems, whereas public banks faced issues due to policy delays and large exposure to corporate loans.

Rajesh Kumar and Pooja Sharma (2019) conducted an empirical analysis on NPAs in Indian banking sectors. Their study highlighted that poor lending practices and political interference are major reasons for rising NPAs in public banks, while private banks have effective internal controls that reduce default risks.

Anita Devi and Rakesh Kumar (2021) studied the relationship between NPAs and profitability among Indian banks. The findings indicated that a rise in NPAs directly lowers the Return on Assets (ROA) and Return on Equity (ROE), especially in public sector banks due to ineffective recovery procedures.

Manoj Kumar and S. Reddy (2020) compared the trend of NPAs between public and private sector banks from 2015 to 2020. The study showed that although overall NPAs have declined in recent years, public banks still struggle with corporate bad loans, while private banks manage risks better through diversified portfolios.

Priya Singh and Neha Verma (2023) examined the post-COVID-19 impact on NPAs in Indian banks. The research found that both public and private banks witnessed a temporary increase in NPAs during the pandemic, but private banks recovered faster due to digital loan monitoring and prompt restructuring policies.

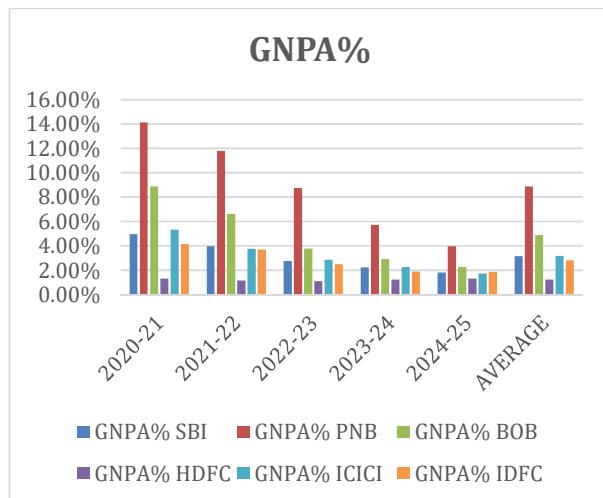
Ravi Prakash and Sunita Sharma (2018) investigated the determinants of NPAs in Indian banking. The study found that macroeconomic factors such as GDP growth, inflation, and interest rates significantly influence NPAs, with public banks being more sensitive to economic fluctuations than private banks

DATA ANALYSIS AND INTERPRETATION:

GROSS NON PERFORMING ASSET:

The table shows the gross non performing GNPA% of selected public and private sector banks from 2020-2021 to 2024-2025 for comparative analysis.

GNPA%						
YEAR	SBI	PNB	BO B	HD FC	ICI CI	IDF C
2020-21	4.98 %	14.12 %	8.87 %	1.32 %	5.33 %	4.15 %
2021-22	3.97 %	11.78 %	6.61 %	1.17 %	3.76 %	3.70 %
2022-23	2.78 %	8.74 %	3.79 %	1.12 %	2.87 %	2.51 %
2023-24	2.24 %	5.73 %	2.92 %	1.24 %	2.26 %	1.88 %
2024-25	1.82 %	3.95 %	2.26 %	1.33 %	1.73 %	1.87 %
AVER AGE	3.16 %	8.86 %	4.89 %	1.24 %	3.19 %	2.82 %



The analysis of the average Gross Non-Performing Assets (GNPA) from 2020 to 2025 reveals a clear difference in asset quality between public and private sector banks. Among public sector banks, **PNB** recorded the **highest GNPA (8.86%)**, indicating persistent asset quality challenges despite slight improvement. **SBI** showed a **significant decline in GNPA** from 4.98% to 1.82%, reflecting effective recovery and management efforts, while **BOB** also exhibited gradual improvement but still remained higher compared to private peers.

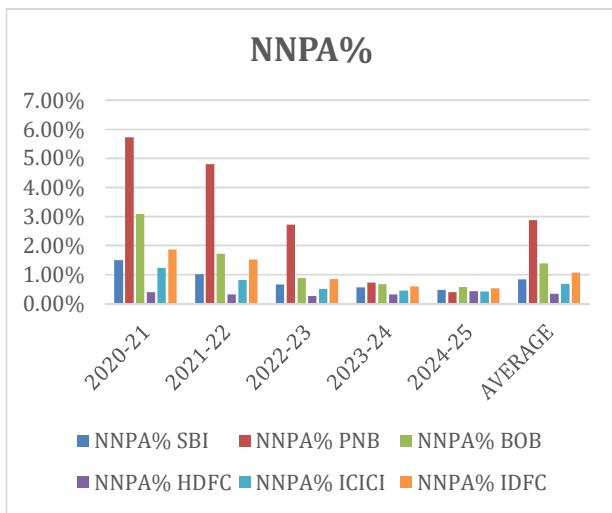
In contrast, private sector banks demonstrated **superior asset quality and better NPA control**. **HDFC Bank** maintained the **lowest GNPA (1.24%)**, showing consistent and stable loan performance. **ICICI Bank** and **IDFC Bank** also showed commendable improvement in their GNPA ratios, reflecting strong credit monitoring and risk management systems. Overall, the findings suggest that **private sector banks are more efficient in managing NPAs** due to better governance, technological adoption, and proactive recovery strategies, while **public sector banks still need stronger measures** to reduce their NPA levels further.

NET NON PERFORMING ASSET:

The table shows the net non performing NNPA% of selected public and private sector banks from 2020-2021 to 2024-2025 for comparative analysis.

NNPA%						
YEAR	SBI	PNB	BOB	HDF C	ICI CI	IDF C
2020-21	1.50 %	5.73 %	3.09 %	0.40 %	1.24 %	1.86 %
2021-22	1.02 %	4.80 %	1.72 %	0.32 %	0.81 %	1.53 %
2022-23	0.67 %	2.72 %	0.89 %	0.27 %	0.51 %	0.86 %
2023-24	0.57 %	0.73 %	0.68 %	0.33 %	0.45 %	0.60 %
2024-25	0.47 %	0.40 %	0.58 %	0.43 %	0.42 %	0.53 %
AVER AGE	0.85 %	2.88 %	1.39 %	0.35 %	0.69 %	1.08 %

Interpretation of GNPA Analysis (2020–2025)



Interpretation of NNPA Analysis (2020–2025)

The analysis of **Net Non-Performing Assets (NNPA)** from 2020 to 2025 shows a consistent improvement across all selected banks, reflecting stronger provisioning and recovery mechanisms. Among public sector banks, **SBI** recorded remarkable progress, reducing its NNPA to **0.47%**, indicating efficient NPA management. **PNB**, however, continues to show the **highest NNPA (2.88%)**, highlighting the need for better asset monitoring and provisioning policies. **BOB** showed stability but remains higher than top private banks.

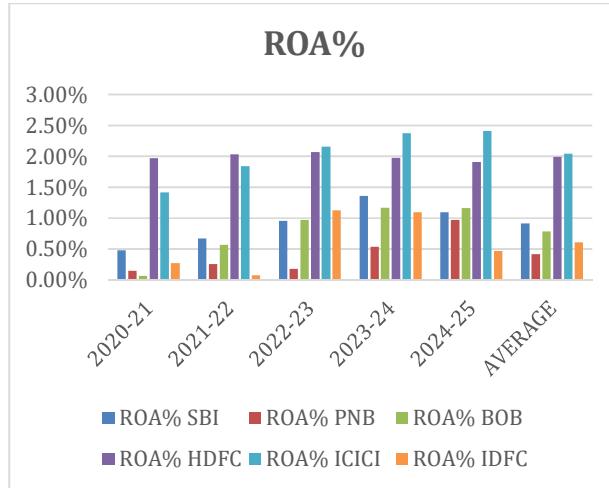
In the private sector, **HDFC Bank** maintained the **lowest NNPA (0.35%)**, showcasing exceptional credit quality and robust risk control systems. **ICICI Bank** and **IDFC Bank** also exhibited steady improvement, reflecting effective recovery strategies and prudent provisioning. Overall, the study indicates that **private sector banks consistently outperform public sector banks** in managing NPAs, owing to better governance, technological tools, and efficient operational strategies.

RETURN ON ASSET:

The table shows the Return on asset (**ROA%**) of selected public and private sector banks from 2020-2021 to 2024-2025 for comparative analysis

ROA%						
YEAR	SBI	PNB	BOB	HDFC	ICICI	IDFC
2020-21	0.48%	0.15%	0.07%	1.97%	1.42%	0.28%

2021-22	0.67%	0.26%	0.57%	2.03%	1.84%	0.08%
2022-23	0.96%	0.18%	0.97%	2.07%	2.16%	1.13%
2023-24	1.36%	0.54%	1.17%	1.98%	2.37%	1.10%
2024-25	1.10%	0.97%	1.16%	1.91%	2.41%	0.47%
AVERA GE	0.91%	0.42%	0.79%	1.99%	2.04%	0.61%



Interpretation of ROA Analysis (2020–2025)

The analysis of **Return on Assets (ROA)** from 2020 to 2025 shows a positive trend across most banks, indicating an overall improvement in profitability and asset utilization efficiency. Among public sector banks, **SBI** recorded the **highest average ROA (0.91%)**, showing steady growth due to effective NPA control and improved income generation. **BOB** showed moderate improvement with an average ROA of **0.79%**, while **PNB** maintained the lowest average (**0.42%**), reflecting the impact of its higher NPA levels on profitability.

In contrast, private sector banks displayed **superior profitability performance**. **ICICI Bank** achieved the **highest average ROA (2.04%)**, followed closely by **HDFC Bank (1.99%)**, indicating strong operational efficiency, better credit management, and high-quality assets. **IDFC Bank** reported fluctuating results with an average of **0.61%**, reflecting moderate performance. Overall, the results indicate that **lower NPA ratios contribute significantly to higher profitability**.

with private sector banks showing stronger financial health compared to their public sector counterparts.

INTERPRETATION AND ANALYSIS BETWEEN GNPA AND NNPA (2020–2025)

The comparative analysis of **Gross Non-Performing Assets (GNPA)** and **Net Non-Performing Assets (NNPA)** from 2020 to 2025 reveals the overall asset quality and efficiency of NPA management among both public and private sector banks.

Gross NPA (GNPA) represents the total amount of bad loans before any provisions are made, while **Net NPA (NNPA)** reflects the actual burden of non-performing assets after deducting provisions. The consistent reduction in both GNPA and NNPA ratios across all banks indicates improved credit monitoring, stricter recovery actions, and stronger provisioning policies.

Among **public sector banks**, **SBI** demonstrated a remarkable improvement, with GNPA falling from 4.98% to 1.82% and NNPA dropping from 1.50% to 0.47%, showing strong recovery and effective management practices. However, **PNB** continues to have the highest GNPA (8.86%) and NNPA (2.88%), suggesting that despite progress, the bank still faces significant asset quality issues. **BOB** also showed gradual improvement but remains above the performance level of private sector peers.

In the **private sector**, **HDFC Bank** consistently maintained the **lowest GNPA (1.24%)** and **NNPA (0.35%)**, proving its superior credit appraisal and risk control mechanisms. **ICICI Bank** also recorded significant improvement in both ratios, indicating effective provisioning and recovery measures. **IDFC Bank** showed moderate progress but needs stronger control over its loan portfolio.

Overall, the analysis reveals that **private sector banks are more efficient in managing NPAs**, as they maintain lower GNPA and NNPA levels due to advanced technology, better governance, and proactive risk management. In contrast, **public sector banks**, while improving, still struggle with higher NPA levels owing to legacy issues, larger exposure to priority sectors, and slower recovery processes.

INTERPRETATION BETWEEN NNPA AND ROA

The analysis of **Net Non-Performing Assets (NNPA)** and **Return on Assets (ROA)** from 2020 to 2025 reveals an **inverse relationship** between asset quality and profitability. Banks with **lower NNPA ratios** recorded **higher ROA**, indicating that efficient NPA management directly contributes to better financial performance. Among public sector banks,

SBI showed strong improvement in NNPA, leading to a steady rise in ROA. However, **PNB**, with the highest NNPA, reported the lowest ROA, reflecting the negative impact of bad loans on profitability. In contrast, private sector banks like **HDFC** and **ICICI** maintained very low NNPA levels and achieved consistently **high ROA**, proving effective credit risk management and operational efficiency. Overall, the findings confirm that **reducing NPAs enhances profitability** and strengthens the financial stability of banks.

FINDINGS

- Declining Trend in NPAs:** Both public and private sector banks have shown a significant decline in GNPA and NNPA levels from FY 2020–21 to FY 2024–25, reflecting stronger recovery mechanisms and improved credit monitoring.
- Public Sector Banks' Improvement:** Banks like **SBI** and **BOB** have improved their asset quality through higher provisioning and active recovery efforts. **PNB**, however, continues to report the highest NPA ratios, indicating structural challenges.
- Private Sector Banks' Superior Performance:** **HDFC** and **ICICI** consistently maintain lower GNPA and NNPA ratios, showcasing efficient credit appraisal systems, stricter monitoring, and a diversified asset portfolio.
- Provisioning Strength (PCR):** Public sector banks maintain higher PCR levels (above 85%), ensuring strong protection against potential loan losses. Private sector banks maintain moderate PCR due to their already low NPAs.
- Profitability Impact (ROA):** There exists an inverse relationship between NPAs and profitability. Banks with higher NPAs record lower ROA due to reduced interest income and increased provisioning expenses.
- Risk Management Practices:** High PCR and low NNPA ratios in several banks indicate effective risk management and credit discipline, especially post-pandemic.
- Sector-Wide Improvement:** The overall improvement in NPA ratios signifies the positive impact of regulatory measures such as the **Insolvency and Bankruptcy Code (IBC)** and **RBI's asset quality review frameworks**.

SUGGESTIONS

1. **Strengthen Credit Appraisal:** Banks should adopt advanced risk assessment models and conduct rigorous due diligence before sanctioning loans to reduce the occurrence of new NPAs.
2. **Regular Monitoring of Loans:** Continuous loan portfolio monitoring and early warning systems should be implemented to identify stressed assets at an early stage.
3. **Enhance Recovery Mechanisms:** Banks should expedite recovery through settlement schemes, Asset Reconstruction Companies (ARCs), and legal channels under the IBC.
4. **Diversification of Loan Portfolio:** Banks should diversify their loan portfolios across sectors to reduce concentration risk and exposure to specific industries.
5. **Digitalization and Data Analytics:** Leveraging data analytics and AI tools can help predict default risk and improve credit decisions.
6. **Improve Accountability and Governance:** Strengthening internal controls, promoting transparency, and ensuring accountability of credit officers can prevent the recurrence of NPAs.
7. **Customer Relationship Management:** Building strong relationships with borrowers can help in timely repayments and better understanding of financial difficulties faced by clients.

CONCLUSION

The study concludes that both **public sector** and **private sector banks** in India have made remarkable progress in reducing their Non-Performing Assets over the period 2020–2025. Public sector banks have improved their financial stability by maintaining **high Provision Coverage Ratios (PCR)**, while private sector banks have maintained **superior asset quality and profitability** with consistently **low GNPA and NNPA ratios**.

The comparative analysis reveals a trade-off between **risk coverage and profitability** — public banks prioritize safety through high provisioning, whereas private banks focus on operational efficiency and profitability.

Overall, the Indian banking sector demonstrates a **positive and sustainable recovery trend**, driven by regulatory reforms, improved governance, and stronger risk management practices. Continued emphasis on credit quality, monitoring, and technological adoption will be vital for maintaining long-term financial stability and profitability.

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