

# Analysis and Implications of Non-Performing Assets on the Indian Banking Sector Post 1991

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## Abstract:

The banking sector has undergone major changes after 1991 leading to inefficient credit management, where non-performing assets are one of the burning concerns for the Indian Banking sector. While NPAs are an indicator of the health for the banking sector, the whopping increase in the NPAs especially of Public Sector Banks at Rs. 7.27 lakh crore as of September 30, 2019, indicates otherwise. NPAs are also a basis for judging competence between banks. It affects the liquidity and profitability alongside posing a threat on the quality of assets and survival of banks. Furthermore, it impacts the economy and agricultural loans as well. This paper also highlights various external and internal causes of this distressing situation. The findings of various graphs and correlation revealed relative efficiency of private and public sector banks, which of course may be judged as the major reason for the resilience of Indian banking towards financial crisis. Hence, being a developing country, it is important for banks to manage credit risks and come up with measures to control the menace of NPAs for which some recommendations have been discussed as well. The findings indicate that banks with weaker liquidity and profitability ratios are more prone to higher NPAs, highlighting the critical need for effective risk management strategies. Additionally, the paper discusses the regulatory environment established by the Reserve Bank of India (RBI) and its impact on the banking sector's ability to manage NPAs. This research contributes valuable insights for policymakers, banking professionals, and investors, emphasizing the importance of continuous monitoring of financial ratios to mitigate risks associated with NPAs. The study underscores the necessity for proactive measures to enhance the resilience of banks in the face of growing asset quality challenges, ultimately aiming to foster a more stable and sustainable banking environment in India.

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## I. INTRODUCTION

The banking sector plays a pivotal role in the economic development of a country, serving as the backbone for financial intermediation and capital allocation. In India, the banking industry has undergone significant transformations over the past few decades, driven by liberalization, technological advancements, and regulatory reforms. However, one of the most pressing challenges that the sector faces today is the rising incidence of Non-Performing Assets (NPAs). NPAs are loans or advances that are in default or in arrears, indicating that borrowers are unable to meet their repayment obligations. The increasing levels of NPAs not only threaten the profitability and sustainability of banks

but also pose risks to the overall financial stability of the economy.

The issue of NPAs has garnered considerable attention from policymakers, regulators, and researchers alike, as it directly impacts the health of financial institutions and the broader economy. High levels of NPAs can lead to a reduction in the availability of credit, increased borrowing costs, and a decline in investor confidence. Consequently, understanding the determinants of NPAs and their implications is crucial for formulating effective strategies to mitigate this risk.

The objective is to identify the key financial indicators that correlate with the levels of NPAs and to assess the overall financial health of selected banks. By analysing these ratios, the study seeks to

uncover patterns and trends that can inform better risk management practices and regulatory policies. The literature on NPAs highlights various factors contributing to their rise, including economic downturns, poor credit assessment practices, and inadequate risk management frameworks. Previous studies have shown that banks with lower liquidity and profitability ratios are more susceptible to higher NPAs, emphasizing the need for continuous monitoring of financial metrics. However, there remains a gap in the literature regarding the comprehensive analysis of multiple financial ratios and their collective impact on NPAs in the Indian context.

In addition to examining the financial ratios, this paper will also explore the regulatory framework governing NPAs in India, particularly the role of the Reserve Bank of India (RBI) in addressing this issue. The RBI has implemented several measures to tackle the NPA crisis, including the introduction of the Insolvency and Bankruptcy Code (IBC) and the establishment of asset reconstruction companies. Understanding the effectiveness of these measures is essential for evaluating the current state of the banking sector and identifying areas for improvement.

The findings of this research are expected to provide valuable insights for bank management, policymakers, and investors. By highlighting the relationship between financial ratios and NPAs, the study aims to contribute to the development of more effective risk management strategies and regulatory frameworks. Ultimately, addressing the NPA challenge is vital for ensuring the stability and growth of the Indian banking sector, which in turn supports the broader economic development of the country.

In conclusion, this research paper seeks to shed light on the complex issue of NPAs in Indian banks through a detailed analysis of financial ratios and regulatory measures. By doing so, it aims to contribute to the ongoing discourse on enhancing the resilience of the banking sector in the face of growing asset quality challenges.

## **II. LITERATURE REVIEW**

The phenomenon of Non-Performing Assets (NPAs) has been extensively studied in the context of banking, particularly due to its implications for financial stability and economic growth. A significant body of literature has emerged that explores the determinants, consequences, and management strategies related to NPAs, especially in developing economies like India.

One of the foundational studies by Gupta and Kumar (2018) emphasizes the impact of macroeconomic factors on NPAs, highlighting that economic downturns, inflation, and interest rates significantly influence asset quality in banks. Their findings suggest that during periods of economic stress, the likelihood of defaults increases, leading to a rise in NPAs. This aligns with the work of Das and Ghosh (2018), who argue that external economic conditions, coupled with internal management practices, create a complex environment that affects the performance of loans.

In addition to macroeconomic factors, several studies have focused on the role of bank-specific characteristics in determining NPAs. For instance, Sharma and Kaur (2019) conducted an analysis of various financial ratios, revealing that banks with lower liquidity and profitability ratios are more vulnerable to higher NPAs. Their research underscores the importance of maintaining robust financial health to mitigate the risks associated with bad loans.

The regulatory framework governing NPAs has also been a focal point in the literature. The introduction of the Insolvency and Bankruptcy Code (IBC) in India has been widely discussed as a significant reform aimed at addressing the NPA crisis. According to a study by Sahu and Mohanty (2020), the IBC has improved the recovery process for banks, although challenges remain in its implementation. They argue that while the IBC provides a structured approach to resolving insolvency, the effectiveness of the framework is contingent upon timely execution and the cooperation of various stakeholders.

Furthermore, the role of technology in managing NPAs has gained traction in recent years. Research by Rani and Singh (2021) highlights the potential of

data analytics and artificial intelligence in predicting defaults and enhancing credit assessment processes. Their findings suggest that leveraging technology can lead to more informed lending decisions, thereby reducing the incidence of NPAs.

### III. RESEARCH OBJECTIVES

The prime purpose of the research is

1. To study the status of Non-Performing Assets of Indian Public and Private Sector Banks.
2. To analyse the impact of NPAs on Indian banking sector
3. To study the effect of global pandemic, Covid-19, on NPAs.
4. To examine the changes in RBI's framework and guidelines to banks regarding NPAs.

### IV. SAMPLE SELECTION

The data delves into the conceptual framework of NPAs and analyses the trends post 1996.

For our study, the components are:

Sample: the spectrum of research includes the NPAs in public and private sector commercial banks

Time Horizon: The time frame of this research spans from 1996 till 2019 for to broaden the outcome of study while also covering the current covid-19 impacts

Variable of Interest: Gross and Net NPAs in public and public sector, moreover the implications of NPAs on Indian economy is also a subject of interest

### V. DATA COLLECTION METHOD

Research mechanism: the data collected is secondary in nature and graphical representations are derived from the RBI dataset or adopted from a reputed newspaper.

### VI. HYPOTHESIS

H1: There is a significant relationship between financial ratios (such as liquidity and profitability) and the levels of Non-Performing Assets (NPAs) in Indian banks.

H2: Regulatory measures implemented by the Reserve Bank of India (RBI) have a significant impact on the management and reduction of NPAs in Indian banks.

H3: The COVID-19 pandemic has led to a significant increase in NPAs in the Indian banking sector.

## VII. DATA ANALYSIS

### A. DESCRIPTIVE ANALYSIS OF NPA in PSB

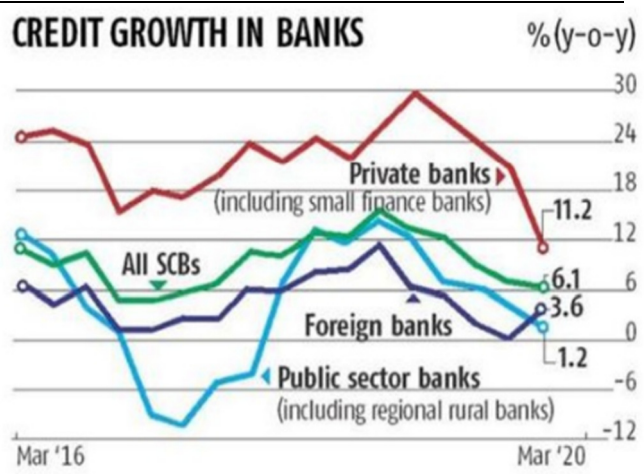


Fig. 1 Credit growth in Banks

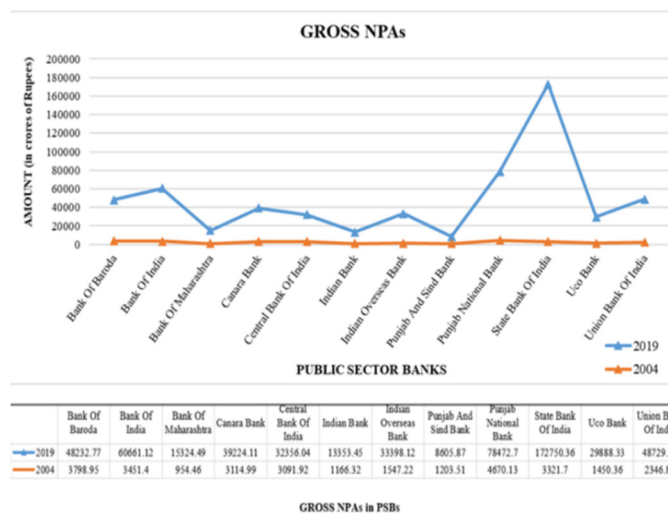


Fig. 2 Comparison of gross NPAs amongst 12 public sector banks in 2004 vs 2019

The above graph shows the absolute value of Gross NPAs where Y-Axis is the amount in crore of rupees and X-Axis shows the various Public Sector Banks. There was a dramatic rise in NPAs after 2015. There has been an overall average increase of 1014.54% in the NPAs in the banking sector during the 15 years of study.

Net Profit ( Rupees in corer)							
Year	State Bank of India	Bank of India	United Bank of India	Bank of Baroda	Indian Overseas Bank	Panjab National Bank	Central Bank India
2007	4541.31	1125.95	267.28	1026.46	1008.43	1540.08	498.01
2008	6729.12	1960.28	318.95	1435.52	1202.34	2048.76	550.16
2009	9121.23	3009.41	184.71	2227.20	1325.79	3090.88	571.24
2010	9166.05	1738.56	322.96	3058.33	706.96	3905.36	1058.23
2011	7370.35	2488.71	523.97	4241.68	1072.54	4433.50	1252.41
2012	11707.29	2674.62	632.53	5006.96	1050.13	4884.20	533.04
2013	14104.98	2741.91	391.90	4480.72	567.23	4747.67	1014.96
2014	10891.17	2732.65	-1213.44	4541.08	601.74	3342.58	-1262.84
2015	13101.57	1748.32	255.99	3398.44	-454.33	3061.58	606.45
2016	9950.65	-6334.98	-281.96	-5395.54	-2897.33	3944.40	-1117.67

Source: Financial results of different seven banks of ten years

Fig. 3 Net Profit of 7 banks from 2007-2016

### B. Analysis of Data

Almost all the banks have experienced a negative result in the year 2016 but haven't been witnessing continuously increasing GPA for all the specified banks across the years. As the business operations of the banks increase, the amount of NPAs have also increased.

A notable difference in the financial performance of the banks was observed in the year 2016. All the banks except SBI and PNB went through a severe loss in 2016. Among the banks, only SBI and PNB could achieve profit consistently in all the years even though they had the highest NPAs.

Correlation between NPA and Net Profit of the selected banks

Bank	Correlation
State Bank of India	0.591125611
Bank of India	-0.863792026
United Bank of India	-0.654074198
Bank of Baroda	-0.720973007
Indian Overseas Bank	-0.985503809
Panjab National Bank	0.194168193
Central Bank India	-0.73857971

Fig. 4 Correlation between NPA and Net profit

The table indicates the correlation for SBI and PNB are equal to 0.591 and 0.194 respectively. It means that there is a positive relation between Net Profits and NPA which means that as profits increase, NPA also increases. But other banks have negative correlation showing that NPAs are increasing every year, but net profit is decreasing.

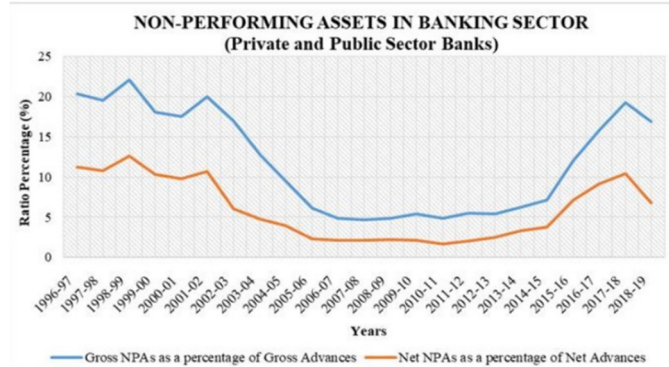


Fig. 5 NPA in banking sector

The X-axis represents the years and Y-axis represents the percentage of Gross and Net NPAs against the respective advances. The blue curve highlights the Gross NPAs and the orange curve represents the Net non-performing Assets. From the graph above it can be ascertained that Gross and Net NPAs are directly proportional and with a rise in Gross NPAs even net NPAs are likely to shoot up.

From the graph it can be seen, that the NPAs percentage was highest during the post reform period which is due to the revolutionary changes in the Economic policies, many restrictions were uplifted and many old firms were shut down due to the changes, this could explain the high rate of NPAs during the post reform period.

From the 2002-03 the gross and net NPAs witnessed a decline, possibly due to the economic reforms implemented and greater freedom in trade. The economy was liberalized promoting private involvement and the sentiments shifted to pro-market from pro-business orientation. Many sectors were opened to private owners which led to improved efficiency, greater profitability and lower defaulters.

After declining for almost 8 years, NPAs reached their lowest in 2011, which is also termed as the best phase in the Indian economy, the GDP growth rate in this phase was almost 8%. despite the global financial crisis, the NPAs didn't increase significantly, mainly due to a conservative approach by RBI and blooming businesses. Businesses were flourishing and output was increasing at a fast rate, aided by inflow of foreign capital and emergence of more financial institutions, all these factors led to the lowest phase for NPAs.

From the year 2011-12 the NPAs started witnessing a rise again, and till 2017-18 NPAs rose significantly. In the same period steps like demonetization and introduction of GST took place. India and Pakistan ties were also not stable, all of this led to lower confidence in the market. In 2015, RBI also mandated a re-assessment of the books of Banks as it doubted understatement of bad loans. Kingfisher also filed for bankruptcy in 2013, all NPAs. All of these factors led to a surge in NPAs

### **IMPACT OF COVID-19 ON NON-PERFORMING ASSETS IN INDIA:**

The non-performing loans of state-owned banks are likely to rise by 2-4 percentage points, which will increase to \$15 billion recapitalization pressure on the government in FY21 according to a foreign brokerage firm.

Analysts seem to confide and agree in the fact that the ongoing COVID-19 pandemic will lead to a huge surge in the gross non-performing assets of banks with some reports pegging the stock might double as well.

While RBI has clearly stated that the financial system of the country is sound, NPAs are expected to rise sharply and have a huge impact because of the Covid-19 pandemic. The Gross Non-Performing Ratio of all commercial banks's expected to surge from 8.5% in March 2020 to 12.5% by March 2021. The Financial Stability report of the RBI mentioned that if the overall macroeconomic situation worsens the NPA situation could worsen causing huge headaches. They estimate that the NPA ratio could increase up to 14.7% if the situation really keeps worsening over the course of time.

RBI further reports that an approximate 50% of customers have applied for the benefits of the relief system that is the loan moratorium high came to an end on 31 August. Amongst all banks the Gross Non-Performing Assets ratio of public sector banks could see a 11.3% in March 2020 to 15.2% by March 2021. The quality of bank loans to service sectors have worsened in March 2020. Major sectors such as retail, construction as well gems and jewelry have experienced huge swelling in their NPA ratios in March 2020. However on the flip side, on a positive note sectors such as infrastructure which has a share

of 36.2% in bank credit to the industrial sector, electricity with a 17.5% and basic metals with a 11.3% have shown declines in their NPA ratios.

The capital to risk-weighted assets ratio of commercial banks slid down to 14.8% in March 2020 from 15% in September 2019, while their Gross Non Performing Assets ratio reduced to 8.5% from 9.3% and the provision coverage ratio also referred to as Provision Coverage Ratio increased and improved from to 65.4% from 61.6% over the course of this period.

RBI has infused liquidity nearly 3.2% of our GDP. However, the revival in fact the basic survival of businesses especially medium and small-scale industries needs more credit. The extra deposits of banks apart from the required CRR with RBI has grown from 1.7 lakh crore on March 22, 2019 to 7.46 lakh crore on April 10, 2020. The bank's discretionary deposits with RBI increased by an extra 5.76 lakh crore.

### **CHANGES IN RBI'S FRAMEWORK AND GUIDELINES TO BANKS:**

NPAs are a huge problem and a matter of concern for the entire banking sector. For this reason, to avoid it, the apex bank of the nation, RBI has included and introduced schemes like:

**Strategic Debt Restructuring:** This gives banks a choice to make changes in the management of the company. **Joint Lenders' Forum:** Where a resolution is prepared by the lenders and voting is done for the implementation of the same.

Reserve Bank of India substituted the old and pre-existing guidelines with more simp, generic and one with time constraints for solving future problems of stressed assets by passing a circular. This also aligned it with those of the Insolvency and Bankruptcy Code of 2016.

In the new guidelines and the framework put forward by RBI, a stern deadline of 180 days has been set and during this time, its mandatory to implement the resolution plan, and if not done, the stressed assets must be referred to National Community Law Tribunal under the Insolvency and Bankruptcy Code under 15 days. The new framework has also come up with a provision for monitoring single-day defaulters, where the growing issue is identified and

is drawn immediately when such repayments are due by a day.

There were NPAs which had crossed the 180-day limit for the resolution by banks before the new framework was brought forward and the borrowers included various sugar mills and power producers. They had later appealed against RBI's new framework in various High Courts, but the Allahabad High Court passed its decision in favour of RBI and refused to grant interim relief to the power producers for contacting NCLT for filing for bankruptcy. Further challenges to the decision of the High Court have made the case transferred to it means that the case cannot be filed for bankruptcy at NCLT till the final orders from the the Supreme Court which Supreme Court even after the 180 days limit of RBI has been passed. So such are the exceptions to new framework

### **VIII. CONCLUSION**

A From the above Research paper it can be concluded that the problem of NPAs is a pragmatic problem which cannot be completely eradicated but can only be minimized to a certain extent.

The NPA problem has always troubled the Indian banking sector. The major issue of NPAs is that it affects the profitability of the banks making it difficult for banks to earn income as they are heavily dependent on interest earned on the money that is lent.

Until recent years corporate borrowers weren't keen in paying back their defaults. This increased NPAs of banks and there was no stringent legal action that was taken to curb the growth of NPAs.

The SARFAECI Act allows banks to issue notice to borrowers to repay their loans. The Supreme court of the country has also given permission to banks to sell the assets of borrowers who fail to repay their loans. The majority of NPAs lie with the public sector banks as lesser strict repayment processes have been set up. These time-consuming processes lead to delay in collection of loans payable.

Private sector banks have been performing better and this is indicated by the Gross Non- Performing Asset ratio (GNPA) as well as the Net Non-Performing Asset ratio (NNPA) which is pretty low as compared to the public sector banks.

A high NPA ratio will indicate higher possibility of credit defaults and a low NPA ratio will indicate lower possibility of credit defaults.

With the help of credit assessment, monitoring of credit disbursement, timely sanctions as well as proper follow up processes with improvements in the time duration of the processes will help banks to reduce costs well time liabilities.

The Insolvency and Barring Code (IBC) of 2016 has played a pivotal role in the recovery of bad loans in relation to those creditors whose cases had been filed under the National Company Law Tribunal. Reports published by the RBI indicate that there is a downward trend in the growth of NPAs in these cases.

The crisis of NPAs must be addressed as it also affects the economy of the country. Primarily the economy is dependent upon the country's financial system and the banking sector constitutes a majority stake.

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### **REFERENCING**

[1] Mohan, A. (Ed.) (2018). A comparative study of non-performing assets in public and private sector banks in India. In International Journal of Scientific

Research. Retrieved from

<https://www.worldwidejournals.com/international-journal-of-scientific-research>

[2] Reserve Bank of India. (n.d.). Database on Indian Economy. Retrieved October 5, 2020, from <https://dbie.rbi.org.in/DBIE/statistics.rbi?action=RL&f=365&sd=37ida>,

[3] Economic Times. (2020). Lok Sabha Passes Insolvency and Bankruptcy Code Amendment Bill. Economic Times. Retrieved from [Economic Times]

[4] Sharma, V., & Jain, P. (2018). Negative Impact of NPA on Indian Economy: An Analysis. ResearchGate. Retrieved from ResearchGate.

[5] Mehta, R., & Kashyap, P. (2017). Impact of Non-Performing Assets on the Profitability of Banks - A Selective Study. ResearchGate. Retrieved from ResearchGate.

[6] Kumar, S., & Gupta, A. (2019). Analysis of Non-Performing Assets in the Indian Banking Sector. International Journal of Science, Technology and Policy (IJSTP), 4(2), 25-35. Retrieved from IJSTP.