



ANALYSING NON-PERFORMING ASSETS (NPA) IN PUBLIC AND PRIVATE SECTOR BANKS OF INDIA: A COMPARATIVE STUDY

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ABSTRACT

The issue of Non-Performing Assets (NPA) in the banking sector has been a major concern in India, affecting the financial stability and performance of banks. This comparative study aims to analyse and compare the NPAs of selected public and private sector banks in India, and examine their impact on the financial performance of these banks over a period of five years from 2017-18 to 2021-22. The sample banks chosen for this study include three private sector banks, namely Axis Bank Ltd, HDFC Bank Ltd, and ICICI Bank Ltd, and three public sector banks, namely Bank of Baroda, Punjab National Bank, and State Bank of India. The study employs ratio analysis and regression techniques as tools for data analysis. The findings of the study will provide insights into the trends and patterns of NPAs in the selected banks, and their impact on financial performance. The results of this study will be useful for policymakers, regulators, and stakeholders in the banking sector to better understand the dynamics of NPAs and their implications for the performance of public and private sector banks in India.

Keywords : NPA, Public Sector Banks, Private Sector Banks, Financial Performance

1. INTRODUCTION

Non-performing assets (NPA) are a major concern for banks and financial institutions worldwide. In India, the issue of NPAs has been a persistent problem for the banking sector, and it has been a matter of great concern for policymakers and stakeholders. Non-performing assets are loans and advances that are not being serviced by the borrower, i.e., the principal or interest amount is not being repaid as per the loan agreement. It is a major source of financial instability and risk for banks and financial institutions.

The rising level of NPAs in India is a cause of concern for the economy as a whole. In recent years, the banking sector in India has been grappling with a high level of NPAs, which has affected the growth and development of the sector. The Reserve Bank of India (RBI) has taken several measures to address the issue of NPAs, including the introduction of the Insolvency and Bankruptcy Code, 2016, which provides a framework for the timely resolution of stressed assets.

The main reasons for the high level of NPAs in India include the economic slowdown, poor credit appraisal and monitoring, diversion of funds by borrowers, wilful default, and fraud. The banking sector has also been impacted by external factors such as the COVID-19 pandemic, which has led to a significant increase in NPAs. The RBI has taken several measures to mitigate the impact of the pandemic on the banking sector, including providing a moratorium on loan repayments and restructuring of loans.

The high level of NPAs has several negative consequences for banks and financial institutions. It affects their profitability, reduces their ability to lend, and increases the risk of insolvency. Moreover, it impacts the overall health of the economy as a whole, as banks are unable to lend to productive sectors, which slows down the pace of economic growth.

To address the issue of NPAs, banks and financial institutions need to adopt a multi-pronged approach. They need to strengthen their credit appraisal and monitoring systems, ensure that loans are given to creditworthy borrowers, and take proactive measures to recover bad loans. Moreover, banks need to focus on the resolution of stressed assets through measures such as debt restructuring, asset sale, and strategic debt restructuring.

Non-performing assets (NPAs) are a major concern for banks and financial institutions in India, both in the public and private sectors. The level of NPAs in India has been on the rise in recent years, and it has become a matter of great concern for policymakers and stakeholders.

The public sector banks in India have been more affected by the issue of NPAs than their private sector counterparts. The reasons for the high level of NPAs in public sector banks include poor credit appraisal and monitoring systems, political interference, and lack of accountability. Moreover, public sector banks have also been impacted by the economic slowdown, which has led to a significant increase in NPAs.

On the other hand, private sector banks in India have been more proactive in addressing the issue of NPAs. They have stronger credit appraisal and monitoring systems, which helps them identify potential bad loans early on. Private sector banks have also been more successful in recovering bad loans and resolving stressed assets.

To address the issue of NPAs, both public and private sector banks need to adopt a multi-pronged approach. They need to strengthen their credit appraisal and monitoring systems, ensure that loans are given to creditworthy borrowers, and take proactive measures to recover bad loans. Moreover, banks need to focus on the resolution of stressed assets through measures such as debt restructuring, asset sale, and strategic debt restructuring.

The Reserve Bank of India (RBI) has taken several measures to address the issue of NPAs in both public and private sector banks. The introduction of the Insolvency and Bankruptcy Code, 2016, has provided a framework for the timely resolution of stressed assets. Moreover, the RBI has also provided a moratorium on loan repayments and allowed for the restructuring of loans in the wake of the COVID-19 pandemic.

In conclusion, the issue of non-performing assets (NPAs) is a major challenge for both public and private sector banks in India. The rising level of NPAs has negative consequences for the banking sector, the economy, and society as a whole. Therefore, it is crucial that banks and financial institutions take proactive measures to address the issue of NPAs and ensure the stability and growth of the banking sector. The RBI, as the regulator of the banking sector, has a critical role to play in ensuring that the banking sector in India remains healthy and resilient.

2. LITERATURE REVIEW

One study conducted by Patra and Pothal (2019) analysed the trends and patterns of NPAs in public and private sector banks in India. The study found that the level of NPAs was higher in public sector banks compared to private sector banks. The study attributed this difference to factors such as poor credit appraisal and monitoring systems, political interference, and lack of accountability in public sector banks.

Another study by Singhal and Singh (2017) analysed the impact of NPAs on the profitability of banks in India. The study found that higher levels of NPAs were associated with lower profitability in both public and private sector banks. The study also found that private sector banks were more successful in managing their NPAs, which helped them maintain higher profitability compared to public sector banks.

A study by Panigrahi and Nanda (2021) analysed the impact of the COVID-19 pandemic on NPAs in public and private sector banks in India. The study found that the pandemic had led to a significant increase in NPAs in both public and private sector banks. However, the study found that private sector banks were more successful in managing the impact of the pandemic on their NPAs.

A study by Karthikeyan and Subramaniam (2020) analysed the measures taken by banks to address the issue of NPAs in India. The study found that both public and private sector banks had adopted measures such as debt restructuring, asset sale, and strategic debt restructuring to manage their NPAs. However, the study found that private sector banks were more proactive in taking such measures, which helped them manage their NPAs more effectively.

A study by Das and Swain (2020) analysed the impact of macroeconomic factors on the level of NPAs in Indian banks. The study found that factors such as inflation, GDP growth, and interest rates had a significant impact on the level of NPAs in both public and private sector banks. The study also found that private sector banks were more sensitive to changes in macroeconomic factors compared to public sector banks.

Another study by Singh and Nigam (2021) analysed the impact of corporate governance on NPAs in Indian banks. The study found that corporate governance practices such as board independence, CEO duality, and audit committee size had a significant impact on the level of NPAs in both public and private sector banks. The study found that private sector banks had better corporate governance practices, which helped them manage their NPAs more effectively.

A study by Das et al. (2021) analysed the impact of technology adoption on the level of NPAs in Indian banks. The study found that banks that had adopted advanced technologies such as artificial intelligence and machine learning had lower levels of NPAs compared to banks that had not adopted such technologies. The study found that private sector banks were more proactive in adopting advanced technologies, which helped them manage their NPAs more effectively.

Finally, a study by Prakash and Nair (2020) analysed the impact of the Insolvency and Bankruptcy Code (IBC) on the resolution of NPAs in Indian banks. The study found that the IBC had helped in the timely resolution of NPAs, particularly in the case of private sector banks. The study found that private sector banks had been more successful in resolving their NPAs through the IBC process compared to public sector banks.

Overall, the existing literature on the topic suggests that the issue of non-performing assets (NPAs) is a major challenge for both public and private sector banks in India. The higher level of NPAs in public sector banks can be attributed to factors such as poor credit appraisal and monitoring systems, political interference, and lack of accountability. Private sector banks have been more successful in managing their NPAs, which has helped them maintain higher profitability. However, the COVID-19 pandemic has led to a significant increase in NPAs in both public and private sector banks, and it is crucial that banks take proactive measures to manage the impact of the pandemic on their NPAs.

3. RESEARCH METHODOLOGY

RESEARCH OBJECTIVES

1. To compare the NPA of selected private and public sector banks of India.
2. To examine the impact of NPA on financial performance of selected banks of India

SAMPLE SIZE

Below mentioned 3 private sector and public sector banks taken under study

PRIVATE SECTOR BANKS

1. Axis Bank Ltd
2. HDFC Bank Ltd
3. ICICI Bank Ltd

PUBLIC SECTOR BANKS

1. Bank of Baroda
2. Punjab National Bank
3. State Bank of India

PERIOD OF THE DATA COVERAGE

In this study 5 years of data has been analysed. Data for the year 2017-18 to 2021-22 have been analysed in this used

TOOLS AND TECHNIQUES USED FOR DATA ANALYSIS

In this study, ratio analysis and regression techniques have been used to analyse the financial performance of selected public and private sector banks of India

4. DATA ANALYSIS

1. GROSS NON-PERFORMING ASSETS (GNPA)

GROSS NPA- (Rs.)					
BANK	2021-22	2020-21	2019-20	2018-19	2017-18
PRIVATE SECTOR BANKS					
Axis Bank Ltd	21822.32	25314.84	30233.82	29789.00	34248.64
HDFC Bank Ltd	16140.96	15086.00	12649.97	11224.16	8606.97
ICICI Bank Ltd	33294.92	40841.42	40829.09	45676.04	53240.18
AVERAGE	23752.73	27080.75	27904.29	28896.40	32031.93
PUBLIC SECTOR BANKS					
Bank of Baroda	64059.39	66671.00	69381.43	48232.76	56480.00

Punjab National Bank	92448.04	104423.42	73478.76	78472.70	86620.05
State Bank of India	112023.00	126389.00	149091.85	172753.60	223427.46
AVERAGE	89510.14	99161.14	97317.35	99819.69	122175.84

INTERPRETATION

The table provided shows the Gross Non-Performing Assets (GNPA) in Indian rupees (Rs.) for various banks in the private and public sectors for the past five financial years. GNPA refers to the total amount of non-performing loans (NPLs) that a bank has on its books, without taking into account any recoveries or write-offs.

Private Sector Banks:

1. Axis Bank Ltd: The bank's GNPA decreased from Rs. 25,314.84 crore in 2020-21 to Rs. 21,822.32 crore in 2021-22. However, it was still higher than the GNPA figures for the previous three years.
2. HDFC Bank Ltd: The bank's GNPA increased from Rs. 15,086.00 crore in 2020-21 to Rs. 16,140.96 crore in 2021-22. However, it was still lower than the GNPA figures for the previous two years.
3. ICICI Bank Ltd: The bank's GNPA decreased from Rs. 40,841.42 crore in 2020-21 to Rs. 33,294.92 crore in 2021-22. However, it was still higher than the GNPA figures for the previous three years.

The average GNPA for private sector banks decreased from Rs. 27,080.75 crore in 2020-21 to Rs. 23,752.73 crore in 2021-22. However, it was still higher than the average GNPA figures for the previous three years.

Public Sector Banks:

1. Bank of Baroda: The bank's GNPA increased from Rs. 66,671.00 crore in 2020-21 to Rs. 64,059.39 crore in 2021-22. However, it was still higher than the GNPA figures for the previous two years.
2. Punjab National Bank: The bank's GNPA decreased from Rs. 1,04,423.42 crore in 2020-21 to Rs. 92,448.04 crore in 2021-22. However, it was still higher than the GNPA figures for the previous two years.
3. State Bank of India: The bank's GNPA decreased from Rs. 1,26,389.00 crore in 2020-21 to Rs. 1,12,023.00 crore in 2021-22. However, it was still higher than the GNPA figures for the previous three years.

The average GNPA for public sector banks decreased from Rs. 99,161.14 crore in 2020-21 to Rs. 89,510.14 crore in 2021-22. However, it was still higher than the average GNPA figures for the previous three years.

Overall, the data shows that the GNPA figures for both private and public sector banks have been fluctuating over the past five years, with some banks showing an increase in NPLs and others showing a decrease. While some banks have been able to manage their bad loans effectively, others continue to struggle with high levels of NPLs.

The data highlights the need for effective risk management strategies and loan recovery mechanisms to prevent the accumulation of bad loans and ensure the stability of the banking sector.

Average GNPA of Private Sector Banks: The average GNPA of private sector banks decreased from Rs. 27,080.75 crore in 2020-21 to Rs. 23,752.73 crore in 2021-22. This indicates a decline in the amount of bad loans held by private sector banks. However, the average GNPA figures for the past five years suggest that private sector banks have been struggling with high levels of bad loans, which is a cause for concern.

Average GNPA of Public Sector Banks: The average GNPA of public sector banks decreased from Rs. 99,161.14 crore in 2020-21 to Rs. 89,510.14 crore in 2021-22. This also indicates a decline in the amount of bad loans held by public sector banks. However, the average GNPA figures for the past five years suggest that public sector banks continue to face significant challenges with regards to bad loans.

Difference in Average GNPA between Private and Public Sector Banks: The average GNPA of public sector banks is significantly higher than that of private sector banks over the past five years. This indicates that public sector banks are facing greater challenges with regards to managing bad loans. It is important to note that public sector banks make up the majority of the banking sector in India, and their performance has a significant impact on the overall health of the banking system. Overall, the comparative analysis of the average GNPA figures for private sector banks and public sector banks suggests that both segments of the banking sector are struggling with bad loans, but public sector banks are facing greater challenges in this regard. The data highlights the need for effective risk management strategies and loan recovery mechanisms to prevent the accumulation of bad loans and ensure the stability of the banking sector.

2. NET PROFIT MARGIN (%)

NET PROFIT MARGIN (%)					
BANK	2021-22	2020-21	2019-20	2018-19	2017-18
PRIVATE SECTOR BANKS					
Axis Bank Ltd	19.33	10.35	2.59	8.5	0.6
HDFC Bank Ltd	28.93	25.74	22.86	21.29	21.79
ICICI Bank Ltd	27.02	20.46	10.6	5.3	12.33
AVERAGE	25.09	18.85	12.02	11.70	11.57
PUBLIC SECTOR BANKS					
Bank of Baroda	10.4	1.17	0.71	0.87	-5.57
Punjab National Bank	4.61	2.5	0.62	-19.44	-25.59
State Bank of India	11.49	7.69	5.63	0.35	-2.96
AVERAGE	8.83	3.79	2.32	-6.07	-11.37

Net Profit Margin is a profitability ratio that measures a company's net profit as a percentage of its revenue. It is an important metric for investors and analysts to evaluate a company's profitability.

Private Sector Banks:

1. Axis Bank Ltd: The net profit margin of Axis Bank has been consistently above 10% over the past five years, with a significant increase in the last two years.
2. HDFC Bank Ltd: HDFC Bank has consistently maintained a high net profit margin of over 20%, indicating a strong profitability.
3. ICICI Bank Ltd: ICICI Bank's net profit margin has shown a consistent improvement over the past five years, reaching a high of 27.02% in 2021-22.

Public Sector Banks:

1. Bank of Baroda: Bank of Baroda's net profit margin has shown a significant improvement in the last two years, with a notable increase in 2021-22.
2. Punjab National Bank: PNB has consistently maintained a low net profit margin, with negative margins in 2019-20 and 2018-19.
3. State Bank of India: SBI's net profit margin has been volatile over the past five years, with a significant increase in 2021-22 after a decline in the previous year.

Overall, private sector banks have shown a higher net profit margin as compared to public sector banks, with HDFC Bank having the highest net profit margin among all the banks analysed. Public sector banks, on the other hand, have shown a mixed performance, with Bank of Baroda and SBI showing some improvement in the recent past.

Average Net Profit Margin of Private Sector Banks: The average net profit margin of private sector banks has been consistently higher than that of public sector banks over the past five years. It increased from 18.85% in 2020-21 to 25.09% in 2021-22, indicating improved profitability for private sector banks. The figures suggest that private sector banks have been successful in managing costs and generating higher revenues, resulting in a better bottom line.

Average Net Profit Margin of Public Sector Banks: The average net profit margin of public sector banks has been lower than that of private sector banks, and the figures indicate a mixed performance over the past five years. In 2021-22, the average net profit margin for public sector banks increased to 8.83% from 3.79% in the previous year. However, the figures for the previous three years show negative net profit margins for public sector banks. This suggests that public sector banks are facing significant challenges with regards to managing costs and generating profits.

Difference in Average Net Profit Margin between Private and Public Sector Banks: The difference in the average net profit margin between private and public sector banks has been significant over the past five years. Private sector banks have consistently reported higher net profit margins, indicating better profitability and financial

health. This suggests that private sector banks have been more successful in managing risks, generating higher revenues, and controlling costs.

Overall, the analysis of net profit margin figures for private and public sector banks suggests that private sector banks have been more successful in managing profitability over the past five years. Public sector banks, on the other hand, continue to face challenges with regards to managing costs and generating profits. The data highlights the need for public sector banks to improve their operational efficiency, adopt better risk management strategies, and explore new revenue streams to improve profitability and ensure the stability of the banking system.

Private sector banks have consistently performed better than public sector banks in terms of NPM. Private sector banks had an average NPM of 25.09% in the most recent fiscal year (2021-22), which is significantly higher than the public sector banks' average NPM of 8.83% for the same period. Furthermore, the trend over the past five years shows that private sector banks' NPM has been increasing, while public sector banks' NPM has been inconsistent, with negative values in some years. This indicates that private sector banks are more efficient in generating profits from their revenue compared to public sector banks. The reasons behind this could be due to factors such as better risk management practices, a more customer-centric approach, and the ability to adapt to changing market conditions.

3. NET PROFIT MARGIN (%)

RETURN ON ASSETS (%)					
BANK	2021-22	2020-21	2019-20	2018-19	2017-18
PRIVATE SECTOR BANKS					
Axis Bank Ltd	1.10	0.66	0.17	0.58	0.03
HDFC Bank Ltd	1.78	1.78	1.71	1.69	1.64
ICICI Bank Ltd	1.65	1.31	0.72	0.34	0.77
AVERAGE	1.51	1.25	0.87	0.87	0.81
PUBLIC SECTOR BANKS					
Bank of Baroda	0.56	0.07	0.04	0.05	-0.33
Punjab National Bank	0.26	0.16	0.04	-1.28	-1.60
State Bank of India	0.63	0.45	0.36	0.02	-0.18
AVERAGE	0.48	0.23	0.15	-0.40	-0.70

Return on Assets (ROA) is a financial ratio that measures a company's profitability in relation to its total assets. It indicates how effectively a company is utilizing its assets to generate profits.

Private Sector Banks:

1. Axis Bank Ltd: The bank's return on assets has been consistent over the past five years, ranging from 0.03% in 2017-18 to 1.10% in 2021-22. The bank's average return on assets for the five-year period is 0.51%.
2. HDFC Bank Ltd: The bank has consistently maintained a high return on assets, with an average of 1.51% over the past five years. The return on assets has ranged from 1.64% in 2017-18 to 1.78% in 2020-21 and 2021-22.
3. ICICI Bank Ltd: The bank's return on assets has been volatile over the past five years, ranging from 0.34% in 2018-19 to 1.65% in 2021-22. The bank's average return on assets for the five-year period is 0.87%.

Public Sector Banks:

1. Bank of Baroda: The bank's return on assets has been consistently low over the past five years, ranging from -0.33% in 2017-18 to 0.56% in 2021-22. The bank's average return on assets for the five-year period is 0.48%.
2. Punjab National Bank: The bank's return on assets has been consistently low over the past five years, ranging from -1.60% in 2017-18 to 0.26% in 2021-22. The bank's average return on assets for the five-year period is 0.23%.
3. State Bank of India: The bank's return on assets has been consistently low over the past five years, ranging from -0.18% in 2017-18 to 0.63% in 2021-22. The bank's average return on assets for the five-year period is 0.15%.

Private sector banks have consistently performed better than public sector banks in terms of ROA. Private sector banks had an average ROA of 1.51% in the most recent fiscal year (2021-22), which is significantly higher than the public sector banks' average ROA of 0.48% for the same period. Furthermore, the trend over the past five years shows that private sector banks' ROA has been increasing, while public sector banks' ROA has been inconsistent, with negative values in some years. This indicates that private sector banks are more efficient in generating profits from their assets compared to public sector banks. The reasons behind this could be due to factors such as better management practices, higher focus on customer service, and more innovative business models.

1. IMPACT OF GROSS NPA ON NET PROFIT MARGIN (%)

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.850645
R Square	0.723596
Adjusted R Square	0.631461
Standard Error	4.081824
Observations	5

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	130.8525	130.8525	7.853681	0.067716
Residual	3	49.98387	16.66129		
Total	4	180.8363			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	56.96269	17.68283	3.221355	0.048534	0.688019	113.2374
X Variable 1	-0.00076	0.000272	-2.80244	0.067716	-0.00163	0.000103

H0 = There is no impact of Gross NPA on Net Profit Margin (%)

H1 = There is impact of Gross NPA on Net Profit Margin (%)

INTERPRETATION

Multiple R = 0.8506, which indicates that there is linear relationship between Gross NPA and Net Profit Margin (%).

From the ANOVA table, it can be seen that p-value 0.06 which is higher than specified α of 0.05, so there is no impact of Gross NPA on Net Profit Margin (%)

2. IMPACT OF GROSS NPA ON RETURN ON ASSETS (%)

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.864214
R Square	0.746866
Adjusted R Square	0.662488
Standard Error	0.219783
Observations	5

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.427567	0.427567	8.851445	0.058825
Residual	3	0.144914	0.048305		
Total	4	0.572481			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	3.323559	0.952122	3.490687	0.039747	0.293483	6.353635
X Variable 1	-4.4E-05	1.46E-05	-2.97514	0.058825	-9E-05	3.03E-06

H0 = There is no impact of Gross NPA on Return on Assets

H1 = There is impact of Gross NPA on Return on Assets

INTERPRETATION

Multiple R = 0.864, which indicates that there is linear relationship between Gross NPA and Return on Assets

From the ANOVA table, it can be seen that p-value 0.058 which is higher than specified α of 0.05, so there is no impact of Gross NPA on Return on Assets

5. CONCLUSION

Based on the table, it is evident that public sector banks have a significantly higher average value of Gross NPA (in Rs.) compared to private sector banks in each of the five years. The trend shows that both public and private sector banks have been able to reduce their Gross NPA over the years, but private sector banks have maintained a much lower value.

Furthermore, private sector banks have consistently outperformed public sector banks in terms of NPM and ROA over the past five years. Private sector banks have a higher NPM and ROA, indicating that they are more efficient in generating profits from their assets and revenue.

Overall, the comparative study highlights the significant performance gap between public sector banks and private sector banks in terms of Gross NPA, NPM, and ROA. Private sector banks have consistently performed better than public sector banks in all three parameters, indicating better risk management practices, a more customer-centric approach, and higher efficiency in operations.

Therefore, it is important for public sector banks to focus on improving their NPA, NPM, and ROA to remain competitive and meet the evolving needs of the market.

It is concluded that the study found no statistically significant impact of Gross NPA on the Net Profit Margin (%) and Return on Assets of selected public and private sector banks of India. This means that Gross NPA did not have a significant effect on the profitability and efficiency of the banks during the period of the study.

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