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Article

Asset Quality of Scheduled Commercial Banks in India: A Two-Dimensional and Comparative Study

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Abstract

Asset quality, an important performance indicator for banks as far as its risk management and operational efficiency is considered, started to accumulate post financial crisis reaching alarming levels during 2015-18, especially for public sector banks. Asset quality of public sector banks in this period worsened more than private sector banks with the gross NPA to total advances ratio(GNPA) rising from 2.2 in 2008 to 14.6 in 2018 much higher than 4.6 of Private sector banks. The paper attempts to compare the trend in asset quality of public and private sector banks as well as examine the disparity in NPAs in priority sector lending and restructured advances during 2008-2020. Two sample t-test assuming unequal variances (Welch's t-Test) for comparative analysis has been used to examine the data empirically. The results showed significantly higher GNPA and NNPA ratio for public sector banks. As poor asset quality adversely affect their profitability the study finds significantly lower return on assets (ROA) for public sector banks.

Keywords: GNPA, Priority, Restructured Advances, Comparative, Public Sector Banks, Private Sector Banks.

1. INTRODUCTION

The recent deterioration in asset quality within India's banking sector is primarily attributed to the unprecedented accumulation of non-performing loans. Irrespective of their ownership, all banks have registered substantial volume of bad loans, though the incidence of non-performing assets (NPA) is higher in PSBs. The factors associated with the deterioration as per various studies are macroeconomic factors such as global economic slowdown, industry-wise issues such as corporate distress especially in iron and steel, power, telecom, textile and real estate leading to defaults and bank-specific factors such as profitability, solvency, liquidity, management efficiency, cost efficiency, malpractices and governance. The period of study of asset quality of banks has been taken from 2008, a turning point due to the global financial crisis arisen out of the housing bubble burst in the US after which the global activity contracted by 0.8 percent in 2009. The asset quality of scheduled commercial banks (excluding that of regional rural banks) started to deteriorate after 2011 worsening significantly during 2012-14 with the emergence of twin balance sheet problem. The ratio of NPAs to total advances (GNPA ratio) of scheduled commercial banks (SCBs) had risen significantly to a mammoth 11.2 percent in 2017–18 from a moderate NPA of 2.2 percent in 2007–08 (Table 1).

The period under study is till 2020 since the onset of the pandemic impacted the performance of banks for a short period and could introduce distortions. The NPA figures of the PSBs

increased significantly to 14.6 percent in 2017–18 from 2 percent in 2008–09. Similarly, the GNPA ratio of private banks also increased to 5.5 percent in 2019–20 from a moderate 2.5 percent in 2008-09. Poor asset quality can not only erode their profitability but also be a threat to their survival leading to bank failures. Consequently net interest margins of scheduled commercial banks (SCBs) declined from 3.0 per cent in 1999-2000 to 2.5 per cent in 2016-17 while the returns on assets/equity of public sector banks remained negative during 2015-16 and 2016-17.

Apart from the other factors, asset quality review launched by RBI in 2015 to examine the true health of loan books of banks resulted in a spike since banks were previously restructuring loans and abstaining from classifying them as NPAs to gain from lower provisions. There was disparity also in priority sector lending considered as loans having higher defaults between public and private sector banks. This paper aims to study the trend of these important parameters of asset quality indicators such as GNPA ratio, NNPA ratio (net NPA to total advances), and growth rates of NPAs in public and private sector banks and conduct a detailed comparative analysis of asset quality after the subprime crisis, during 2008-2020. The paper also aims to aims to examine the disparity in NPAs in priority sector lending, restructured advances and profitability ratio among the two groups of banks. The paper is divided into the following subsections, literature review, trend and comparative analysis, research methodology, result and discussion and conclusion.

2. LITERATURE REVIEW

To examine the disparity in NPA management, Kadanda (2018) conducted a study on category wise movement of gross NPAs and found that CAGR of gross NPAs of Public sector banks reached 26 percent during 2004-17 highlighting the ineffectiveness of debt recovery mechanisms. However, gross NPA in private sector banks grew at a lower CAGR of 16.33 per cent during 2005-16. Although higher contribution of NPAs in priority sector in public sector banks compared to private sector was found, the share had declined from 42.9 per cent in 2013 to 25 percent in 2016. It also refuted the assumption that priority sector creates more NPAs for the banking sector. Similar study on understanding the variation of profitability across various bank groups namely PSBs, PVBs, and foreign banks was conducted by Nikam S (2024). It reports that the profitability represented by return on assets was lowest for PSBs during 2005-2022 as it starts to fall from 2009-10 and continues to do so continuously declined till 2019-2020 while it increases for private sector banks form 2008-09 to 2014-15 and later falls till 2019-20. The study also finds NPAs significantly affect the profitability of banking groups in India.

To measure the level of total factor productivity of the Indian banking sector a study on 21 public sector banks, 18 private sector banks and 22 foreign banks, Bhuyan B(2022) find that the bank size and bank diversifications significantly reduce productivity, whereas credit-deposit ratio and return on asset significantly increase productivity during 2008-2019. Highlighting the interlinkage of profitability and productivity Gowda I (2022) reports that all three groups of public private and foreign banks have improved their manpower productivity during 2004-2020. However, in terms of Total Business per branch, Total Business per employee, advances, deposits, the performance of FBs is superior compared to PSBs and PVSBs. But in terms Total Business per Rupee of Wages, performance of foreign banks is poor

compared to PSBs and PVSBs. This is attributed to the difference in pay structure between the branches of FBs on the one hand, and PSBs and PVSBs on the other. Between public and private sector banks, the performance of private sector banks was found to be better compared to that of public sector banks on a majority of parameters and for a majority of the years.

Majid et al. (2015) investigated the influence of enhanced human resource productivity on the operational performance of branch offices of Tabriz Keshavarzi Bank. Utilizing the Fuzzy TOPSIS method alongside Hersey's questionnaire, the study assessed seven key criteria namely ability, clarity, environment, evaluation, incentive, organizational support, and validity. Data were collected from 124 bank employees, and the findings revealed a strong positive correlation between manpower productivity and branch performance, with a correlation coefficient of 0.93.

Comparing the accumulation of NPAs in PSBs and New private sector banks over a period of twenty years, Sharma K (2020) finds a significantly higher level of NPAs in the PSBs compared to the new private sector banks and emergence of the non-priority sector as the main driver of rise in NPAs of PSBs post the financial crisis. Appreciating the stricter credit standards and better implementation of strict rules and regulations of loan sanctioning in private sector banks, Harani B (2019) reports that although increasing, loss assets were meagre compared to public sector banks during 2008-2018.

Comparing the NPAs of priority sector between public and private sector banks during 2013-17, Gaur (2019) concludes that NPAs of priority sector have grown at a higher rate in private sector banks in contrast to its public counterparts based on compounded annual growth rate. It is also indicated that although priority sector lending has increased at a higher pace, the NPAs in this sector have not increased at the similar inflated pace. Further, growth of NPAs in non-priority sector exceeded that of priority sector for both the groups of banks. On the same lines, acknowledging the higher proportion of NPAs in the non-priority sector in SCBs Kanyan K et al. (2024) highlight the high NPAs in industries, agriculture and micro and small businesses. On comparative terms while priority and non-priority sector GNPAs significantly affect the overall GNPAs for public sector banks, the same is not significant for private and foreign banks. Regression results also show that sectors such as agriculture, MSE, industries, services, retail loans and non-priority's other sectors have a significant impact on the total GNPAs of both public and private sector banks. NPAs in food credit, retail loans and other sectors in both priority and non-priority were seen to negligible impact on the total GNPAs in all three bank groups.

Dividing the priority sector lending into Agricultural, industries, services and personal credit panel data study conducted by Desai R (2021) on 34 banks during 2010-2019 reported that priority sector credit significantly affected profitability. While agricultural, industrial and personal credit had a negative impact on profitability, service credit had a positive effect. Taking a sample of 10 banks from public loans and private sector banks each on the basis of size, Kaur M (2018) finds that although NPAs in priority sector fell post crisis period, the financial crisis significantly affected the NPAs in priority sector in Bank of Baroda, Syndicate bank and Allahabad bank among public sector and J&K Bank and ICICI banks among private sector banks.

3. TREND ANALYSIS AND GROUP-WISE COMPARATIVE ANALYSIS OF NPAS

3.1 Gross and Net NPAs

Public sector banks (PSBs) play a critical role in directing the flow of funds to the productive sectors of the country and supporting priority sectors identified by the government, such as agriculture, small and medium enterprises (SMEs), housing, and infrastructure. Significantly higher growth rate in advances was witnessed during 2008-2020 averaging more than 12 percent per annum. However GNPAs surged from ₹40,500 crore to ₹6.78 lakh crore—a 16.7-fold increase. Table 1 shows the absolute gross and net NPAs along with GNPA and NNPA ratio for SCBs, PSBs and PvSBs during the span of 2008-2020. During 2009 and 2018, NPAs grew at an average annual rate of ₹0.86 lakh crore, with the sharpest spike of ₹2.61 lakh crore occurring in 2015–16. The period from 2016 to 2018 alone accounted for ₹6.2 lakh crore in additional NPAs, highlighting a critical deterioration in asset quality. However, this trend reversed between 2018 and 2020, with average annual reductions of ₹1.08 lakh crore. The ratio of gross NPA to total advances(GNPA ratio) surged from 2.2% in 2008 to 10.3% in 2020, ranging from a minimum of 2 % in 2009 to a peak of 14.6 % in 2018 reflecting the stress in asset quality. Following a similar trajectory the ratio of net NPA to total advances (NNPA ratio) which measures NPAs after accounting for provisions to cover losses from these loans, varied between 0.9 in 2009 to 8 in 2018 increasing steadily from 2009 to 2018 the highest increase being in 2015-16 (fig 1).

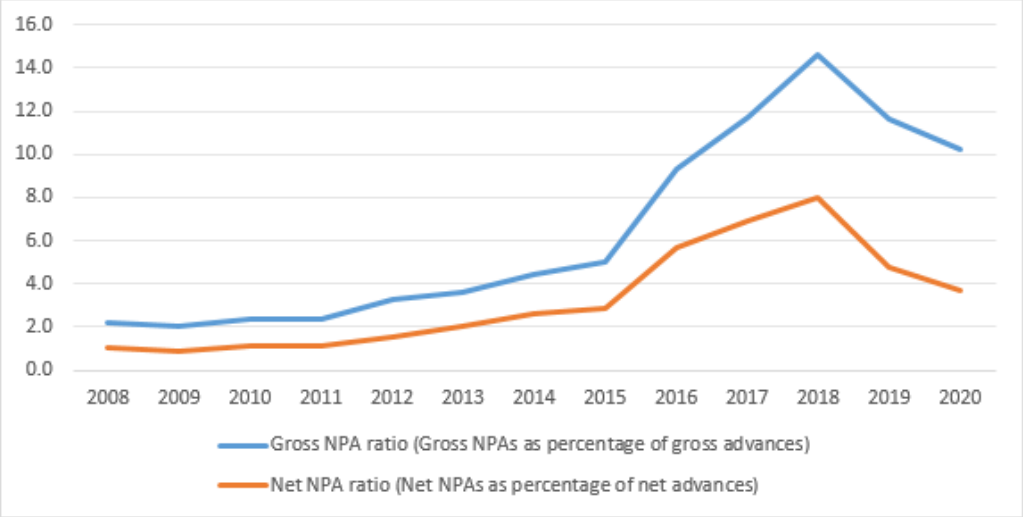

Fig 1: Gross NPA and Net NPA (PSBs)

Source- author's calculation based on RBI's data

Private sector banks (PvSBs) showed higher credit growth during 2011-2020 after slowing down during the crisis period of 2008-10. Gross NPAs of PvSBs rose sharply from ₹0.13 lakh crore in 2008 to ₹2.05 lakh crore in 2020—an over 16-fold increase. On an average, they grew by ₹0.16 lakh crore annually, with a sharp spike of ₹5.5 lakh crore recorded in 2017–18. Notably, the average increase during the later period of 2015–2020 was substantially higher, at ₹3.4 lakh crore. The Gross NPA ratio ranged from 2.5% in 2008 to a peak of 5.5% in 2020, with the lowest levels of 1.8% observed in 2013 and 2014. The Net NPA ratio fluctuated

between 0.6% and 2.4%, rising from 0.9% in 2008 to 1.5% in 2020, with the highest level recorded in 2018 (fig 2).

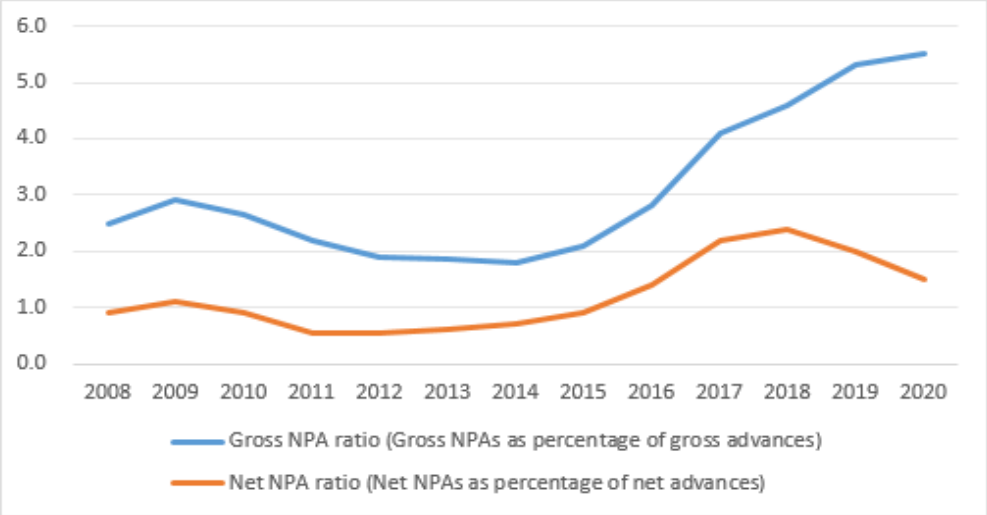

Fig 2: Gross NPA and Net NPA (PvSBs)

Source- author's calculation based on RBI's data

On a comparative basis, PvSBs showed higher credit growth during 2011-2020 after slowing down during the crisis period of 2008-10. Gross NPAs of PvSBs rose sharply from ₹0.13 lakh crore in 2008 to ₹2.05 lakh crore in 2020—an over 16-fold increase. On an average, they grew much gradually by ₹0.16 lakh crore annually, with a sharp spike of ₹5.5 lakh crore recorded in 2017–18. Notably, the average increase during the later period of 2015–2020 was substantially higher, at ₹3.4 lakh crore. The Gross NPA ratio ranged from 2.5% in 2008 to a peak of 5.5% in 2020, with the lowest levels of 1.8% observed in 2013 and 2014. The Net NPA ratio fluctuated between 0.6% and 2.4%, rising from 0.9% in 2008 to 1.5% in 2020, with the highest level recorded in 2018.

Table 1: Bank Group-wise NPAs in Banks in India: 2008-2020

Year	All SCBs		Public sector banks		Private sector Banks	
(end March)	Gross	Net	Gross	N et	Gross	N et
	NPAs	NPAs	NPAs	NPAs	NPAs	NPAs
Volume of NPAs (Rs. Crore)						
2007-08	56500	24730	40500	17836	13000	6387
2008-09	69300	31564	45000	21155	17000	8571
2009-10	84700	39127	59900	29643	17600	7777
2010-11	97900	41799	74700	36055	18200	5332
2011-12	142000	65205	117300	59391	18500	5701
2012-13	193200	98693	164500	90037	20800	7994
2013-14	263021	142656	227264	130635	24190	8862
2014-15	322926	175841	278468	159951	33700	14128
2015-16	611609	349814	539956	320376	55853	26677
2016-17	790268	433121	684732	383089	91915	47780
2017-18	1036187	520838	895601	454473	125863	64380
2018-19	933609	355076	739541	285123	180872	67309
2019-20	896082	289531	678317	230918	205848	55746

NPAs as % of Advances						
2007-08	2.2	1	2.2	1	2.5	0.9
2008-09	2.3	1.1	2	0.9	2.9	1.1
2009-10	2.6	1.1	2.4	1.1	2.65	0.9
2010-11	2.5	1	2.4	1.1	2.2	0.55
2011-12	3.1	1.3	3.3	1.5	1.9	0.55
2012-13	3.2	1.7	3.6	2	1.85	0.6
2013-14	3.8	2.1	4.4	2.6	1.8	0.7
2014-15	4.3	2.4	5	2.9	2.1	0.9
2015-16	7.5	4.4	9.3	5.7	2.8	1.4
2016-17	9.3	5.3	11.7	6.9	4.1	2.2
2017-18	11.2	6	14.6	8	4.6	2.4
2018-19	9.1	3.7	11.6	4.8	5.3	2
2019-20	8.2	2.8	10.3	3.7	5.5	1.5

Source: Statistical tables relating to banks in India (RBI)

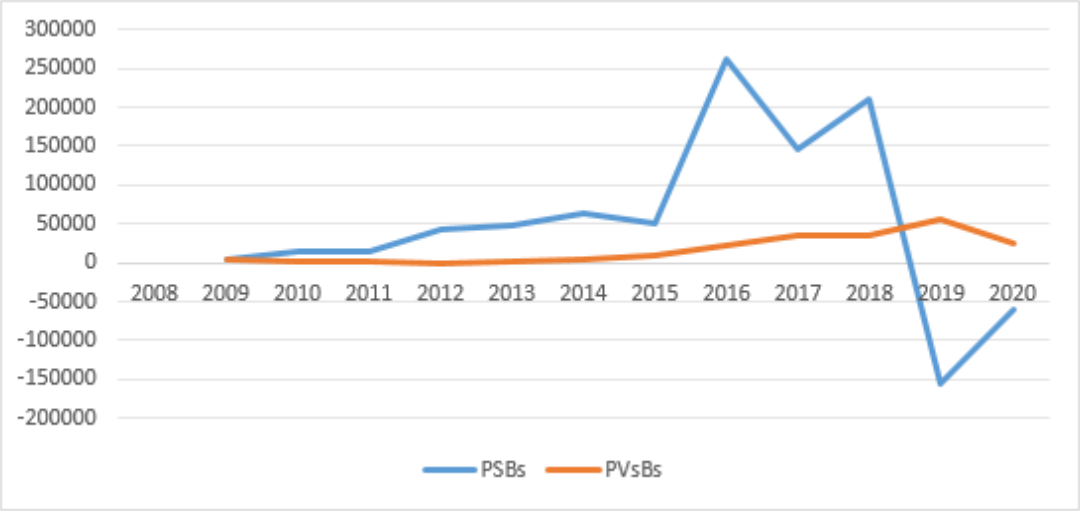

Fig 3: Incremental Gross NPAs (public and private sector banks

Source- author's calculation based on RBI's data

The share of public sector banks in total advances reduced from 72.5 to 60.6 percent from 2008 to 2020 while share of private sector banks increased from 21 to 34.6 in this period. GNPA ratio of public sector banks started deteriorating faster after 2010 when it overtook private sector banks, after which the gap between public sector and private sector started widening (fig 4).

Further analysis shows that the CAGR in gross NPA of public sector banks is higher at 29% compared to 22% for private sector banks. Post 2009 till 2016, the growth in NPAs of public sector banks exceeded private sector banks after which this trend reversed. Also it is noted that the highest growth in gross NPAs was witnessed in 2016 being alarmingly high at 94% and 56% for public and private sector banks respectively due to the high accretion during 2015-16.

In the succeeding year, while the growth rate fell by 67% for public sector banks, it fell by only 1% for private sector banks. GNPA ratio then fell in 2018-19 for public sector banks but continued to increase for private sector banks. Incrementally too the accretion of public

sector banks has been higher than private sector till 2018 (fig 3). PSBs constituted more than 80 percent of the NPAs in India's banks during 2012-18 and more than 70 percent from 2010-2020(fig 5).

On the other hand, the share of private banks increased to 23 percent in 2019–20 from a low of 9.2% in 2014.Public sector banks having more stressed assets than their private sector counterparts also figured among the top 20 banks with the highest gross non-performing asset (GNPA) ratios, according to CARE Ratings' analysis of the first quarter results of 38 banks.

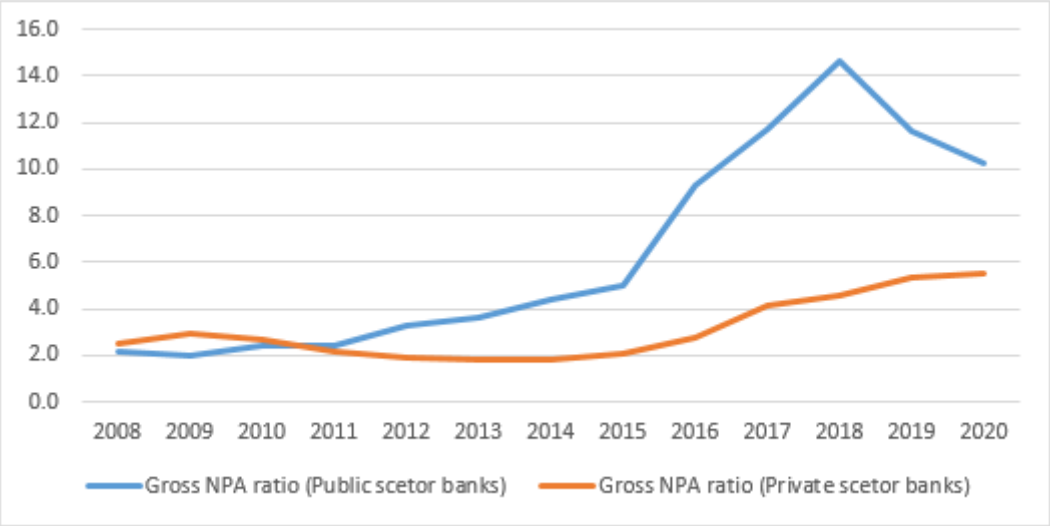

Fig 4: Comparison of Gross NPAs' of public and private sector banks

Source: author's calculation based on RBI's data

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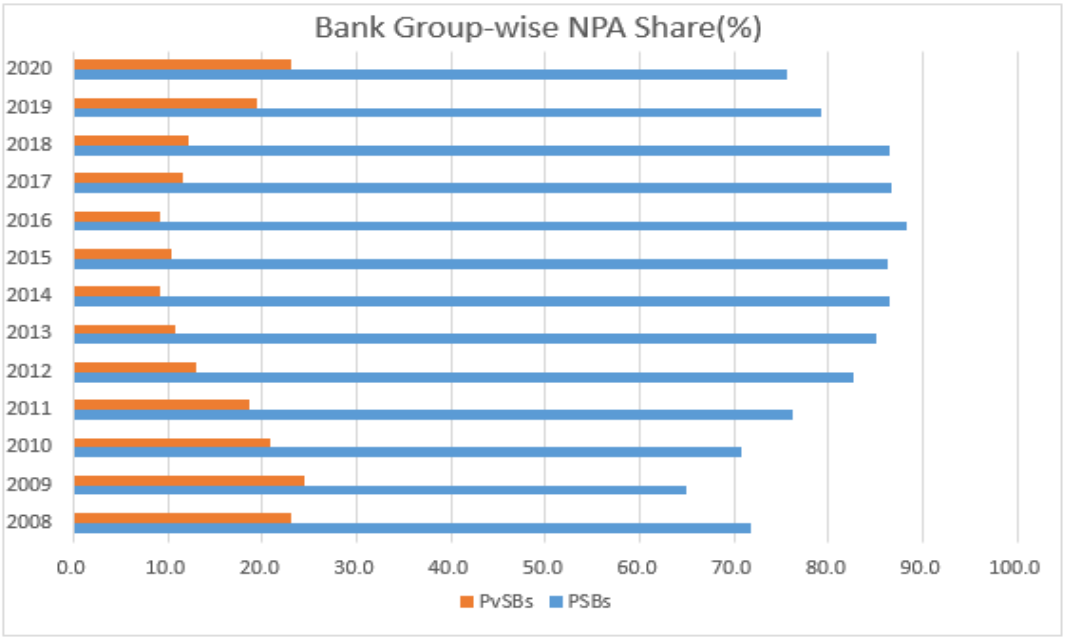

Fig 5: Groupwise comparative share of NPAs (%)

Source- author's calculation based on RBI's data

Among the 22 active public sector banks considered in the period under study, GNPA ratio of 13 banks exceeded the average, the worst in asset quality being Indian overseas bank, CBI, PNB, UCO bank, UBI. Eight PSBs banks namely IDBI Bank, Indian Overseas Bank, UCO Bank, Bank of Maharashtra, Central Bank of India, Dena Bank and United Bank of India reported GNPA ratio of over 15 per cent as of March 2017. In 2017-18, the year with poorest asset quality 6 public sector banks namely IDBI Bank (with gross NPA ratio of 27.95 per cent of gross advances), Indian Overseas Bank (25.3), Union bank of India (24.64), Vijaya Bank (24.10), Dena Bank (22.04) and Central Bank of India (21.48) reported NPA ratios of over 20 per cent.

3.2 Disparity in Restructuring of Advances

Under the corporate debt restructuring (CDR) scheme, banks could restructure loans and classify as standard assets to handle post crisis high corporate vulnerabilities. Table 2 shows the growth of restructured advances and as a percent of standard advances during 2008 to 2020. Growth of restructured assets was highest during 2011-12 growing by more than 140 percent for both public and private sector banks and more than 100 percent during 2012-13. However the AQR, initiated by the RBI in December 2015, with the intention of full recognition of NPAs by March 2017 led to a massive spike in NPA slippages. With intense transition of previously restructured loans into NPAs and higher recognition of NPAs as per the new norms GNPA rose and the level of restructured assets fell by 47.8 percent for public sector banks and 8.7 percent for private sector banks and continued to fall till 2019.

The proportion of restructured standard advances to standard advances rose from 0.79 percent from 2008 for public sector banks to a maximum of 7.52 in 2015 and from 0.62 to 2.35 for private sector banks (table 2) showing higher accumulation for PSBs. The proportion

for private sector banks was lower throughout the period under study, the difference reaching a high of 5.17 percent in 2015 compared to a low of 0.17 in 2008. With GNPA rising to a high of 7.5 in 2016 and 11.2 in 2018, many of the restructured loans defaulted falling into the NPA category due to change in RBI guidelines. After many extensions, forbearance and restructuring schemes on asset classification were removed in effect from by February 12, 2018. This was a step towards discouraging 'evergreening of loans' and implementing the Insolvency and Bankruptcy Code (IBC) to tackle resolution of NPAs in a time bound manner.

Table 2: Restructured advances in public and private sector banks

	Restructured standard advances(RSA)		Growth%(RSA)		Standard advances		RSA as % of standard advances	
	PSBs	PvSBs	PSBs	PvSBs	PSBs	PvSBs	PSBs	PvSBs
2008	14105.3	3156.9			1778600	512900	0.79	0.62
2009	64913.7	6133.7	360.2	94.3	2237800	568100	2.90	1.08
2010	94958.7	11839.5	46.3	93.0	2673500	626500	3.55	1.89
2011	56711.5	4110.6	-40.3	-65.3	3271800	793600	1.73	0.52
2012	137517.1	9994.8	142.5	143.1	3825500	962900	3.59	1.04
2013	279866.0	20025.2	103.5	100.4	4395700	1138400	6.37	1.76
2014	289220.4	30044.4	3.3	50.0	4988656	1337133	5.80	2.25
2015	401348.4	36960.6	38.8	23.0	5338249	1574957	7.52	2.35
2016	209611.0	33762.7	-47.8	-8.7	5287543	1918387	3.96	1.76
2017	142944.6	24404.7	-31.8	-27.7	5181641	2168500	2.76	1.13
2018	46271.2	11727.2	-67.6	-51.9	5246097	2600028	0.88	0.45
2019	30130.0	9818.6	-34.9	-16.3	5642920	3261474	0.53	0.30
2020	37077.2	5628.5	23.1	-42.7	5936795	3570383	0.62	0.16

Source: Data compiled from Statistical Tables Relating to Banks in India, RBI Mumbai of relevant years

3.3 Composition of NPAs with respect to priority and non-priority sector

Since 2008, the average contribution of NPAs in the non-priority sector to total NPAs aggregated to 62% as per RBI data till 2019 rising at an average annual rate of 4.9%. Priority sector NPAs which had been proportionately higher than non-priority NPAs started falling since 2011 from 56% to 27% in 2020 and the non priority sector increasing to 73%. Priority sector lending often considered as a driver of poor asset quality due to political interference, inadequate due diligence by banks so as to meet targets and higher default risks was higher for public sector banks. Contribution of NPAs in priority sector to Gross NPA too, although reducing from 61.5 percent to 36.7 percent was higher for public sector banks for all years under study, averaging to 39 percent compared to 23 percent for private sector banks (table 3).

3.4 Disparity in Profitability

NPAs which require upfront provisioning erode the profits of banks directly impacting the return on assets, a measure of bank efficiency. Curbing banks' ability to grant credit, they also stop generating interest income leading to higher operating cost by way of Recovery efforts and legal proceedings. High NPAs further impact investor confidence as credit ratings fall resulting in higher cost of funds. Studies show that higher NPAs significantly affect banks profitability adversely (Ravindra B etal (2024), Das S etal (2021) and Das R etal (2022)).

Data shows higher GNPA ratio and lower return on assets, key measure for efficiency for public sector banks during the critical years of 2008-2018. While ROA in percentage reduced from 1 to -0.84 for public sector banks, it increased from 1.13 to 1.68 in 2016 for private sector banks before falling to 0.51 in 2020(table 3). The average ROA of private sector banks during 2008-2020 exceeded that of public sector banks by 0.6 percent.

Table 3: Restructured Advances as % of standard advances, NPA_priority sector (%)

	Gross NPA ratio (Gross NPAs as percentage of gross advances)		Growth rate of GNPAs (%)		RSA as% of Standard advances		NPA_priority sector (%)		ROA	
	PSBs	PvSbs	PSBs	PvSBs	PSBs	PvSBs	PSBs	PvSBs	PSBs	PvSBs
2008	2.2	2.5			0.79	0.62	61.5	26.3	1.00	1.13
2009	2.0	2.9	11.1	30.8	2.90	1.08	53.8	21.6	1.02	1.13
2010	2.4	2.7	33.1	3.5	3.55	1.89	50.9	27.6	0.97	1.28
2011	2.4	2.2	24.7	3.4	1.73	0.52	53.8	26.8	0.96	1.43
2012	3.3	1.9	57.0	16.0	3.59	1.04	47.6	27.9	0.88	1.53
2013	3.6	1.85	40.2	12.4	6.37	1.76	40.9	26	0.80	1.63
2014	4.4	1.8	38.20	16.30	5.80	2.25	35.2	26.6	0.50	1.65
2015	5.0	2.1	22.5	39.3	7.52	2.35	34.7	22.8	0.46	1.68
2016	9.3	2.8	93.9	65.7	3.96	1.76	23.3	21	-0.07	1.50
2017	11.7	4.1	26.8	64.6	2.76	1.13	23.5	18	-0.10	1.30
2018	14.6	4.6	30.8	36.9	0.88	0.45	20.9	18	-0.84	1.14
2019	11.6	5.3	-17.4	43.7	0.53	0.30	26.7	19	-0.65	0.63
2020	10.3	5.5	-8.3	13.8	0.62	0.16	36.7	19.7	-0.23	0.51

Source: author's calculation based on RBI's data

4. RESEARCH METHODOLOGY

The primary objective is to examine the disparity in accumulation of NPAs in the two major groups of commercial banks, public and private sector banks during FY 2008 to FY 2020 in terms of its extent, gross and net NPA ratio and growth rates.

The study also aims at examining whether there is any significant difference in their asset quality, ratio of priority sector NPAs, restructured advances and their profitability measured by ROA.

The data for the current study includes all public and private sector banks in India including PSBs (18) and PVBs (22) during 2008-2020. The RBI's trend and progress report, RBI publications, and the RBI Database on the Indian Economy served as the main sources for data collection

Data analysis

For comparative analysis, two sample t-test assuming unequal variances (Welch's t-Test) were employed so as to understand the mean difference amongst the performance ratios. Therefore SPSS 16 and Excel software were used for the purpose of analysis. Based on the objectives following hypotheses are created and examined.

Ho1: There is no significant difference between GNPA as a percent of total advances of public and private sector banks

$H0_2$: There is no significant difference between NNPA as a percent of total advances of public and private sector banks

$H0_3$: There is no significant difference between mean growth of NPAs of public and private sector banks

$H0_4$: There is no significant difference between composition of restructured standard advances as a percentage of standard advances in public and private sector banks

$H0_5$: There is no significant difference between composition of NPA in priority sector lending in public and private sector banks

$H0_6$: There is no significant difference between ROA of public and private sector banks

5. RESULTS AND DISCUSSIONS

Table 4 reports the mean and variance of the performance indicators and results of the t-test.

Disparity in GNPA and NNPA ratios

The results of the t-test assuming unequal variances, presented in table 4 prove that there is significant statistical difference between GNPA ratio of the PSBs and those of the PvSbs as the p-value was than 0.05 testifies this conclusion. The high mean value of the NPAs in PSBs shows that level of NPAs for this sector was high as compared to that for the NPBs.

Thus, the hypothesis H1 is accepted based on this evidence to say that with a 95degree confidence the true difference in means is not equal to zero. Similar result is reported for Net NPA ratio for public and private sector banks. There is statistically significant difference between the means of NNPA ratios for the years of the two groups of banks and hence the null hypothesis is rejected.

Disparity in growth rates of NPAs

The p values of both one-tail and two-tail t test were found to be greater than 0.05 and so, we accept the null hypothesis that there is no significant difference between growth of GNPA assets of public and private sector banks.

Disparity in NPAs in priority sector

The mean proportion of NPAs in priority sector was 39.2 percent for PSBs compared to 23.2 percent for PSBs. To examine if there is any significant difference between the proportion of NPAs in priority sector in total NPAs in public and private sector banks, t-test revealed that there is significant statistical difference between these ratio of the PSBs and PvSbs as the p-value was lower than 0.05.

Disparity in profitability

To examine if there is any significant difference between profitability of public and private sector banks, t-test was conducted on retrun on assets ratio assuming unequal variances. The low P values (lower than 0.05) at 95% confidence levels imply that there is significant

difference between profitability of the two groups of banks during 2008-2020. The mean ROA (in percent) was found to be 0.3 compared to 1.3 for PvSBs (table 4).

Table 4: Performance analysis of PSBs & PvSBs during 2008-2020

	PSBs	PvSBs	P(T<=t) one-tail	P(T<=t) two-tail
GNPA ratio				
Mean	6.3	3.08	0.013	0.027
Variance	20.22	1.73		
NNPA ratio				
Mean	3.25	1.21	0.005	0.010
Variance	5.79	0.41		
Mean growth of GNPA				
Mean	29.4	27.7	0.437	0.873
Variance	832.4	518.2		
ROA				
Mean	0.31	1.28	0.000	0.000
Variance	0.44	0.15		
NPA_priority sector (%)				
Mean	39.2	23.2	0.001	0.001
Variance	180.3	14.6		
RSA as% of Standard advances				
Mean	3.16	1.18	0.005	0.010
Variance	5.3	0.57		

Source: Author's calculation

6. CONCLUSION

The paper charts out the rising trend of NPA accumulation during 2008-2020 in SCBs, PSbs and PvSBs owing to the myriad macro-economic and bank specific factors. Amidst the rising NPAs public sector banks contributed the most to the problem with its mean proportion of NPAs being more than 70 percent. Results from the empirical analysis reveal that its GNPA ratio and NNPA ratio is also significantly higher than private sector banks. Although NPAs in priority sector lending reduced for both the groups of banks they were significantly higher for PSBs. The growth of NPAs was however found to be similar for both the groups of banks. Priority sector lending is often criticized for higher defaults due to political interferences and lax credit monitoring. The restructured advances as a proportion of standard advances were also significantly higher for PSBs leading to higher slippages with the onset of asset quality review. Deterioration in asset quality results in lower return on assets which was also noted during the period under study for both the groups of banks. However, the mean return on assets, a measure of profitability and efficiency was significantly lower for PSBs.

Considering that PSBs contribute to credit delivery, financial inclusion, and economic stability in a major way, it is imperative that due attention is paid to improve its asset quality and hence profitability. Attention should be paid to asset quality of priority sector loans and to improve governance, due-diligence and credit monitoring. They should develop mechanism for early recognition of corporate distress using technology such as artificial intelligence and enhance their loan recovery capacity. Further studies can examine the asset quality within

public and private sector banks and severity of factors affecting each. The impact of priority sector loans on asset quality can also be determined.

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