

# Impact of Non-Performing Assets on the Performance of Public and Private Sector Banks in India

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**Abstract-** Non-performing Assets is a major concern for the Indian Banking Industry in the present times. It has adversely affected the profitability position of the banks. In India, both Public and Private Sector Banks are affected by the problem of increasing Non-Performing Assets. The present study analyzes the Non-Performing Assets of selected public and private sector banks with the help of Gross Non-Performing Assets and Net Non-Performing Assets Ratios. The level of Non-Performing Assets ratios have been compared for the selected banks. Further, the impact of Non-Performing Assets on the profitability of such banks has also been analyzed. Various statistical tools have been used to analyze the data of banks. The analysis reveals that the Non-performing Assets have been increasing in the Indian banks. But public sector banks have been affected more than the private banks. There is a need to take adequate steps to slow down the level of Non-Performing Assets in the public sector banks.

**Keywords:** Non-performing Assets, Public Sector Banks, Private Sector Banks

## INTRODUCTION

India has emerged as a fast growing economy. In a growing economy, Banks play a very important role to play. Indian banking sector is quite promising in the recent times. But Non-Performing Assets are posing problem for the banks. In the early 2000s Indian economy was rising and banks started providing considerable amount of loans to the corporate houses relaxing the lending norms. But those corporate were not able to pay their debts which contributed greatly to the increase of Non-Performing Assets in the banking sector.

Non-Performing assets are those which are at a risk of being default. If a borrower of a loan does not pay interest and principal for 90 days or more, it is considered as a Non-Performing asset. Non-Performing Assets affect the profitability and liquidity position of a bank. The increased Non-Performing Assets require banks to have more provisions which in turn reduce the profitability of banks. The concept of Non-Performing Assets was first introduced by the Narasimham Committee in the year 1991. Non-Performing Assets are of two types-Gross Non-Performing Assets and Net Non-Performing Assets. Gross Non-Performing Assets is the total of all loan assets that are classified as Non-Performing Assets on the balance sheet date. It consists of all the non standard assets like sub-standard, doubtful and loss assets. Secondly, Net Non-Performing Assets is Gross Non-Performing Assets less balance of interest suspense account, DICGC/ECGC claims received and held pending adjustment, part payment received and kept in suspense account and total provisions held (Shah, 2019). Non-performing Assets is a major problem which the Indian Banking Sector is facing in the present times. The Non-Performing Assets adversely affects the profitability of the banks thus affecting the credibility and functioning of the banks. It also creates mistrust among the accountholders regarding the banks. The account holders also However, Reserve Bank of India (RBI) has been taking several measures from time to time to overcome this problem such as Debt Recovery Tribunals (DRTs), Lok Adalats, SARFAESI (Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest) Act and the Insolvency and Bankruptcy Code, 2016. Further, Re-capitalization of Public Sector Banks, setting up of stressed assets management verticals is some other steps taken by RBI.

## REVIEW OF LITERATURE

**Kaur and Singh (2011)** studied the Non-performing assets of Public and Private Sector Banks. NPA should be considered as an important parameter to judge the performance and financial health of banks. In the present times, the financial institutions are facing a major problem of managing the NPAs which are badly affecting the Indian economy. **Gupta (2012)** compared NPAs of SBI & its Associates with other Public Sector Banks. The study concluded that each bank should examine the financial capability of each borrower before providing credit facility. Professional should be appointed to identify the genuine borrowers. Credit Rating Agencies should evaluate the clients regularly. Monthly loan concentration report each client should be made. **Selvarajan & Vadivalagan (2013)** in A Study on Management of Non-Performing Assets in Priority Sector reference to Indian Bank and Public Sector Banks (PSBs) their research paper has studied that the growth of Indian Bank's lending to Priority sector is more than that of the Public Sector Banks as a whole. Indian Bank has slippages in controlling of NPAs in the early years of the decade. Therefore, the management of banks must pay special attention towards the NPA management and take appropriate steps to arrest the creation of new NPAs, besides making recoveries in the existing NPAs. Timely action is essential to ensure future growth of the Bank. **Satpal (2014)** compared the trend of NPAs in Public and Private Sector Banks in India from 2009 to 2013. The data has been analysed with the help of charts and graphs. The study concluded that the extent of NPAs is more in case of Public Sector Banks than Private Sector Banks. Government is taking several measures but still much needs to be done. **Girish and Dozomba (2018)** studied trend and occurrences of Non-Performing Assets (NPA) of Nifty Indexed Banks in India. The study examined the relationship of Net Non-Performing Assets with Total assets of Banks. The results indicated that Panjab National Bank had

highest level of NPA while Yes Bank had least level of NPAs. The study concluded that the trend of Net NPA to Total Assets is increasing. The study suggested that the banks should focus on liquidity, safety and profitability so as to contain NPAs. **Shah (2019)** analysed the Gross and Net NPA ratio of selected SBI Group of Banks and Other Public Sector Banks. The significance of difference has been studied with the help of T-Test. The results indicated that both SBI group and Non-SBI group did not differ significantly in terms of Gross NPA to Total Advances and Net NPA to Total Advances ratio. **Naaz (2021)** analyzed the effect of the Non-Performing Assets on the Profitability of the Public Sector Banks. The relationship between Gross Non-Performing Assets and Net Profit was analyzed with the help of statistical tools correlation coefficient, regression analysis, T-test etc. The study concluded that there was a strong negative relationship between Gross Non-Performing Assets. The net profits of the banks and the profits were steadily decreasing and the Gross Non-Performing Assets were rising. This was due to poor appraisal system of banks, aggressive lending practices, willful defaulters, loan frauds etc.

### OBJECTIVES OF THE STUDY

1. To study the trend of Gross and Net Non-Performing Assets Ratio and Return on Assets of Public and Private Sector Banks.
2. To compare the level of NPAs across the selected banks.
3. To study the impact of NPAs on the profitability of selected Public and Private Sector Banks.
4. To suggest the measures to reduce NPAs in banks.

### HYPOTHESES

H<sub>1</sub> = There is no significant difference in the Net NPA to Net Advances Ratio of selected Public and Private Sector Banks.

H<sub>2</sub> = There is no significant correlation between Net NPA Ratio and Return on Assets Ratio of selected Public and Private Sector Banks.

### RESEARCH METHODOLOGY

The study is descriptive in nature. The data is collected from secondary sources such as official website of Reserve Bank of India, websites of relevant banks as well as financial websites like [www.moneycontrol.com](http://www.moneycontrol.com). For the purpose of comparison of Non-Performing Assets of public and private sector banks, the prominent banks have been selected for the study. Thus, among the public sector banks, State Bank of India, Panjab National Bank and Bank of Baroda has been selected. Further, among the private sector banks, ICICI Bank, HDFC Bank and Axis Bank have been selected. The period of study ranges from 2008-09 to 2018-19 i.e. eleven years. The data for the year 2019-20 is not available so it has been excluded. So, the study is mainly focused on post-recession period. The collected data has been analyzed with the help of SPSS.

The Non-Performing Assets of the public and private sector banks have been studied with the help of Non-Performing Ratios-Gross NPA to Gross Advances and Net NPA to Net Advances. The trend of these Gross NPA to Gross Advances and Net NPA to Net Advances ratios has been shown in the form of line graphs. These ratios have been compared among the selected public and private sector banks using descriptive statistics. Non-parametric test Kruskal Wallis test has been used to compare Net NPA Ratio of selected Public and Private Sector Banks. The test has been used as the assumptions of normality of data and homogeneity of variance are not met. Further, the relation between Net NPA to Net Advances Ratio and ROA (Return on Assets) has been tested with the help of correlation analysis and the significance has been tested at 95% confidence level. Since the study intends to analyze the relationship of Net NPA Ratio and Profitability of the banks under study. Generally the profitability of a bank is measured by its Return on Assets (ROA) which is the ratio of the bank's net profits to its net assets. So, the Return on Assets has been selected to measure the profitability of banks.

### ANALYSIS AND INTERPRETATIONS

#### Trend of Gross and Net NPA ratio of Public and Private Sector Banks

The trend of Gross NPA to Gross Advances and Net NPA to Net Advances Ratio of selected Public and Private Sector Banks has been analyzed with the help of table and line graphs. Further descriptive statistics such as mean and standard deviation has been computed to check the variability in both ratios.

**Table: 1 Gross and Net Non-Performing ratios of selected Public Sector Banks**

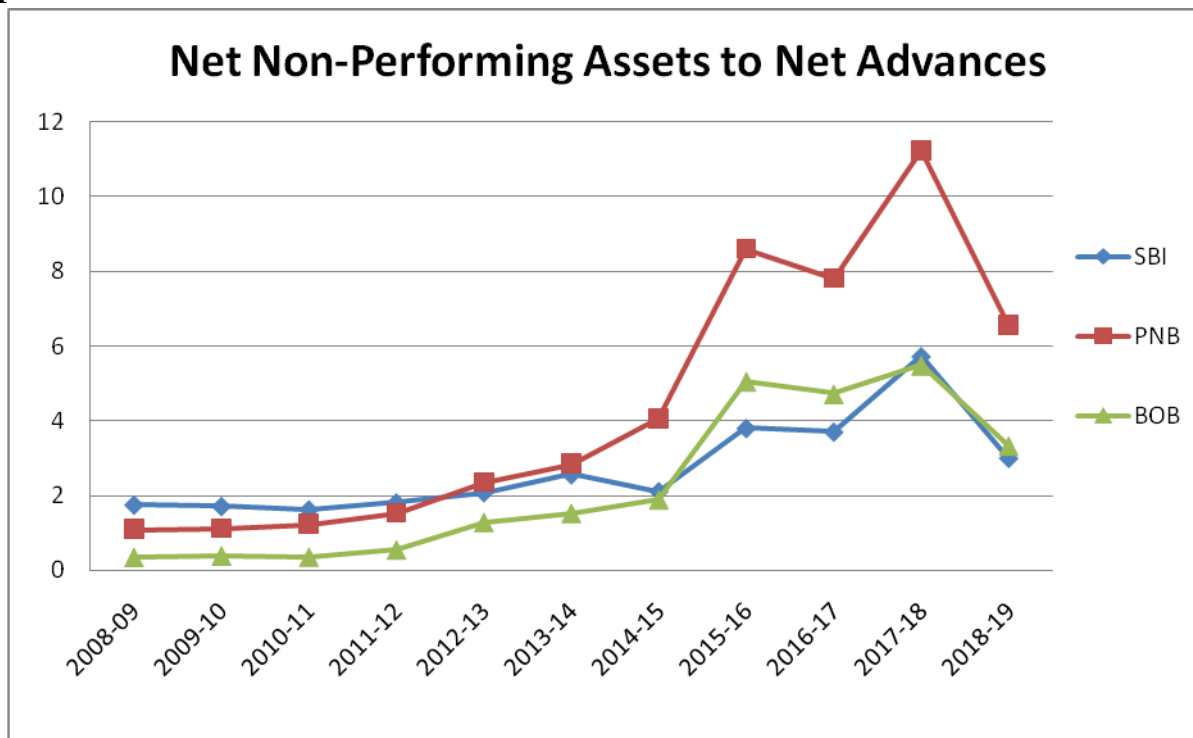
Bank	SBI		PNB		BOB	
	%GNPA	%NNPA	%GNPA	%NNPA	%GNPA	%NNPA
<b>2008-09</b>	3.01	1.76	1.55	1.09	1.2	0.34
<b>2009-10</b>	3.09	1.72	1.68	1.12	1.25	0.38
<b>2010-11</b>	3.28	1.63	1.79	1.23	1.36	0.35
<b>2011-12</b>	4.44	1.82	2.93	1.52	1.53	0.54
<b>2012-13</b>	4.75	2.09	4.27	2.35	2.4	1.28
<b>2013-14</b>	4.96	2.57	5.25	2.85	2.94	1.52
<b>2014-15</b>	4.27	2.12	6.55	4.06	3.72	1.89
<b>2015-16</b>	6.52	3.81	12.9	8.61	9.99	5.06
<b>2016-17</b>	6.91	3.71	12.53	7.81	10.46	4.72

<b>2017-18</b>	10.91	5.73	18.38	11.24	12.26	5.49
<b>2018-19</b>	7.53	3.01	15.5	6.56	9.61	3.33
<b>Average</b>	5.42	2.72	7.57	4.4	5.15	2.26
<b>S.D.</b>	2.38	1.26	6.13	3.57	4.41	2.02

Source: RBI report and author’s calculations

Table 1 highlights the trend of Gross NPA to Gross Advances and Net NPA to Net Advances of State Bank of India, Panjab National Bank and Bank of Baroda. It clearly shows that the gross non-performing assets to gross advances ratio of all the selected banks increased consistently from the year 2008-09 to 2017-18. However, there was a small fall in this ratio during the year 2018-19. During the study period, the average Gross NPA ratio was highest in case of Panjab National Banks with 7.57 per cent, then State Bank of India with 5.42 per cent and Bank of Baroda with 5.15 per cent. The standard deviation depicts the variability in the ratio, it indicates that highest variability or fluctuation in the Gross NPA ratio was in the case of Panjab National Bank with 6.13 per cent and lowest in case of State Bank of India. Also, in case of Net NPAs assets to Net Advances ratio, there was a rising trend. The average Net NPA ratio is highest in case of Panjab National Bank with 4.4 per cent and lowest in case of Bank of Baroda with 2.26 per cent. Further, the variability in the ratio was highest in case of Panjab National Bank with 3.57 per cent and lowest variability in the ratio was in case of State Bank of India 1.26 per cent. Thus, all Public Sector Banks failed in controlling NPA ratios during the study period. The Gross and Net NPA ratios increased sharply during the year 2015-16 for all selected banks. However, the NPA ratios improved slightly during the year 2018-19.

Chart: 1



Source: Computed by author using RBI data

Chart 1 highlights that the selected public sector banks i.e. State Bank of India, Punjab National Bank and Bank of Baroda shows an increasing trend in the Net Non-Performing assets to Net advances ratio from the year 2008-09 to 2017-18. However, the ratio decreases during the year 2018-19 in all the three Public Sector Banks. Also, Punjab National Bank reported highest Net NPA ratio from the year 2012-13 to 2018-19.

**Testing of Hypothesis for Significance of the difference in the Net NPA to Net Advances Ratio of Selected Public Sector Banks**

Table: 2 Ranks

	Selected PSBs	N	Mean Rank
Net NPA of selected PSBs	SBI	11	18.09
	PNB	11	19.68
	BOB	11	13.23
	Total	33	

Source: SPSS output

**Table: 3 Test Statistics<sup>a,b</sup>**

	Net NPA of selected PSBs
Chi-Square	2.661
df	2
Asymp. Sig.	.264

a. Kruskal Wallis Test

b. Grouping Variable: Selected PSBs

Table 2 and 3 shows the output generated through SPSS Software. The Kruskal Wallis Test indicates that there is no significant difference in the Net NPA to Net Advances Ratio of selected Public Sector Banks,  $H(2) = 2.661$ ,  $p = .264$ , with a mean rank score of 18.09 for SBI, 19.68 for PNB and 13.23 for BOB. So, the hypothesis that there is no significant difference in the Net NPA to Net Advances Ratio of selected public sector banks is not rejected.

Thus, the results show that the NPA ratio of selected public sector banks showed increasing trend during the period of the study. Also, the level of NPAs in these banks does not differ significantly. These banks failed to reduce their NPAs from the year 2008-09 to 2017-18 which shows their inability to manage NPAs. However, this ratio falls during the year 2018-19 which is due to the action taken by the authorities to contain NPA of public sector banks. Further, among these banks, Punjab National Bank reported highest NPAs.

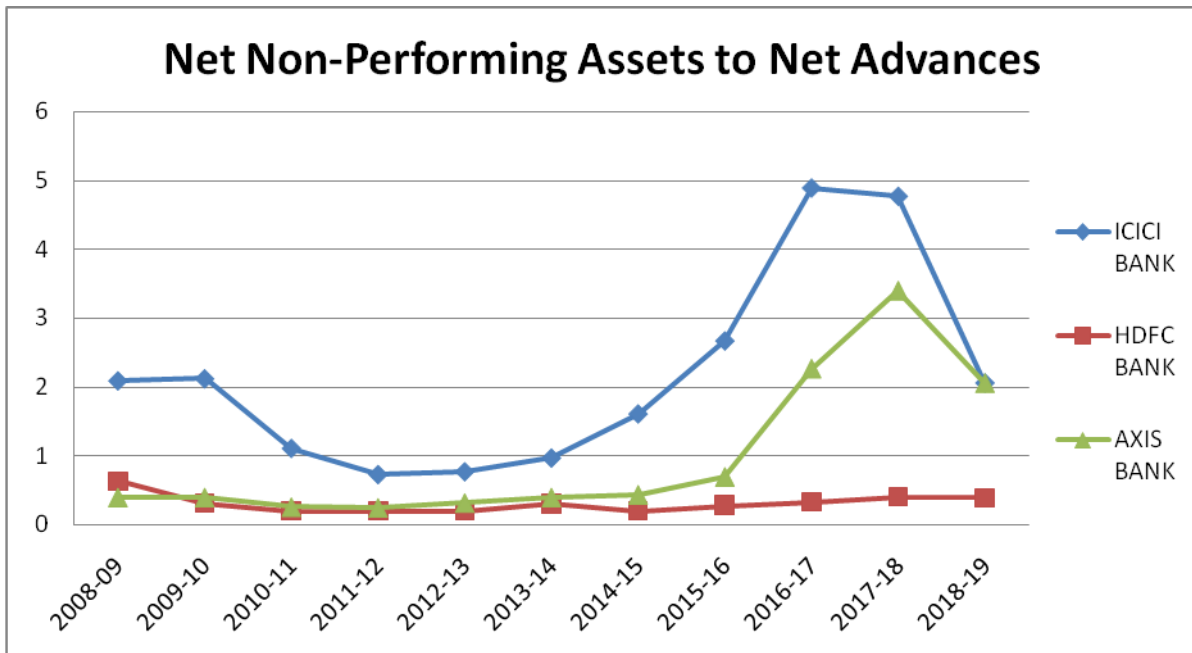
**Table: 4 Gross and Net Non-Performing ratios of selected Private Sector Banks**

Bank	ICICI BANK		HDFC BANK		AXIS BANK	
Year/Ratio	%GNPA	%NNPA	%GNPA	%NNPA	%GNPA	%NNPA
2008-09	3.96	2.09	1.12	0.63	1.15	0.4
2009-10	4.36	2.12	1.09	0.31	0.98	0.4
2010-11	4.47	1.11	1.05	0.2	1.01	0.26
2011-12	3.62	0.73	1.02	0.2	0.94	0.25
2012-13	3.22	0.77	0.97	0.2	1.06	0.32
2013-14	3.04	0.97	0.91	0.3	1.29	0.4
2014-15	3.78	1.61	0.89	0.2	1.36	0.44
2015-16	5.21	2.67	0.92	0.28	1.71	0.7
2016-17	7.89	4.89	1.04	0.33	5.21	2.27
2017-18	8.84	4.77	1.28	0.4	6.79	3.4
2018-19	6.7	2.06	1.36	0.39	5.26	2.06
Average	5.01	2.16	1.06	0.31	2.43	0.99
S.D.	1.95	1.46	0.15	0.13	2.18	1.07

**Source:** RBI report and author's calculations

Table 4 shows that the Gross NPA and Net NPA ratio of all the selected banks i.e. ICICI Bank, HDFC Bank and Axis Bank showed increasing trend from the year 2008-09 to 2017-18 with little fall during the year 2018-19 in terms of these ratios. It clearly shows that the highest variability in Gross NPA ratio was shown by Axis Bank with 2.18 per cent while lowest in case of HDFC Bank. It is evident from the table that in case of Axis Bank the Gross NPA ratio increased sharply from 1.71 per cent in 2015-16 to 5.21 per cent in the year 2016-17. The variability in Net NPA ratio was high in case of ICICI Bank with 1.46 per cent and lowest of 0.13 per cent in case of HDFC Bank. Thus, HDFC Bank performed better than the other two banks during the study period.

**Chart: 2**



Source: Computed by author using RBI data

Chart 2 depicts the trend of Net Non-Performing Assets to Net Advances ratio of selected private sector banks. It shows that the Net NPA ratio of Axis Bank was at low level and consistent from the year 2008-09 to 2015-16. After that it starts increasing sharply till 2017-18 but falls during the year 2018-19. Further, in case of HDFC Bank, the Net NPA ratio was more or less same during the study period. It was the ICICI Bank which shows high Net NPA ratio during whole of the study period. It shows sharp increasing trend from the year 2014-15 till 2016-17. However, falls sharply during the year 2018-19. Thus, in short among all the selected private banks, the ICICI Bank reported highest NPA Ratio during whole of the study period while HDFC bank performed better and was successful in controlling NPAs.

**Testing of Hypothesis for Significance of the difference in the Net NPA to Advances Ratio of Selected Private Sector Banks**

Net

Table: 5 Ranks

	PVTGRP	N	Mean Rank
NETNPAPT	ICICI	11	25.95
	HDFC	11	8.14
	AXIS	11	16.91
	Total	33	

Source: SPSS Output

Table: 6 Test Statistics<sup>a,b</sup>

	NETNPAPT
Chi-Square	18.743
df	2
Asymp. Sig.	.000

a. Kruskal Wallis Test

b. Grouping Variable: PVTGRP

Table 5 and 6 depicts the results generated by SPSS using Kruskal Wallis Test. It clearly shows that there is a significant difference in the Net NPA to Net Advances Ratio of selected Private Sector Banks,  $H(2) = 18.743, p = .000$ , with a mean rank score of 25.95 for ICICI Bank, 8.14 for HDFC Bank and 16.91 for Axis Bank. Further, Post-Hoc Mann-Whitney Tests using a Bonferroni-adjusted alpha level of .0167 (0.05/3) is used to compare all pairs of banks which shows that there is a significant difference in the Net NPA Ratio of all pairs of selected private banks. Thus, the hypothesis that there is no significant difference in the Net NPA to Net Advances Ratio of selected private sector banks is rejected.

In brief, the results indicate that the private sector banks showed sharp rise in the Net NPA Ratio from the year 2015-16 to 2017-18. However, this ratio falls during the year 2018-19. Also, there was a significant difference in the level of NPAs in all selected private banks. Among these selected private sector banks, HDFC Bank was most successful in controlling their level of NPAs while ICICI Bank reported highest level of Net NPA Ratio.

**Trend of Return on Assets ratio of Public and Private Sector Banks**

Table: 10 Return on Assets of Selected Public Sector Banks

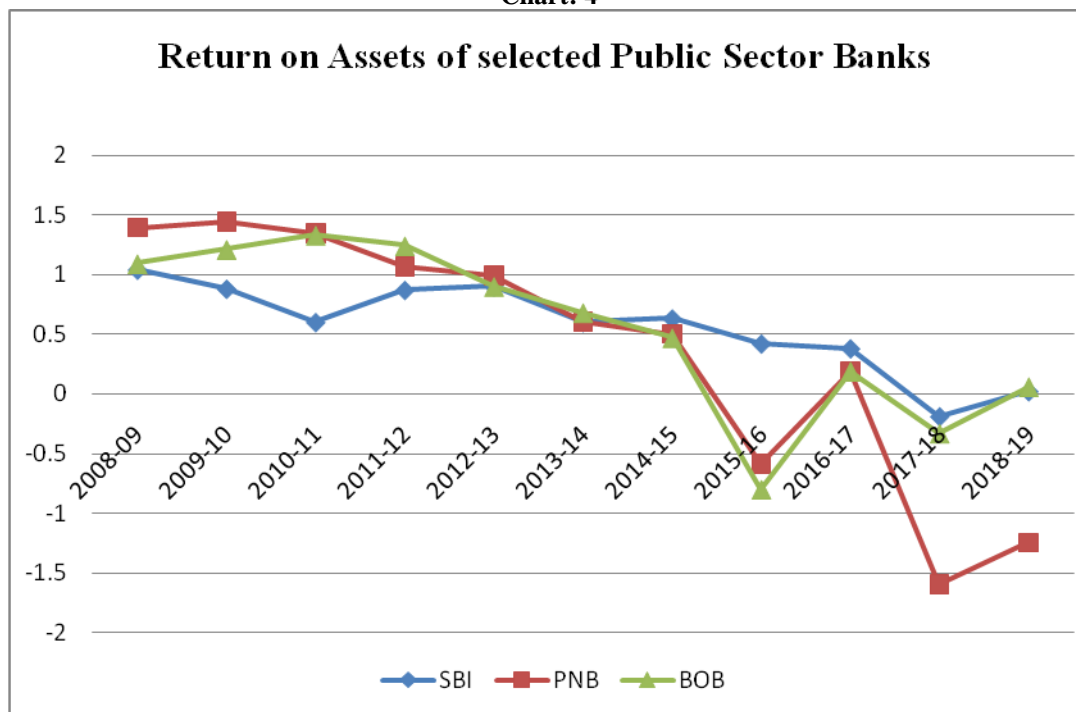
Return on Assets			
Year/Bank	SBI	PNB	BOB
2008-09	1.04	1.39	1.09
2009-10	0.88	1.44	1.21
2010-11	0.6	1.34	1.33

2011-12	0.87	1.06	1.24
2012-13	0.9	0.99	0.9
2013-14	0.6	0.6	0.68
2014-15	0.63	0.5	0.47
2015-16	0.42	-0.59	-0.8
2016-17	0.38	0.18	0.19
2017-18	-0.19	-1.6	-0.33
2018-19	0.02	-1.25	0.06
<b>Average</b>	0.56	0.36	0.55
<b>SD</b>	0.382	1.07	0.7

**Source:** RBI report

Table 10 depicts the Return on Assets of State Bank of India, Punjab National Bank and Bank of Baroda. The average ROA was highest in SBI Bank with .56 per cent and lowest in Panjab National Bank with 0.36 per cent. The variability in ROA was more in the Panjab National Bank with 1.07 per cent and lowest in State Bank of India having 0.38per cent. This shows that State Bank of India registered highest and more stable returns while Panjab National Bank had less and unstable return on its assets during the study period.

**Chart: 4**



**Source:** Computed by author using RBI data

Chart 4 depicts the trend of Return on assets of three selected public sector banks. It shows that the ROA of Panjab National Bank decreased sharply during the period of study. The ROA of Punjab National Bank was negative in the later years of the study. The other two banks i.e. State Bank of India and Bank of Baroda also showed downward trend in the ROA but not as low as Panjab National Bank.

**Table: 11 Return on Assets of Selected Private Sector Banks**

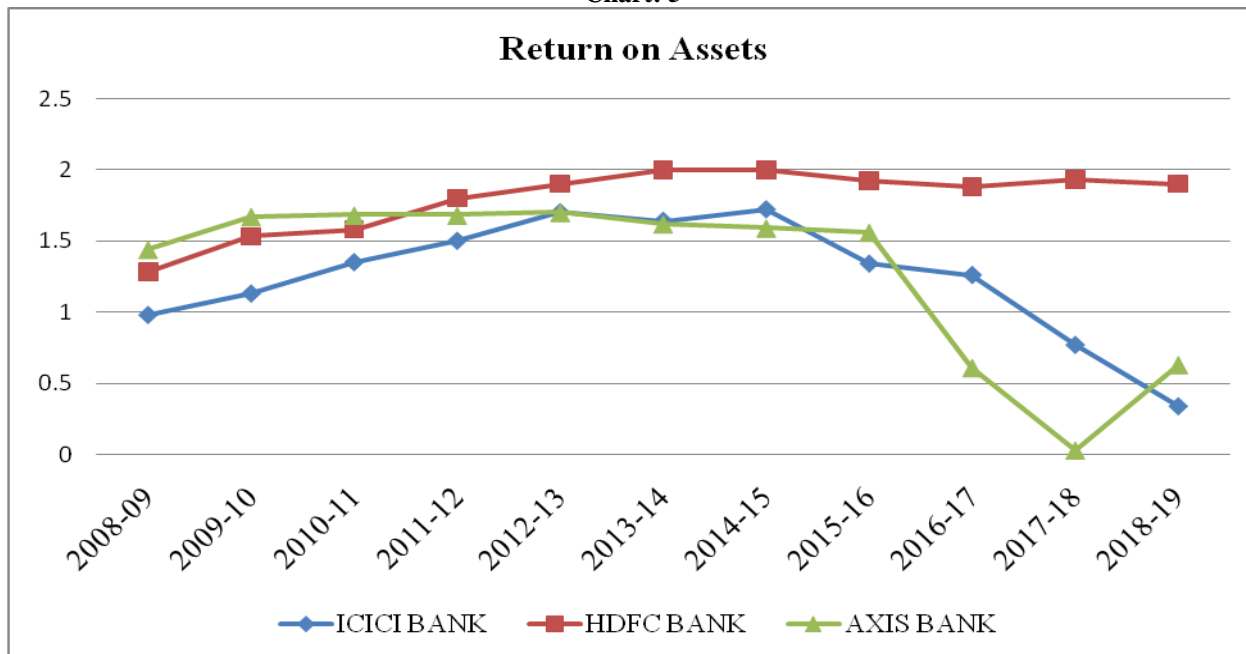
Return on Assets			
Year/Bank	ICICI BANK	HDFC BANK	AXIS BANK
2008-09	0.98	1.28	1.44
2009-10	1.13	1.53	1.67
2010-11	1.35	1.58	1.68
2011-12	1.5	1.8	1.68
2012-13	1.7	1.9	1.7
2013-14	1.64	2	1.62
2014-15	1.72	2	1.59

<b>2015-16</b>	1.34	1.92	1.56
<b>2016-17</b>	1.26	1.88	0.61
<b>2017-18</b>	0.77	1.93	0.03
<b>2018-19</b>	0.34	1.9	0.63
<b>Average</b>	1.25	1.79	1.29
<b>SD</b>	0.42	0.23	0.58

**Source:** RBI report

Table 11 indicates that among the selected private banks, HDFC shows higher Return on Assets (ROA) ratio with average value of 1.79 percent followed by Axis Bank with 1.29 percent value and ICICI Bank with 1.25 percent value. Further, the ROA was more consistent in case of HDFC Bank with S.D of 0.23 percent followed by ICICI Bank with 0.42 percent and Axis Bank with 0.58 percent value. Thus, the overall table shows that HDFC registers higher and consistent return than that of ICICI Bank and Axis Bank.

**Chart: 5**



**Source:** Computed by author using RBI data

Chart 5 depicts that ROA was higher in case of HDFC Bank while there was a decreasing trend of ROA in case of ICICI Bank and Axis Bank. The return was almost consistent from the year 2008-09 to 2015-16 but afterwards decreased sharply till the year 2017-18 in case of Axis Bank. However, it was recovered during the year 2018-19. Among these banks, HDFC Bank should increase in the Return on Assets from 2008-09 to 2013-14 and then maintained it more or less consistent.

#### **Relationship between Net Non-Performing Assets Ratio and Return on Assets Ratio of Selected Public and Private Sector Banks**

**Table: 13 Hypothesis Testing of Correlation between Net NPA Ratio and Return on Assets of Selected Public and Private Sector Banks**

Bank Name	Correlation	Sig. Value	Decision
State Bank of India	-.851	.001	Reject Null Hypothesis
Punjab National Bank	-.920	.000	Reject Null Hypothesis
Bank of Baroda	-.943	.000	Reject Null Hypothesis
ICICI BANK	-.464	.151	Null Hypothesis Not Rejected
HDFC BANK	-.537	.089	Null Hypothesis Not Rejected
AXIS BANK	-.992	.000	Reject Null Hypothesis

Table 13 shows the hypothesis testing to see if there exists a significant relationship between Net NPA ratio and ROA of selected public and private sector banks. The significant of correlation coefficient was tested at 95 per cent confidence level. The table above shows that there exist a strong negative correlation between Net NPA ratio and ROA of State Bank of India, Punjab National Bank, Bank of Baroda and Axis Bank. This negative correlation is also significant, hence null hypothesis is rejected. It means there exists a significant negative correlation between Net NPA Ratio and ROA of these banks. It depicts that with the increase in Net NPA Ratio, the ROA decreases significantly. However, ICICI Bank and HDFC Bank show insignificant negative correlation which means that with the increase in Net NPA Ratio the ROA decreases but not significantly.

The correlation result indicates that the rising Net NPA Ratio has negatively impacted the profitability of banks especially that of Public Sector Banks. The reason behind it is that the banks having higher NPAs have to make higher provisions for losses setting aside more funds to protect themselves from anticipated losses leading lower profitability i.e. Return on Assets.

### Conclusion

The Non-Performing Assets has been emerged as a big challenge for Indian Banking Industry. Both Public and Private Sector Banks are facing this challenge. However, private banks are comparatively at better side in managing their NPAs. Among these selected private sector banks, HDFC Bank was most successful in controlling their level of NPAs while ICICI Bank reported highest level of Net NPA Ratio. Among the selected Public Sector Banks, the Punjab National Bank has failed in controlling the rising NPAs in the recent years.

The results also indicates that the rising NPAs are adversely impacting the profitability i.e. Return on Assets of the banks especially in case of public sector banks. Lack of effective mechanism of sanctioning of loans as well as recovery of loans is a major reason of increased NPAs of Public Sector Banks. Public Sector Banks sanctioning loans to big corporate houses blindly and not following due course of the recovery of loans are another big reason leading to big frauds and misappropriation of funds. The Second major reason of more NPAs in Public sector banks could be their obligation to provide credit to all sections of the society while private sector banks always play safe and provide credit to that section which would be well enough to pay back their loans. However, the Gross and Net NPA Ratios of Public Sector Banks reduced sharply during the year 2018-19. According to the Report on Trend and Progress of Banking in India 2018-19, the banking sector showed improvement with the gross non-performing assets ratio of Scheduled Commercial Banks declining from 11.2 per cent in March 2018 to 9.1 per cent in March 2019. The reasons behind it were the various policy measures such as strengthening of capital base of recapitalization of Public Sector Banks, transparent recognition of Non-Performing Assets, amendments in Insolvency and Bankruptcy Code gained traction in enhancing resolutions, Mergers etc.

But with the outset of corona virus, the economy has come to a standstill affecting adversely each sector especially the banking sector. It has put burden on the banks in a way that banks have to infuse liquidity in the market by disbursing credit to all sections of the society. It has also increased the default risk as the repaying capacity of borrowers has reduced to great extent. As per the RBI Financial Stability Report released on 24<sup>th</sup> July 2020, the macro stress tests for credit risk indicate that the GNPA ratio of all SCBs may increase from 8.5 per cent in March 2020 to 12.5 per cent by March 2021 under the baseline scenario; the ratio may escalate to 14.7 per cent under a very severely stressed scenario. Thus, Non-Performing Assets will prove a biggest threat for Indian Banking Industry in the coming times.

### Suggestions

As the study concludes that the level of NPA ratios has increased over the period of time especially in case of Public Sector Banks, it is suggested that the banks need to strengthen their monitoring and appraisal system. The banks should vigilantly check the creditworthiness of their borrowers especially the corporate borrowers because lending them involves huge funds. The recovery mechanism of banks needs to have a re-look. Legal procedures need to be less lengthy. Implementation of already framed laws is the biggest problem as these are not fairly applied on big corporate houses. Banks need to identify willful defaulters so as to take quick action against them. It is well understood that it is not possible to bring down non-performing assets of public sector banks to zero level because public sector banks need to accomplish various social obligations as per the schemes of the government for all sections of the society. But efforts can be made to bring them down to the low level. It is of utmost importance because the non-performing assets negatively affect the profitability of the banks as already indicated in the present study. The corona virus has further worsened the situation of Indian banking industry. Although Reserve Bank has taken various steps to infuse liquidity in the economy so as to boost economic activity. The recovery of Indian economy largely depends upon the supply of credit by the banks.

### REFERENCES:

- Bhatia (2007). Non-Performing Assets of Indian Public, Private and Foreign Sector Banks: An Empirical Assessment. *ICFAI Journal of Bank Management*, Vol. 6(3), 7-28.
- Bhowmik, R. (2020). OPINION: How banks will change post COVID-19. article published in *The Week* downloaded from <https://www.theweek.in/news/biz-tech/2020/04/27/opinion-how-banks-will-change-post-covid-19.html>.
- Borse, B.N. (2016). The Study of the Effect of Non Performing Assets (NPA) on Return on Assets (ROA) of Major Indian Commercial banks. *International Journal in Management and Social Science*, 2(4). Downloaded from [www.researchgate.net](http://www.researchgate.net)
- Garg, A. (2015). Statistical Investigation and Comparative Assessment of the Non-Performing Assets of Indian Commercial Bank. *International Journal of Management and Business Research*, 5(4), 287-302.
- Girish & Dozomba (2018). Trend And Occurances of NPA on NIFTY Indexed Banks in India. *International Journal of Social Science and Economic Research*, 3(7).
- Gupta, B. (2012). A Comparative Study of Non-Performing Assets of SBI & Associates & Other Public Sector Banks. *SIT Journal of Management*, 2(3), 175-189.
- Naaz, Shaik J. (2021). Analysis of the Effect of the Non-Performing Assets on the Profitability of Public Sector Banks. *Ilkogretim Online- Elementary Education Online*, 20(1), 2100-2111.
- Satpal (2014). A Comparative Study of Non Performing Assets in Public and Private Sector Banks in the New Age of Technology. *International Journal of Current Engineering and Technology*, 4(4).



13. Shah, K. R. (2019). A Comparative Study of NPAs of SBI Group of Banks and Other Public Sector Banks in India. *International Journal of Basic and Applied Research*, 9(4), 377-385.
14. Selvarajan, B. & Vadivalagan, G. (2013). A Study on Management of Non-Performing Assets in Priority Sector reference to Indian Bank and Public Sector Banks (PSBs). *Global Journal Of Management and Business Research*, 13(1).
15. Kaur, K. & Singh, B. (2011). Non-performing Assets of Public and Private Sector Banks (A Comparative Study). *South Asian Journal of Marketing and Management Research*, 1(3).
16. Paul, A. (2018). Examining the Rise of NPA in India. Report retrieved from <https://www.prsindia.org/content/examining-rise-non-performing-assets-india>.
17. Reports on Trend and Progress of Banking in India, Mumbai, RBI retrieved from Reserve Bank of India, [www.rbi.org.in](http://www.rbi.org.in) for the year 2008-09, 2009-10, 2010-11, 2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2018-19.
18. RBI Financial Stability Reports retrieved from, Reserve Bank of India, [www.rbi.org.in](http://www.rbi.org.in) for the year 2018-19, 2019-20.
19. Annual Reports of State Bank of India, Punjab National Bank, Bank of Baroda, ICICI Bank, HDFC Bank and Axis Bank for the year 2008-09, 2009-10, 2010-11, 2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2018-19.
20. <https://www.grainmart.in/news/rbis-banking-in-india-report-shows-how-indias-mpa-crisis-compares-to-other-emerging-economies/>
21. [www.moneycontrol.com](http://www.moneycontrol.com)