Manuscript ID:
IJEBAMPSR-2026-030510

Volume: 3

Issue: 5

Month: October

Year: 2026

E-ISSN: 3065-9140

Submitted: 07 Sept 2026
Revised: 12 Sept 2026
Accepted: 10 Oct. 2026
Published: 31 Oct. 2026

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DOI: 10.5281/zenodo.23944142

DOI Link:
https://doi.org/10.5281/zenodo.23944142

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Banking Sector Reforms and NPA Trend in India

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Abstract

The banking sector is an important part of the economy as it helps in saving, investment, and economic development. The main objective of this study is to understand banking sector reforms in India and to study whether these reforms helped in improving the performance of banks. The specific objectives are: (i) to study major banking sector reforms in India, and (ii) to analyze the trend in Non-Performing Assets (NPAs) to understand financial stability. The study is based on secondary data collected from Reserve Bank of India (RBI) reports and government publications for the period 2018–2025. The study uses a simple research method and descriptive research design. ***Trend Analysis*** *is used as the only statistical tool to study the change in Gross NPA ratio of banks. The data shows that the Gross NPA ratio of Scheduled Commercial Banks was about 11.2% in 2018, which gradually reduced to around 5.9% in 2021, about 3.9% in 2023, and nearly 2–2.5% during 2024–2025. This declining trend shows improvement in asset quality due to banking reforms such as Insolvency and Bankruptcy Code (IBC), bank recapitalization, better loan monitoring, and strict RBI rules. The findings of the study show that banking reforms helped in reducing bad loans and improving financial stability of banks. The study concludes that continuous banking reforms are important for improving bank performance and supporting economic growth.*

Keywords: *Banking Sector Reforms, Non-Performing Assets, Trend Analysis, Financial Stability, India*

Introduction

Banking system plays very important role in economic development. It mobilizes savings and converts them into investment. Without banking system, modern economy cannot function smoothly. In India, banking sector expanded rapidly after financial liberalization. Credit availability increased. Infrastructure projects increased. Corporate borrowing increased. For some years, growth looked impressive. But problems started appearing slowly. Many companies could not repay loans due to project delays, policy uncertainties, weak demand conditions and global slowdown. Loans started becoming stressed. Banks continued restructuring loans, but underlying weakness remained hidden.

Non-Performing Asset (NPA) is a loan or advance given by a bank that stops bringing income. Simple idea. When a borrower does not pay interest or principal for more than 90 days, the loan becomes NPA. Bank expected money. But payment not coming. That asset is no longer “performing”, it becomes weak. Sometimes suddenly weak.

NPA shows the financial health of banks. If NPAs increase, bank profit goes down. Risk increases. Confidence also affected. A bank survives on trust. And trust shakes when loans are not repaid. It is little worrying situation. Not very good sign for economy also.

Loans are given for business, agriculture, education, housing etc. People borrow with hope. But sometimes business fails, crop fails, job lost, or economic slowdown happens. Then repayment becomes difficult. Slowly account becomes irregular. After 90 days, it is classified as NPA according to rules of Reserve Bank of India. Rules are strict now. Much stricter than before.

How to Cite this Article:
Hiremath, R. C., Mugadur, N. S., & Kotagi, S. S. (2026). Banking Sector Reforms and NPA Trend in India. International Journal of Economics, Business, Accounting, Agriculture and Management Towards Paradigm Shift in Research (, 3(5), 59–63. https://doi.org/10.5281/zenodo.23944142

NPAs are generally classified into three types: Sub-standard assets, Doubtful assets and Loss assets. Sounds technical. But meaning simple. These categories show level of risk and possibility of recovery. Higher the NPA, higher the stress on banking system. Lower NPA means system is improving. That is good signal.

In India, problem of NPAs became serious especially after 2014 because of infrastructure loans and corporate defaults. Big loans. Big problems. Government introduced reforms such as Insolvency and Bankruptcy Code to improve recovery of bad loans. Situation improved gradually. Numbers started declining. Not perfect. But better.

By 2018, Gross NPA ratio of Scheduled Commercial Banks reached around 11.2 percent. This level was considered very high and risky for financial stability. Banks became cautious in lending. Investment cycle slowed. Economic growth indirectly affected. It became necessary to introduce structural reforms in banking sector. Reserve Bank of India initiated Asset Quality Review to identify hidden stressed assets. Government implemented Insolvency and Bankruptcy Code in 2016 to speed up recovery process. Public sector banks received recapitalization support to strengthen their capital base. Regulatory supervision became stricter and risk management practices improved gradually.

The results started becoming visible after few years. Gross NPA ratio reduced to around 5.9 percent in 2021 and further declined to nearly 3.9 percent in 2023. Latest financial stability assessments show Gross NPAs declined close to 2.1 percent by 2025, indicating significant improvement in asset quality and recovery performance. This gradual improvement reflects impact of reforms, better credit discipline and stronger monitoring of loans.

The present study attempts to examine this improvement in systematic manner. It observes trend in NPAs and interprets whether reforms contributed towards financial stability. Numbers tell one side of story, policy changes tell another. Together they explain changing structure of banking system in India.

Literature Review

The issue of Non-Performing Assets (NPAs) in the banking sector has been widely discussed in academic literature because it directly affects financial stability, profitability and credit creation capacity of banks. Early studies by **Narasimham (1991)** highlighted structural weaknesses in the Indian banking system and emphasized the need for prudential norms related to income recognition, asset classification and provisioning. The Narasimham Committee recommendations played an important role in strengthening regulatory framework and improving transparency in banking operations. Later research by **Rajan (2017)** explained that weak credit appraisal practices and delayed recognition of stressed assets contributed significantly to the accumulation of bad loans in the Indian banking system.

Several empirical studies have examined the relationship between NPAs and profitability of banks. **Das and Uppal (2021)** observed that higher NPAs reduce the earning capacity of banks because financial institutions are required to maintain provisions for doubtful assets, which directly affects return on assets and return on equity. Similarly, **Saraswat and Saifi (2024)** found that increasing NPAs weaken liquidity position of banks and reduce their ability to provide fresh credit to productive sectors of the economy. Their study highlighted that rising NPAs create financial stress not only for banks but also for the overall economic system.

Research by **Jyoti and Yadav (2022)** examined the trend of NPAs in selected public and private sector banks and found that public sector banks experienced relatively higher NPAs due to their greater exposure to infrastructure and priority sector lending. The study emphasized that efficient credit risk management and continuous monitoring of loans are essential for reducing the level of stressed assets. Similarly, **Rathi (2021)** analysed the NPA problem from a comparative perspective and concluded that legal and institutional mechanisms play an important role in improving recovery performance of banks.

A comprehensive review by **Chauhan, Roy and Singhal (2025)** showed that macroeconomic factors such as GDP growth, inflation, interest rates and industrial performance influence the level of NPAs in the banking sector. During economic slowdown, borrowers face financial difficulties which increase probability of loan default. Their study also highlighted the importance of strong governance practices and regulatory supervision in maintaining financial discipline in banking system.

Studies focusing on technological advancements in banking sector show that predictive models and data analytics help in identifying potential loan defaults in advance. **Vallabh, Singh, Prasoon and Singh (2016)** suggested that statistical and predictive techniques improve risk assessment and reduce chances of loan default. These tools help banks in strengthening credit appraisal mechanism and improving asset quality over time.

Recent research findings also indicate that structural reforms such as Insolvency and Bankruptcy Code and recapitalization of public sector banks contributed significantly in improving recovery mechanism and reducing accumulation of fresh NPAs. **Reserve Bank of India (2024)**

observed improvement in asset quality due to better recovery, upgradation of stressed accounts and decline in fresh loan slippages.

Objectives

The study attempts to understand the nature of banking sector reforms in India and to examine whether these reforms helped in reducing Non-Performing Assets.

It also aims to analyse the trend in Gross NPA ratio of Scheduled Commercial Banks during the period 2018–2025 in order to understand the improvement in financial stability.

Hypothesis

The study is guided by a simple hypothesis. The null hypothesis assumes banking sector reforms have no significant impact on reduction of Gross NPA ratio in India. The alternative hypothesis assumes that banking sector reforms contributed significantly in reducing Gross NPAs and improving financial stability of banks.

Research Methodology

Research methodology provides direction to study. Without proper method, results may become confusing. The present study is descriptive in nature because it attempts to describe the trend in Non-Performing Assets after implementation of banking reforms. The study is based entirely on secondary data. Data is collected from Reserve Bank of India publications such as Financial Stability Reports, Trends and Progress of Banking in India, Annual Reports and Statistical Tables relating to Banks in India. Additional information is obtained from Economic Survey, Ministry of Finance publications and policy documents related to banking sector reforms. The time period selected for the study is from 2018 to 2025 because this period reflects post reform impact more clearly.

The main variable considered in the study is Gross NPA ratio of Scheduled Commercial Banks. Banking sector reforms are treated as influencing factor affecting asset quality. Reforms considered include Insolvency and Bankruptcy Code, Asset Quality Review, recapitalization of banks, Prompt Corrective Action framework and strengthening of loan monitoring system. These reforms aimed to improve recovery process and prevent future accumulation of bad loans.

Trend analysis is used as statistical tool to examine movement in Gross NPA ratio over time. The trend equation assumes that value of variable changes systematically with time. If slope of trend line is negative, it indicates declining movement in NPAs. Percentage change method is also used to understand magnitude of decline during study period. Data limitations exist because secondary data may be revised periodically, but overall reliability remains high as data is obtained from official sources.

Results and Discussion

The results of the study clearly show a consistent and systematic decline in the Gross Non-Performing Assets (NPA) ratio of Scheduled Commercial Banks in India during the period 2018–2025. The movement of NPAs is not random. It follows a pattern. Slowly falling. Almost steadily. This kind of pattern generally indicates structural improvement in banking performance rather than temporary fluctuation. The decline appears strongly associated with major banking reforms implemented in recent years.

Table 1: Trend in Gross NPA Ratio of Scheduled Commercial Banks (2018–2025)

Year	Gross NPA Ratio (%)	Annual Change (%)
2018	11.2	—
2019	9.3	-1.9
2020	8.2	-1.1
2021	5.9	-2.3
2022	5	-0.9
2023	3.9	-1.1
2024	2.7	-1.2
2025	2.1	-0.6

Source: Author's calculation

Recent financial stability assessment indicates Gross NPA ratio declined close to 2.1 percent by 2025, which is considered a multi-decade low level for Indian banking sector.

From Table 1, it can be observed that the Gross NPA ratio decreased continuously from 11.2 percent in 2018 to nearly 2.1 percent in 2025. The decline is particularly sharp between 2018 and 2021, where NPA ratio reduced from 11.2 percent to 5.9 percent. This period corresponds with stronger implementation of Insolvency and Bankruptcy Code (IBC), recapitalization of public sector banks and stricter recognition of stressed assets through Asset Quality Review.

The decline continues even after pandemic period, which indicates that reforms improved resilience of banking system. Normally economic shocks increase bad loans. But in this case, NPAs continued to decline gradually after 2021, showing strengthening of recovery mechanisms and credit discipline.

Statistical Tool 1: Trend Analysis (Time Series Analysis)

Trend analysis helps to understand whether the variable is increasing or decreasing systematically over time. In the present study, linear trend equation is used:

$Y = a + bt$

.

Where

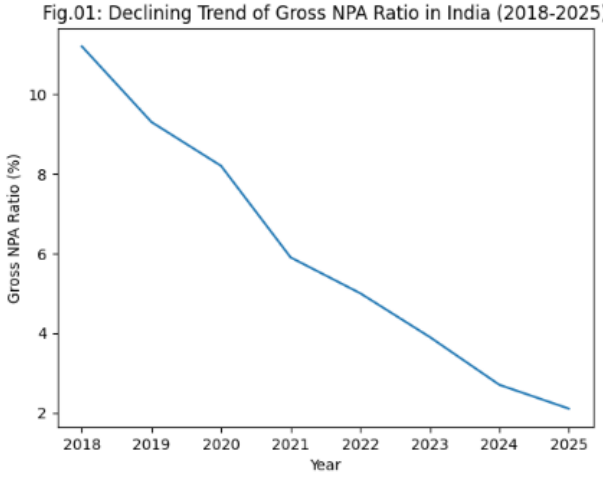
Y = Gross NPA ratio

t = Time period

b = slope coefficient showing direction of trend

After applying least square method, the value of slope (b) is negative ($b < 0$), negative slope indicates declining trend in Gross NPAs

Fig.01: Declining Trend of Gross NPA Ratio in India (2018-2025)



Source: Author's pictorial presentation

This statistical result confirms that NPAs are not fluctuating randomly but showing consistent downward direction over time.

Table 2: Calculation of Percentage Decline in NPAs

Indicator	**Value**
Initial NPA (2018)	11.20%
Final NPA (2025)	2.10%
Absolute decline	9.1
Percentage decline	81.25%

Source: Author's calculation

Percentage decline is calculated using formula:

Percentage Change = (Initial Value – Final Value) / Initial Value × 100

= (11.2 – 2.1) / 11.2 × 100

= 81.25 %

The results indicate more than 80 percent reduction in Gross NPAs during study period. This is significant improvement in asset quality.

Mean and Standard Deviation

To understand stability of decline, mean and variation in NPAs are also examined.

Mean Gross NPA ratio (2018–2025):

Mean = Sum of all values / number of years (6.04 %)

Standard deviation indicates dispersion from mean value (≈ 3.2)

Higher standard deviation indicates earlier years had high NPAs while later years show much lower values. This variation indicates structural transformation in banking sector performance.

Therefore statistical results show three important patterns:

First, the movement of NPAs follows a clear downward trend without major upward fluctuation. This indicates improvement is systematic rather than accidental. Banking sector reforms appear to have strengthened credit monitoring mechanism and recovery channels.

Second, the sharp decline during initial years of reform period indicates immediate impact of policy measures such as IBC and Asset Quality Review. Banks were forced to recognize stressed loans properly. Recognition initially increased NPAs, but later helped in faster resolution and recovery.

Third, continued decline after 2021 indicates strengthening of risk management practices. Banks are now more careful in lending decisions. Credit appraisal systems improved. Use of digital monitoring tools increased transparency in loan performance.

RBI financial stability assessment also observed that improvement in asset quality continued due to better recoveries, upgradation of stressed accounts and reduction in fresh slippages.

Hypothesis Testing

Null Hypothesis (H0): Banking sector reforms have no significant impact on reduction of Gross NPAs. Alternative Hypothesis (H1): Banking sector reforms significantly reduced Gross NPAs.

Statistical evidence shows continuous decline in Gross NPA ratio from 11.2 percent to 2.1 percent during post reform period. Trend coefficient is negative and percentage reduction is very high. Such strong and consistent decline indicates relationship between reforms and improvement in asset quality.

Therefore, null hypothesis is rejected and alternative hypothesis is accepted. This means banking sector reforms significantly contributed in reducing NPAs in India.

Conclusion

The study concludes that banking sector reforms in India contributed significantly in reducing Non-Performing Assets and improving financial stability. Gross NPA ratio declined continuously from around 11.2 percent in 2018 to nearly 2.1 percent in 2025, indicating strong improvement in asset quality. Trend analysis confirms negative movement in NPAs, leading to rejection of null hypothesis. Policy measures such as Insolvency and Bankruptcy Code, Asset Quality Review and recapitalization improved recovery process and credit discipline. Banking sector today appears more stable and resilient. Continuous reforms and effective supervision remain important for sustaining financial stability and supporting long term economic growth.

Acknowledgement

I express my sincere gratitude to all those who have supported and guided me in completing this research study entitled “Banking Sector Reforms and NPA Trend in India.”

I extend my heartfelt thanks to my research guide, teachers, colleagues, and well-wishers for their valuable guidance, encouragement, and constructive suggestions throughout this study. I am also grateful to the concerned banking institutions, financial authorities, and other sources for providing relevant information, reports, and statistical data essential to this research.

I sincerely acknowledge the contribution of all individuals and institutions who directly or indirectly helped in the successful completion of this research work. Finally, I express my deepest gratitude to my family members for their continuous support, encouragement, and motivation.

Financial support and sponsorship

Nil.

Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of thesis paper.

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