ANALYSIS OF NON- PERFORMING ASSETS IN COVID– 19 PERIODS: A COMPARATIVE STUDY OF GOVERNMENT AND PRIVATE BANKS OF INDIA

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Abstract

In this present paper we have focused on Private and government banks NPAs. This is a comparative study of government and private sector banks, here we have analyzed the relationship between Private bank NPAs and Government banks NPAs. we have analyzed significant difference between private banks NPAs and government banks NPAs. In our study we found that after 2017 the government and private sector banks has increasing growth rate of GNPAs. Government sector 2016-2017 gross NPAs growth rate was 11.7 percent which increased to 14.6 percent. (RBI financial stability repost 2018) In year 2018-19 the growth rate increased 11.6 percent. In case of private banks it has increasing rate from 2017 to 2020.

Keyword – COVID- 19, NPA, GNPAs, Private Banks, Government Banks, RBI

Introduction-

Nowadays, every Indian bank are facing the problem of non-performing assets, whether it is government sector bank or private sector bank. If we look the financial system of any country, it is a backbone for economy growth and development of the country.

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The smooth functioning of the banking sector ensures the healthy condition of an entire economy [1]. Finance system of any country is like a blood nerve and the NPAs are blocking the nerve of Indian banking system and are bottleneck in smooth circulation of finance.[2] NPAs are the leading indicators to judge the performance of the banking sector. In the COVID-19 period people suffered with their health issue as well as job and income issue. This situation directly links with their previous loan which are still unpaid. This is again a measure challenge for individual and government how to pay previous loan because most of the people have lost their job due to COVID-19. That's why Indian private and government banks are suffering with NPAs problem these days. In Indian finance system this problem remains from past two decade.

NPAs definition According to RBI "non-performing asset (NPA) was defined as a credit facility in respect of which the interest and/ or instalment of principal has remained 'past due' for a specified period of time." The specified period was reduced in a phased manner as under[3] An amount due under any credit facility is treated as "past due" when it has not been paid within 30 days from the due date. Due to the improvements in the payment and settlement systems, recovery climate, upgradation of technology in the banking system, etc., it was decided to dispense with 'past due' concept, with effect from March 31, 2001. Accordingly, as from that date, a Non-performing Asset (NPA) shall be an advance where:-

    i.   interest and/or instalment of principal remain overdue for a period of more than 180 days in respect of a Term Loan,

    ii.   the account remains 'out of order' for a period of more than 180 days, in respect of an Overdraft/Cash Credit (OD/CC),

    iii.   the bill remains overdue for a period of more than 180 days in the case of bills purchased and discounted,

    iv.   interest and/or instalment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purposes, and

    v.   any amount to be received remains overdue for a period of more than 180 days in respect of other accounts.

With a view to moving towards international best practices and to ensure greater transparency, it has been decided to adopt the '90 days' overdue' norm for identification of NPAs, from the year ending March 31, 2004. Accordingly, with effect from March 31, 2004, a non-performing asset (NPA) shall be a loan or an advance where;

    i.   interest and/ or instalment of principal remain overdue for a period of more than 90 days in respect of a term loan,

[1] Vibhuta, S. & Chandrakant, B. (2021) Study on Non-Performing Assets of Public Sector Banks. *IRE Journals* 4(12).

[2] Kaur S.& Kumar V. (2019) Non-Performing Assets in Indian Banking System: A Grave Epidemic. *Review of Research*. 8(6). Retrieved from: https://www.researchgate.net/publication/350383545

[3] RBI Annual Report, 2020, www.mastercirculars.rbi.org.in.

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    ii.   the account remains 'out of order' for a period of more than 90 days, in respect of an Overdraft/Cash Credit (OD/CC),

    iii.   the bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted,

    iv.   interest and/or instalment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purposes, and

    v.   any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.[4]

In simple word NPA means the advance or credit for which the principal and interest of loan amount repayment remained overdue for 90 days period. In the bank books basically, it is known as bad assets or loan. Non-Performing assets are those loans which are consider as default because it's principal and interest amount is remained overdue.

Why NPAs matter:

The issue of mounting Non-Performing Assets in Indian banks, and public sector banks in particular, found that NPAs of Indian banking industry as a whole are continuously increasing during the period 2008-09 to 2013-14 followed by the global crises.[5] In case of India banking NPAs since 2018 the rate of government sector NPAs rapidly increased due to risk loan which is provided by government banks. Even in the year 2017 total government NPAs was 506921.66 which increased by 895601.26 million in 2018 which means 14.6 precent growth which a very serious problem for Indian banking system. The share of gross non-performing assets is increasing year by year. RBI regularly publishes the data on NPAs as a part of its Financial Stability Reports. in July, 2020, RBI in its latest Financial Stability Report said bank NPAs may touch 22-year high in severe-stress scenario due to the impact of Covid-19 pandemic.[6]

Literature Review:

Rajeev & Mahesh (2010) in their study they mentioned about our weak legal system meant for banking system in India. It is one of the responsible factors for continuously increasing NPAs in banking business. The legal system in India is working sympathetically for its borrowing customers and it doesn't show interest for banks.[7]

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[4] RBI Master Circulation Report, 2020, www.mastercirculars.rbi.org.in.
[5] Ombir & Bansal S. (2016) An Analysis of Non-Performing Assets of Indian Banks, *INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANEGEMENT*, 6(09), http://ijrcm.org.in/
[6] Kattadiyil J.B. & Sisu G. M. (2020) Non-Performing Assets and support the economics growth, *International Journal of Management IJM*, 11(9), pp 78-90 http://www.iaeme.com/IJM/issues.asp?JType=IJM&VType=11&IType=9DOI: 10.34218/IJM.11.9.2020.009
[7] Rajeev, M., & Mahesh, H.P. (2010), Banking sector reforms and NPA: A study of Indian Commercial Banks. Bengaluru, *Institute for Social and Economic Change,10(8).*

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Prasad and Veena, D. (2011) as researchers tested various aspects related to trends of NPAs of banking sector. They pointed out that major section of Public Sector Banks are facing the difficulty of unproductive manpower and too much of inoperative assets, than other sectors of banks.[8]

Rajeswari Sen Gupta and Harsh Vardhan September 2017 - in this research paper research has comparative analyzed two banking crisis episodes-the one in the late 1990s and one that started in the aftermath of the 2008 Global Financial Crisis and is yet to be resolved. They have describes the macroeconomic and banking environment preceding the episodes, the degree and nature of the crises and also discuss the policy responses that have been undertaken.[9]

Sharma S., Rathore D.S., and Prasad, J. (2019) They found that both in public & private sector banks the major reason for the NPAs is miss-utilization of bank loans and poor recovery management. The NPAs are increasing in agriculture and industries. They suggested improving corporate governance for better operational and credit decisions.[10]

Kumari S. S. & Naik M.D. (2020) – in their research paper they have examine the trend of NPAs in government and private banks. They conclude that government and private bank have positive trend and foreign bank have negative trend.[11]

Hawaldar, I.T, Spulkar, C., Lokesh, A., Birau, R., Robegen, C. (2020) in their study analysing non-performing assets in agriculture loans. A case study in India concluded that there is no significant difference in pre and post sanction of agriculture loans and management of non-performing assets by banks. The wilful default by borrowers and more NPAs in banks are due to debt waiver policies announced by political parties.[12]

Selvam, P. and Premnath S., (2020) in their study titled "Impact of coronavirus on NPA and GDP of Indian Economy" finds that the NPAs increased during the period and suggested that government should resolve pending cases quickly and stop mandatory landings which is the real problem segment.[13]

Jethwani, B., Dave, D., Ali, T., Phansalker, S., and Ahhirao, S. (2020) in their study Indian agriculture GDP and NPA: A regression model found that the repayment of farm loan adversely

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[8] Prasad, G.V., & Veena, D. (2011). NPAS in Indian banking sector-trends and issues. *Journal of Banking Financial Services and Insurance Research*, *1*(9), 67-84

[10] Sharma, S., Rathore, D.S., Prasad, J., (2019), Empirical assessment of management of non-performing assets in the public and private sector banks, *Journal of Statistics and Management Systems.* Vol.22 (3), PP 587-601, DOI:10.108010970510.2019.1575601.
[11] Kumari S.S.& Naik M.D. (2020) Trends & Issues of Non-Performing Assets: An overview of banking sectors, *PALARCH'S JOURNAL OF ARCHAEOLOGY OF EGYPT/ EGYPTOLOGY,* 17(7).
[12] Hawaldar, I.T, Spulkar, C., Lokesh, A., Birau, R., Robegen, C., (2020). Analyzing non-performing assets in agricultural loans: A case study of India, *Revista de Stiinte, Politice* , 2020(65), 42-53.
[13] Selvam, P. and Premnath, S. (2020). Impact of coronavirus on NPA and GDP of Indian Economy, *Alochana Chakra Journal,* Vol 2020(2).

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affects as factors like rural population, low export value of crop and low crop production for the year. It should be understood that the farm loan waivers cannot solve the problem.[14]

Saha, M., and Zaman, A. (2021) in their study titled Management of NPAs in banks with special reference to UBI found that with the decrease in NPA level, profitability of banks increased.[15]

Nitesh S. & Vibhute, 2021 – in their research they have critically evaluates the trend in movement of nonperforming assets of public sector banks in India during the period 2000-01 to 2011-12, thereby facilitates an evaluation of the effectiveness of NPA management in the post-millennium period.[16]

Methodology:

The study is based on secondary data, collected from the Annual Report of banks, various reports published by Reserve Bank of India (such as the annual Report on Trend and Progress of Banking in India) as well as data compiled by author which is available on the internet. The study covered before Covid-19 period and during Covid-19 which mean the second wave of Covid-19. In this study we have used sample size = 6 banks. Out of which 3 banks are Government and 3 banks are private. Namely Government banks are SBI (State Bank of India), BOB (Bank of Baroda) and PNB (Punjab National Banks). Namely private banks are HDFC Bank, ICICI Bank and Axis Bank. The selection of banks is based on Net capital and assets of banks where highest amount banks are selected for research paper.

Research Design: The research is based on exploratory and comparative research design.
Sampling:

In this paper we have used non probability sampling for selecting the private and government bank unit. Together, where we have selected 3 unit of government bank and 3 unit of private bank. The sample size is (N = 6). We have selected those banks which have higher amount of Net capital and higher amount of asset in the year.

Objective –
1. To Study the Non-Performing Assets of Indian selected Private and government Banks
2. To examine the comparative difference between private banks NPAs and government banks NPAs

Hypothesis –
1. Private bank has higher NPAs then government banks
2. There is no significant difference between private and government banks

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[14] . Jethwani, B., Dave, D., Ali, T., Pramselkar, S. and Ahhiran, S. (2020) IMCLSC 2020, IOP Publishing, IOP Conference Service; Material science and Engineering
[15] Saha, M., Zaman, A., Basumatry, P. (2021), Management of non-performing assets (NPA) in banks with special reference to Union Bank of India, *Journal of Contemporary issues in Business and Government,* vol. 27, (1).
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Test and tool –

We have used t-test for measuring significance difference between private and government banks NPAs**.** Second tool which we have used is trend analysis for checking the NPAs trend from 2017 to 2020.

Scope of the study –

Several studies have been done on Indian Banking NPAs but this is first study which is based on selected private and government banks. The study is focused on trend analysis of NPAs in different year. And measured the different between private and government sector banks NPAs.

Result and discursion

Table 1.1: Selected Government Sector Banks NPAs in Year 2017, the data in Million

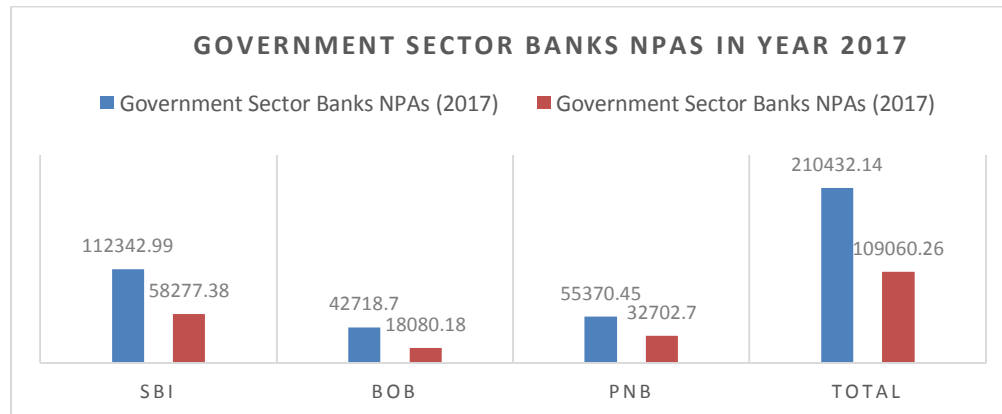| Banks	GNPAs	NNPAs
SBI	112342.99	58277.38
BOB	42718.7	18080.18
PNB	55370.45	32702.7
TOTAL	210432.14	109060.26

Source – Financial Stability report of RBI in 31 March 2017

Table 1.2: Private Sector Banks NPAs in Year 2017, the ins Million

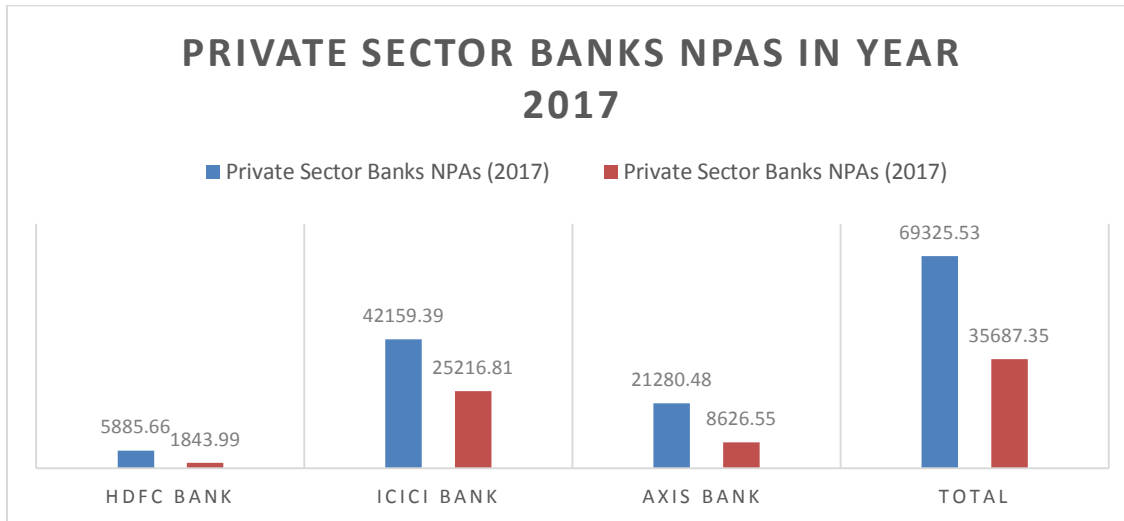| Banks	GNPAs	NNPAs
HDFC Bank	5885.66	1843.99
ICICI Bank	42159.39	25216.81
Axis Bank	21280.48	8626.55
TOTAL	69325.53	35687.35

Source – Financial Stability report of RBI in 31 March 2017

Figure 1.2: Government Sector Banks NPAs in Year 2017, the ins Million

GOVERNMENT SECTOR BANKS NPAS IN YEAR 2017

Source – Financial Stability report of RBI in 31 March 2017, (Data in Million)

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Figure 1.2 Private Sector Bank NPAs in Year 2017

Source – Financial Stability report of RBI in 31 March 2017, the ins Million

In table 1.1 We have compiled the data of selected government banks and in table 1.2 we have compiled the data of selected private banks in year 2017. If we look data of 2017, we clearly found that the private bank has higher NPAs in terms of total. If we look the figure 1.2 ICICI has the highest NPAs in 2017. In 2017 the Bank of Baroda has lowest NPAs which is 42718.7 million. Over all the government bank have higher NPAs then private banks in year 2017.

Tabel 2.1: Government Sector Banks NPAs in Year 2018, Data in Million

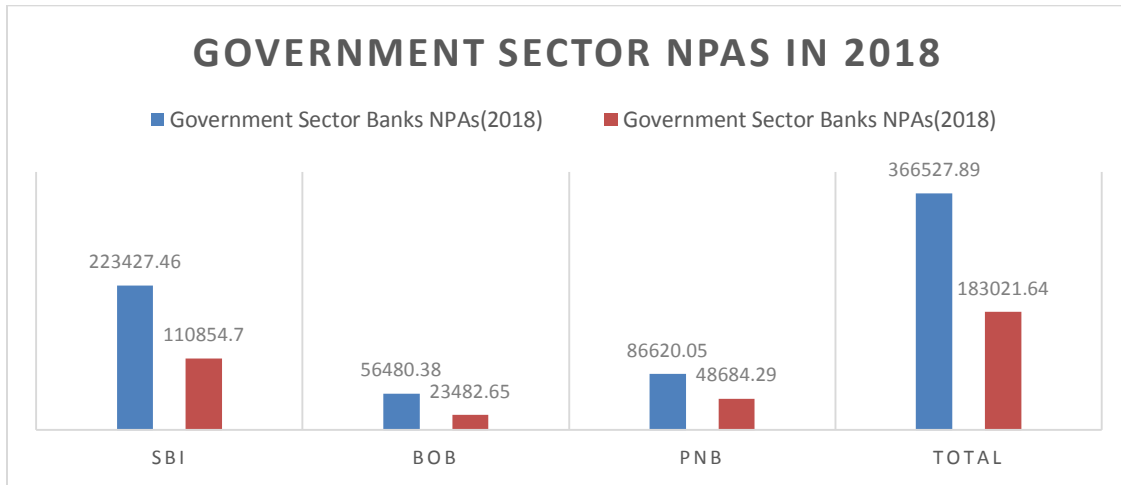| Bank	GNPAs	NNPAs
SBI	223427.46	110854.7
BOB	56480.38	23482.65
PNB	86620.05	48684.29
TOTAL	366527.89	183021.64

Source – Financial Stability report of RBI in 31 March 2018, Annual Report Of RBI

Table 2.2: Private Sector Banks NPAs in Year 2018, Data in Million

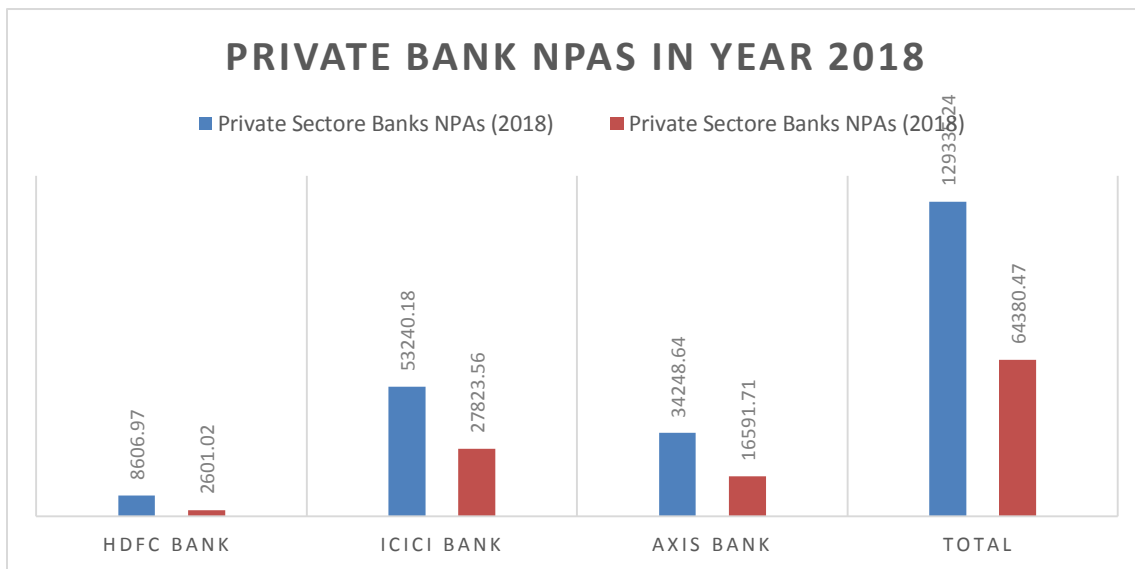| Bank	GNPAs	NNPAs
HDFC Bank	8606.97	2601.02
ICICI Bank	53240.18	27823.56
Axis Bank	34248.64	16591.71
TOTAL	129335.24	64380.47

Source – Financial Stability report of RBI in 31 March 2018, Annual Report Of RBI

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Figure 2.1: Government Sector Banks NPAs in Year 2018

Source – Financial Stability report of RBI in 31 March 2018, Annual Report Of RB

Figure 2.2: Private Sector Bank NPAs in Year 2018, Data in Million

Source – Financial Stability report of RBI in 31 March 2018, Annual Report Of RBI

In table 2.1 we have show the government sector banks NPAs and in Figure 2.1 we have represented the government Banks NPAs in diagram. In year 2018 private sector has higher NPAs then government Banks. Specially ICICI Banks has higher NPAs (53240.18 million) among all selected private and government banks and BOB has lowest (56480.38 million) Bad loan in 2018. If we look only government Banks the SBI has higher NPAs (223427.46 million) among the selected government banks. In 2018 the HDFC has lowest NPAs which is 8606.97 million. In terms of total selected banks government banks has higher NPAs than private banks this means government has weak loan recovery policy.

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Table 3.1: Government Sector Banks NPAs in Year 2019, Data in Million

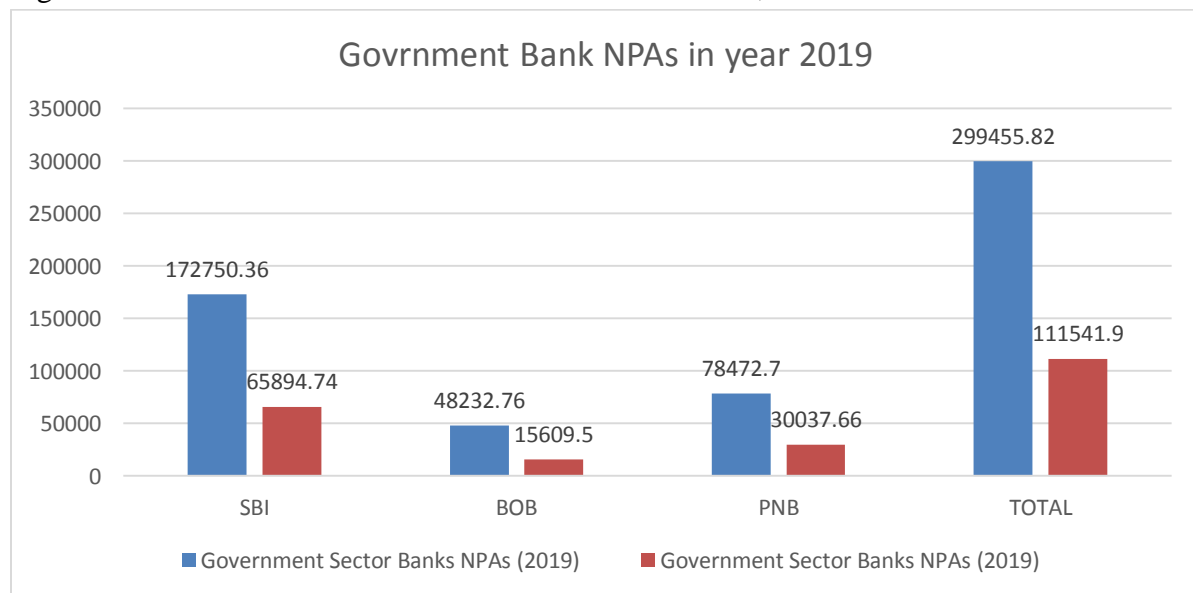| Banks	GNPAs	NNPAs
SBI	172750.36	65894.74
BOB	48232.76	15609.5
PNB	78472.7	30037.66
TOTAL	299455.82	111541.9

Source – Financial Stability report of RBI in 31 March 2019, Annual Report Of RBI

Table 3.1: Private Sector Banks NPAs in Year 2019, Data in Million

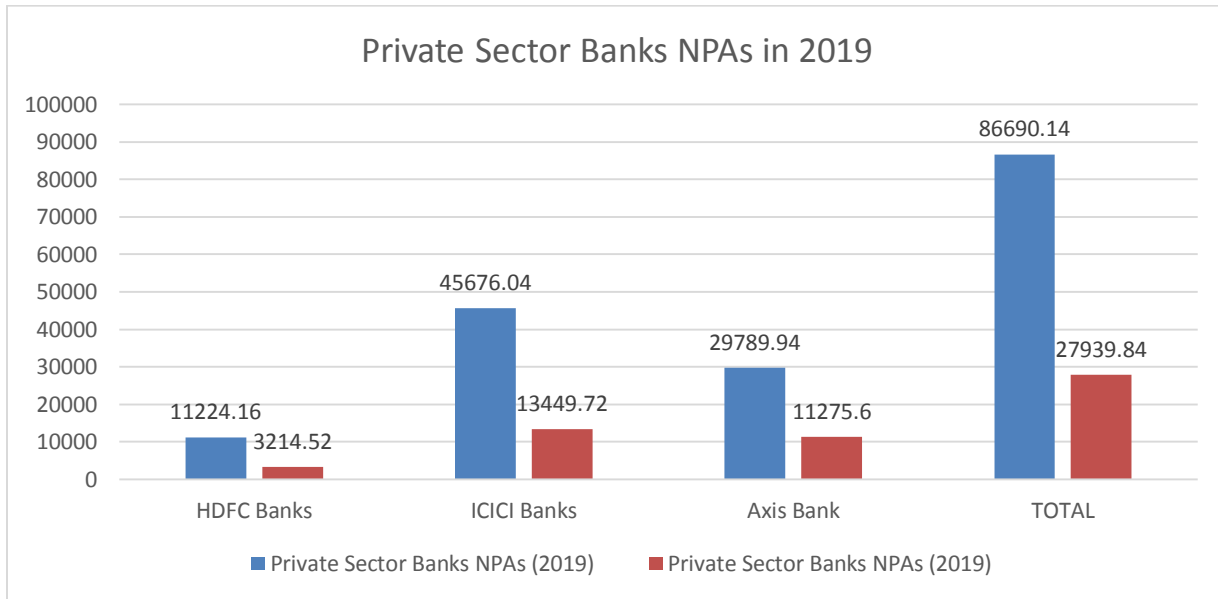| Banks	GNPAs	NNPAs
HDFC Banks	11224.16	3214.52
ICICI Banks	45676.04	13449.72
Axis Bank	29789.94	11275.6
TOTAL	86690.14	27939.8

Source – Financial Stability report of RBI in 31 March 2019, Annual Report Of RBI

Figure 3.1: Government Sector Banks NPAs in Year 2019, Data in Million

Source – Financial Stability report of RBI in 31 March 2019, Annual Report Of RBI

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Figure 3.2: Private Sector Bank NPAs in Year 2019, Data in Million

Source – Financial Stability report of RBI in 31 March 2019, Annual Report Of RBI
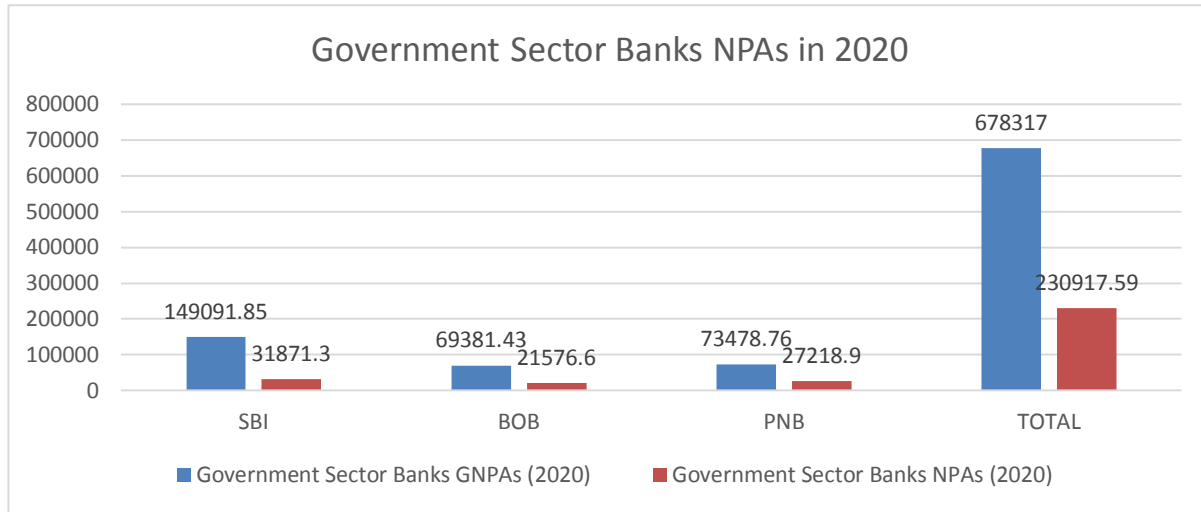
In table 3.1 we have represented the government sector banks NPAs where the total NPAs is 299455.85 million in year 2019 which has decreased than previous year. But the growth rate is 11.6 which is higher rate. Again, SBI has higher NPA among all selected banks which is 172750.36 million (RBI Annual Report 2019) and BOB has lowest NPAs among selected government banks which is 48232.76 million. In term of total NPAs in year 2019 has decreased from previous year. In case of private banks, the HDFC has lowest NPAs among the selected private banks and ICICI banks has higher NPAs of 45676.04 million.

Table 4.1: Government Sector Banks NPAs in Year 2020, Data in million

Banks	GNPAs	NNPAs
SBI	149091.85	31871.3
BOB	69381.43	21576.6
PNB	73478.76	27218.9
TOTAL	678317	230917.59

Source – Financial Stability report of RBI in 31 March 2020, Annual Report Of RBI
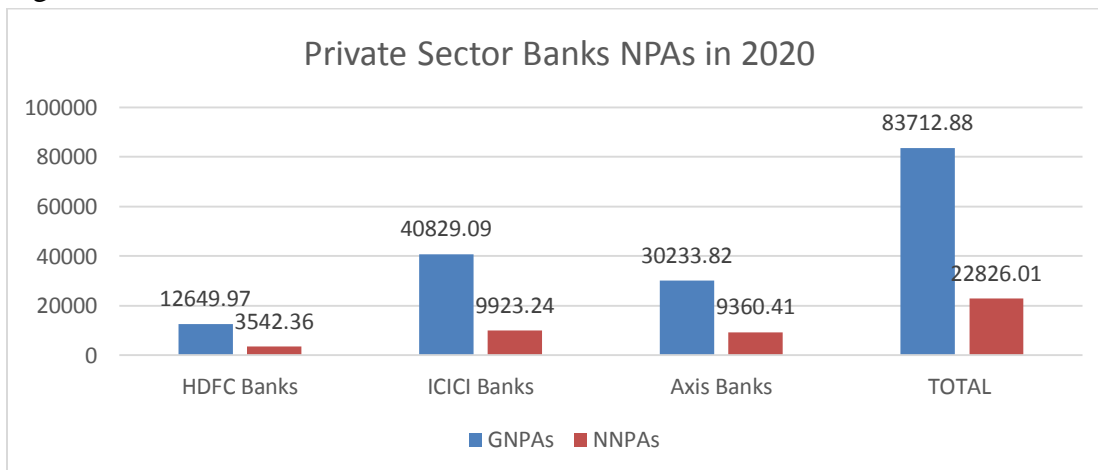
Figure 4.1: Government Sector Bank NPAs in Year 2020

Source – Financial Stability report of RBI in 31 March 2020, Annual Report Of RBI

Table 4.2: Private Sector Banks NPAS 2020 in million

Banks	GNPAs	NNPAs
HDFC Banks	12649.97	3542.36
ICICI Banks	40829.09	9923.24
Axis Banks	30233.82	9360.41
TOTAL	83712.88	22826.01

Source – Financial Stability report of RBI in 31 March 2020, Annual Report Of RBI

Figure 4.1: Government Sector Bank NPAs in Year 2020

Source – Financial Stability report of RBI in 31 March 2020, Annual Report Of RBI

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In table 4.1 we have represented the government sector bank NPAs where we found that SBI has higher NPAs which is 149091.85 million we can clearly see in figure 4.1 SBI has highest range of Gross non-preforming assets and BOB has lowest amount of NPAs. In case of private banks HDFC bank has lowest range, which show the lowest amount of NPAs in selected private banks.

Hypothesis Testing:

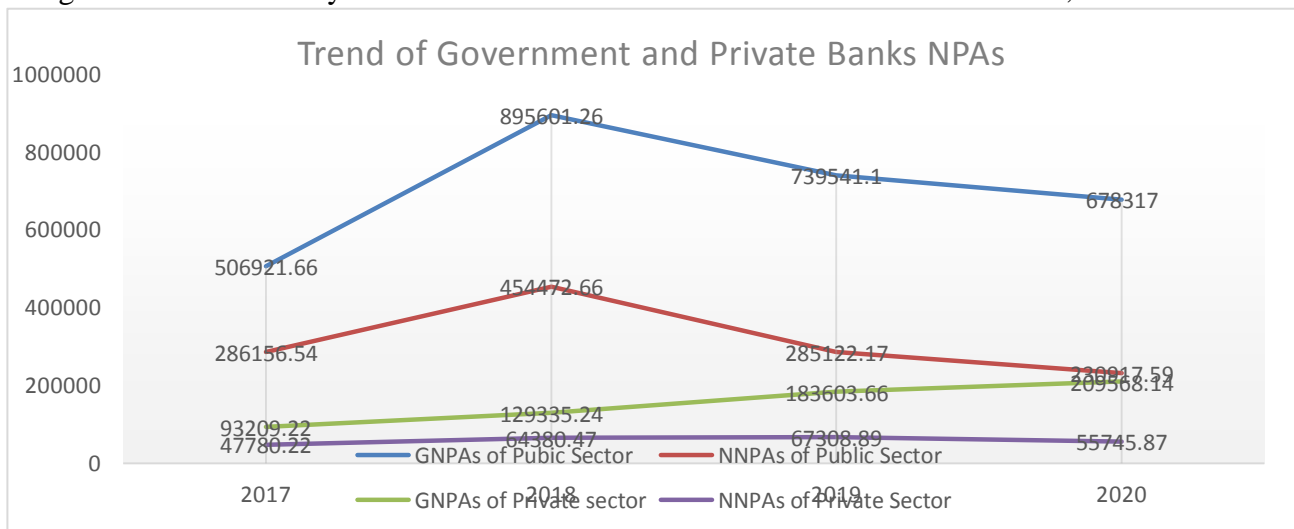1. H_1 = Private bank has higher NPAs then government banks

According to data analysis of RBI 2017 to 2020 we found that Private Bank has less NPAs then Government banks. For first hypothesis Analysis we have used Trend Analysis from 2017 to 2020. We found that the Government Sector has higher NPAs than Private Sector Banks. So reject our first Hypothesis and conclude that government sector banks have higher NPAs.

Table 4.1: Yearly Trend of GNPAs and NNPAs in Selected Bank from 2017 to 2020, Data in million.

Year	GNPAs of Public Sector	NNPAs of Public Sector	GNPAs of Private sector	NNPAs of Private Sector
2017	506921.66	286156.54	93209.22	47780.22
2018	895601.26	454472.66	129335.24	64380.47
2019	739541.1	285122.17	183603.66	67308.89
2020	678317	230917.59	209568.14	55745.87

Source: Financial Stability Report of RBI, and Annual Report of RBI from 2017 to 2020.

Figure 4.1: Trend Analysis of Government and Private Banks ANPs and GNPAs, Data in Million.

Source: Financial Stability Report of RBI, and Annual Report of RBI from 2017 to 2020

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1. H_0 =There is no significant difference between private and government banks

The second hypothesis is null hypothesis. For Analysis the second hypothesis we have used t-test for measuring significant difference between selected government and private banks. We have selected 6 banks. Out of which three banks are private and three banks are government.

H_0 = Government Banks NPAs = Private Banks NPAs.

Technically H_0 - μ = σ, μ = Government Banks NPAs, σ = Private banks NPAs

H_1 = $\mu < \sigma$

t-Test: Paired Two Sample for Means

	Variable 1
Mean	705095.255
Variance	25822967625
Observations	4
Pearson Correlation	0.271848137
Hypothesized Mean Difference	8
Df	3
t Stat	7.116565748
P(T<=t) one-tail	0.002854888
t Critical one-tail	2.353363435
P(T<=t) two-tail	0.005709776
t Critical two-tail	3.182446305

P- value = 0.0028

t-Test Statistic = 2.353 (acceptance area)

t-calculated value = 3.1820, Significant value (α) = 0.05

Because there is higher value of t-calculated than t-statistic we reject the Null Hypothesis.And conclude that there is a big difference between government banks NPAs and private banks NPAs. We accept our alternate hypothesis which we found that government banks have higher NPAs than private banks.

Conclusion

In our study we found that there is high difference between private and government banks NPAs. Government bank have high rate of bad loan due to weak policies of banking loan and assuring risk investment. We found from 2017 to 2018 NPAs data in government sector increased very fast but in next two three year it has fallen down. After 2018 NPAs in government sector decreased slowly. In our first test the data rejected null hypothesis. because government sector have higher NPAs then private sector. second hypothesis is rejected because there is significant difference between private and government banks NPAs that means different policies are needed for removing private sector banks NPAs and government sector banks NPAs. If government want to remove NPAs from Indian banking system they need two different policies for government sector

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and private sector. Our third hypothesis is also rejected because government sector banks NPAs lead to private sector NPAs. In our test we found there is a positive relationship between private and government bank. which means government sector NPAs promote private banks NPAs. In our study we found that there is a big difference in government and private banks NPAs because private sector checks and evaluate the risk of loan that's why private sector has low NPAs rather than government sector NPAs.

Suggestion

For further development these types of research paper should be published on future trend of NPAs. Several studies had been done on government banks NPAs but non on small marginal farming NPAs. These should be amendment in banking low that should give more powers to RBI to monitor bank accounts of big defaulters. There is need of one commit for removing NPAs from government sector banks who will guide the government banks and measure the risk of loan and investment of government.

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   <https://www.researchgate.net/publication/350383545>
3) RBI Annual Report, 2020, <www.mastercirculars.rbi.org.in.>
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