



**International Seminar** on September 16th, 2024  
 “Exploring the Frontiers of Interdisciplinary Research (ICEFIR-2024)”  
 Organized By: Nagpal Charitable Trust, Sri Ganganagar  
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## **"A Comprehensive Study on the Impact of Non-Performing Assets on Economic Growth: An Analytical Perspective with Reference to the Indian Banking Sector"**

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### **Abstract**

Nonperforming assets (NPAs) bring great problems for the nation's economy, resulting in less growth. This paper looks at how non-performing assets affect the growth of the Indian economy, focusing on the cases of public and private banks in India. The factors leading to NPAs, their behavior over time and their impacts on both GDP and the investment sector are included in the paper. The research uses statistics to investigate why banks manage NPA differently and how a rise in NPA may limit their capability to provide loans. The study also explores whether a rise in non-performing assets is connected to slower GDP growth. This paper then discusses what actions could help reduce NPAs and assist the banking sector in supporting continuous economic growth. In reality, a large portion of statistics and data supports financial planning, bank policy development and the efficiency of the Indian banking economy.

**Keywords: Non-Performing Assets, Economic Growth, Indian Banking Sector, Public and Private Banks, Credit Flow, Financial Stability, NPA Reduction, GDP, Banking Performance**  
**Introduction:**

The growth and development of a nation's economy rely heavily on banks. Customers can deposit their money with banks and banks give loans to individuals, businesses and different industries. This step helps entrepreneurs, provides jobs, builds infrastructure and benefits the whole economy.

Nevertheless, if borrowers stop making payments on their loans, the asset is termed a Non-Performing Asset (NPA). An NPA is when a bank doesn't receive any income from a loan for 90 days because the borrower has not made regular payments on time.

Over the last 10 years, non-performing assets have increased the most in public sector banks. Therefore, experts, economists and those who create policies are concerned about what might develop. Too many bad loans lowers a bank's earnings, requires it to increase its reserve funds and results in it becoming more cautious about making loans. If credit moves more slowly, companies face obstacles, put less money into the economy and economic development sags. Having the proper funds is essential for India's economy to grow. If banks continue to hold onto bad loans, they cannot help or participate in new and meaningful development. When this happens, it creates a circle where problems in banks lower the economy and slow growth makes defaults rise.

The aim of the research is to check the overall effect of NPAs on the Indian economy by studying public and private bank data for a long period. It examines how NPAs increase, what leads to this increase and how economic indicators like GDP are involved. The paper reviews the performance of public and private banks in dealing with NPAs as well as the impact of IBC and special reconstruction policies.

The RBI's new measures and stronger standards have created greater transparency, yet the NPA problem persists. It will make it easier to understand the gravity of the NPA situation and decide on controls. From trend analysis, using statistics and comparing different banks, the researchers give a full picture of the problem and suggest how it can be corrected.

This issue is important for the entire economy and not only for banks. It shapes jobs, goods made by industry, the trust people have in financial sectors and levels of foreign investment. For this reason, we need to look at NPAs through the lens of economics, rather than just by their technical meaning in banking.



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This paper intends to contribute by presenting clear facts, highlighting the issues and suggesting practical answers. It will aid in educating students, researchers, bankers and policymakers on how to defend the banking sector against similar dangers in the future.

**Literature Review:**

Numerous studies have looked at how Non-Performing Assets (NPAs) affect banks and India's economy. They study the methods public and private banks take for dealing with NPAs and the effect these assets have on a bank's profits and development.

In 2011, Chaudhary and Sharma compared public and private banks in India. According to the study, private banks experience better results and greater profits from handling NPAs than do public banks. The increase in NPAs in public banks is because of weaknesses in lending process and political pressure. Experts suggest that a few changes in public banks can result in lower numbers of bad loans and better services.

In their 2007 study, Das and Ghosh looked into the reasons for credit risk in public banks. The research explains that NPAs are due, in part, to the high number of rejected loans, lax monitoring and challenging economic conditions. They pointed out that strengthening bank risk checks and warning systems can help stop bad loans.

In this paper, the influence of NPAs on the profits of public and private banks is investigated (Kaur and Singh, 2020). It was discovered that NPAs negatively influence the profits of public banks more than those of private banks. Banks take better care of their bad debts and keep their gains safe better than the government.

They explored the link between standard within assets and a bank's profitability. The findings showed that banks with high-quality assets have better profit margins. It was suggested by them that banks make credit rules more complex and focus on repaying delayed loans.

Rani and Tiwari conducted a study on NPAs within India's banking sector in 2019. These researchers discovered that increased nonperforming assets reduce a bank's ability to grant new loans, negatively affecting the economy. It was pointed out that tough rules and early action are required to address NPAs.

Generally, these findings indicate that NPAs are a major issue for Indian banks, mainly for public banks. As a result of NPAs, banks experience less profit and offer fewer ways to help the economy. This issue should be resolved by banks making their loan checks stricter, increasing their oversight and speeding up the process of recovering funds.

**Objectives of the Study:**

1. To analyze both the reasons and patterns of Non-Performing Assets in India.
2. To learn how NPAs impact the overall growth of an economy.
3. To assess the non-performing asset ratios in banks operating in both sectors.
4. Examining the interaction between the problems of NPAs and levels of GDP.
5. To present strategies to decrease NPAs among Indian banks.

**Hypothesis:**

- H<sub>0</sub> means there is no significant effect that non-performing assets have on economic growth in India.
- Supported by H<sub>1</sub>: Economic growth in India is greatly affected by NPAs.

**Research Methodology:**

The study uses information collected from the Reserve Bank of India (RBI), economic surveys, published journals and bank financial statements. Data for the analysis comes from the years 2012 to 2022. When doing an analysis, we can rely on mean, standard deviation, as well as Pearson correlation to assess the hypothesis.

- **Sample:** Name of Top 5 Public Sector Banks and Top 5 Private Sector Banks in India.
- **Variables:**

NPAs (Independent Variable) = % of Advances



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The main variable is GDP growth rate as a percentage.

**Table 1: Descriptive Statistics (2012– 2022):**

Variable	Mean	Median	Standard Deviation	Minimum	Maximum
NPA (Public Banks)	9.75%	9.30%	2.13	6.8%	12.5%
NPA (Private Banks)	3.15%	3.00%	1.05	2.0%	4.8%
GDP Growth (%)	5.89%	6.20%	1.92	3.7%	8.2%

**Analysis of Descriptive Statistics:**

They help us summarize what we have uncovered in this study. They highlight the important trends and developments in Non-Performing Assets (NPAs) and GDP growth during the last 10 years. Some of the information provided is the average, median, standard deviation, smallest and greatest NPAs for public and private sector banks, together with their GDP growth rate.

**1. Unpaid Bank Loans in Public Banks**

1. The average rate is 9.75%.

Overall, more than 9 percent of public sector bank advances (loans) were identified as non-performing assets during the analyzed period. The data reveals that loan recovery and credit assessment by public banks needs major improvement.

- Median: 9.30 percent

The middle value or median, is less than the mean when the data is organized by size. Therefore, it seems that some years saw particularly high NPA levels that raised the average. Standard Deviation = 2.13

It means that the levels of NPA have changed throughout the years. A bigger standard deviation means that NPAs showed ups and downs over different years.

- Between 6.8% and 12.5%

The list demonstrates that in public sector banks, NPA levels were always above 6% and in the worst year, they climbed to 12.5%. Such a huge peak is due to the serious crisis in Indian banks after the RBI completed asset quality reviews in 2016– 17.

Interpretation:

Regularly high NPA percentages and wide differences in NPs in the public sector mean that the process of credit monitoring, political involvement in lending and recovering loans is substandard. It is important that these banks change their governance, rely on better technology and increase their accountability.

**2. The Issue of NPAs in Private Banking Sector**

Percentage gains tend to average out to 3.15% on Long Island.

This shows that credit assessment, oversight and lender recovery are more efficient in private banks than in public ones.

1. The median yield is 3.00%

Because the median is similar to the mean, the data includes less variation and fewer unusual results.

2. Standard Deviation: 1.05

It shows that the percentage of NPAs hasn't changed much through the years. There has been less change in the quality of assets at private banks.

3. The range is from 2.0% to 4.8%.

In any extreme case, private banks still kept their NPAs below 5%. For the bank sector, this is deemed a level that can be handled well.



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Interpretation:

NPAs have been better managed by private banks. Thanks to advanced internal methods, quick action over defaults and their attention to customers, they have prevented significant bad loans. They do not rely heavily on political sources of financing or public works, both of which expose them to bigger risks.

**3. This figure is GDP Growth Rate (%).**

4. The mean or average, is 5.89%.

The rate of annual growth in India's economy averaged around 5.89% during the period in question. Even though the rate is moderate, it is lower than the 7– 8% growth potential found in developing countries.

5. The median increase is 6.20%.

The median is slightly higher than the mean which means that most of the time, the growth was strong, but some low-growth years (including 2020) made the average dip.

6. Standard Deviation is 1.92

This means that the GDP growth rate didn't vary too much over the years. A few years saw rapid development, but some years saw minimal growth.

Minimum and Maximum: From 3.7% to 8.2%

The lower reading was caused by the global and national economic challenges, including COVID-19, the impact of demonetization and fewer available credits. The fact that growth reached 8.2% demonstrates that, with the right conditions, the Indian economy could be very strong.

Interpretation:

The economy of India expanded and suffered many bumps during this period. At the same time, growing NPAs in banks indicated a possible link between their strength and the country's economic performance.

**Table 2: Hypothesis Testing (Pearson Correlation between NPA and GDP Growth):**

Bank Type	Pearson Correlation (r)	Significance (p-value)
Public Sector Banks	-0.78	0.007
Private Sector Banks	-0.42	0.085

**Analysis of Hypothesis Testing:**

Our study relies on Pearson analysis to investigate whether Non-Performing Assets (NPAs) are related to changes in economic growth based on GDP growth rate. We wanted to see if there is a strong link between the increase in NPAs and India's weaker economy.

Table 2 presents our separate examination of public sector and private sector banks, for the period 2012 to 2022. The results and explanations of the hypothesis testing are listed below.

**1. Public Sector Banks**

7. It is clear that the more non-performing assets are present, the slower the GDP growth tends to be ( $r = -0.78$ ).

At a 5% level of significance, results are considered significant because the p-value is 0.007. There is a link between rising numbers of NPAs in public banks and slower GDP growth.

Interpretation:

It is clear from the results that excessive bad loans at public banks slowdown economic growth. With a high amount of NPAs, public banks can loan less money to the business, industrial and personal sectors. As a consequence, the growth in investment drops, new jobs become rare and the overall economy experiences a decline. Public banks own a big part of the credit market in India, so changes in their performance have a direct effect on the nation's economy.

Consequently, we believe that rejecting the null hypothesis is the right approach and the alternative hypothesis is our conclusion for public sector banks.

To a large extent, non-performing assets have a major impact on India's economic growth.



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## 2. Private Sector Banks are:

It is shown by the Pearson correlation ( $r$ ) value  $-0.42$  that there is a moderate negative correlation between NPAs and GDP growth.

The result is found in the p-value which has a value of  $0.085$ .

Interpretation:

Our research through statistical analysis shows that there is no significant link between non-performing assets and private bank GDP growth. So the effect of NPAs on the economy in private banks is not large enough to show up in statistics.

Private banks are normally careful and diligent when offering loans. They use firmer risk prevention methods and respond more quickly to challenges. So, even when their NPAs increase a little, they handle it better than public banks and it impacts the economy less.

As a result, private sector banks cannot reject  $H_0$ .

NPA does not have a major effect on the country's economic growth.

### Conclusions Overall Results:

The analysis reveals that Non-Performing Assets are responsible for slowing down the Indian economy mainly through the country's public banks. Many non-performing assets on a bank's balance sheet reduce loan offerings, discourage investment and lead to lower GDP growth. This research leads to the main results of:

- Comparatively, public sector banks have greater nonperforming asset ratios than private sector ones.
- When assets that are not profitable rise, public sector banking GDP growth often slows.
- Asset management and risk control are major strengths of private sector banks.
- A dependable and expanding economy is reliant on its banking system.

### References:

- Chaudhary, K., & Sharma, M. (2011). Performance of Indian public sector banks and private sector banks: A comparative study. *International Journal of Innovation, Management and Technology*, 2(3), 249– 256.
- Das, A., & Ghosh, S. (2007). Determinants of credit risk in Indian state-owned banks: An empirical investigation. *Economic and Political Weekly*, 42(52), 5059– 5068.
- Kaur, K., & Singh, B. (2020). Impact of NPAs on profitability of public and private sector banks in India. *International Journal of Financial Management*, 10(2), 23– 29.
- Mishra, R., & Arora, N. (2021). Role of asset quality in determining bank profitability in India: A comparative study. *Journal of Banking and Finance Review*, 3(1), 15– 22.
- Rani, R., & Tiwari, R. (2019). Non-performing assets (NPAs) in Indian commercial banks: An analytical study. *International Journal of Management Studies*, 6(1), 52– 59.