AN EMPIRICAL ANALYSIS OF THE IMPACT OF NON PERFORMING ASSETS OF PUBLIC SECTOR,PRIVATE SECTOR AND SCHEDULED COMMERCIAL BANKS ON GROSS DOMESTIC PRODUCT OF INDIA

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1.0 INTRODUCTION

In the time of Globalization Banking Sector in India is quickly changing since 1990s because of financial liberalization , budgetary progression with passage of banks, and administrative changes in the corporate area. Indian financial industry is bit by bit moving towards embracing the prescribed procedures in bookkeeping, globally acknowledged prudential standards, with higher divulgences and straightforwardness, loan costs have been liberated, while the meticulousness of coordinated loaning is by and large continuously diminished. In our nation, presently we are having a genuinely very much developed banking framework with various classes of banks – public sector banks, private sector banks, foreign banks both old and new age, regional rural banks and co-operative banks keeps money with the Reserve Bank of India as the head of the framework. In the financial field, there has been a remarkable development and enhancement of banking industry. It is essential to understand that banking industry acts as backbone for the development of our nation. The present study examines the impact of NPA on GDP of public sector,private sector and commercial banks in India

The Banking system and financial framework in India is fundamentally not quite the same as that of other Asian countries in view of the nation's remarkable geographic, social, and monetary qualities. India has an enormous populace and land size, a different culture, and outrageous differences in pay, which are set apart among its locales. There are elevated levels of lack of education among an enormous level of its populace be that as it may, simultaneously, the nation has a huge repository of administrative and innovatively progressed abilities. Between around 30 and 35 percent of the populace dwells in metro and metropolitan urban communities and the rest is spread in a few semi-metropolitan and rustic focuses. The nation's monetary arrangement system joins communist and industrialist highlights with a weighty predisposition towards public area speculation. India has followed the way of development drove trades as opposed to the "exportled development" of other Asian economies, with accentuation on independence through import replacement. These highlights are reflected in the structure, size, and variety of the nation's banking and money related area. The financial framework has needed to serve the objectives of monetary

strategies articulated in progressive fiveyear advancement plans, especially concerning impartial pay circulation, adjusted local financial development, and the decrease and end of private area syndications in exchange and industry. All together for the financial business to fill in as an instrument of state strategy, it was exposed to different nationalization plans in various stages (1955, 1969, and 1980). Subsequently, banking remained globally detached (scarcely any Indian banks had presence abroad in worldwide budgetary focuses) in light of distractions with homegrown needs, particularly faster branch extension and pulling in more individuals to the banking framework. The financial framework's global seclusion was likewise because of exacting branch permitting controls on foreign banks .A major test confronting Indian banks is the manner by which, under the current possession structure, to achieve operational effectiveness appropriate for present day monetary intermediation. Then again, it has been moderately simple for the public area banks to recapitalize, given the expansions in nonperforming resources (NPAs), as their Government overwhelmed possession structure has decreased the irreconcilable circumstances that private banks would confront.

1.1 REVIEW OF LITERATURE

Shalini (2013)in her article “A study on causes and remedies for nonperforming assets in Indian public sector banks with special reference to agricultural development branch, state bank of Mysore” concluded that the bankers can avoid sanctioning loans to the non creditworthy borrowers by adopting certain measures. They are careful appraisal of the project which involves checking the economic viability of the project. A banker must consider the return on investment on a proposed project. If the calculated return is sufficiently higher than the credit amount he can sanction the loan. Secondly, he can constantly monitor the borrower in order to ensure that the amount sanctioned is utilized properly for the purpose to which it has been sanctioned. This involves the post sanction inspection by the banker.

Satpal (2014) in his paper concluded that NPAs have always created a big problem for the banks in India. It is just not only problem for the banks but for the economy too. The money locked up in NPAs has a direct impact on profitability of the bank as Indian banks are highly dependent on income from interest on funds lended. The study emphasized that the extent of NPA is comparatively very high in public sectors banks as compared to private bank. An attempt has been made in this paper to find out the actual definition of NPA and the factors contributing to the formation NPAs, reasons for high NPAs and their impact on Indian banking operations.

Dhananjaya K.(2019) examines the increasing twin balance sheet problem in India in the post-global financial crisis (GFC). Twin balance sheet problem, the combination of corporate distress and banking sector crisis, is considered to be devastating for economic growth since it creates a vicious cycle wherein a weak corporate balance sheet leads to increased stressed assets in the banking sector, which in turn seriously impairs the ability of the banking sector to lend to even healthy companies, holding back the growth further. In this perspective, this study is an attempt to understand the extent of corporate distress in the post-GFC and its impact on the asset quality of public sector banks (PSBs). The study reports that the corporate distress has increased in the post-GFC, resulting in significant debt at risk. The article also finds that increasing corporate fragility has adversely affected the balance sheet of PSBs in India. In a panel regression analysis, it is found that corporate profit is an important determinant of non-performing assets (NPAs) in PSBs along with other factors such as the efficiency of the bank, corporate sales growth, bank size, lending rate and lending to sensitive sectors.

1.2 HYPOTHESIS OF THE STUDY:

H0: There is no significance relationship between National GDP and GROSS and NET NPA of scheduled commercial banks, private and public sector banks In India.

H1: There is a significance relationship between National GDP and GROSS and NET NPA of scheduled commercial banks, private and public sector banks In India.

1.3 DATA SOURCE AND STUDY PERIOD:

The financial data and relevant information required for the study are drawn from the various secondary source. The Prowess' corporate databases developed by CMIE (Centre for Monitoring Indian Economy) and CLP (Capital Line Plus) have been used as principal sources. The other relevant data are collected from Journals, Magazines, Dailies namely The Financial Express and The Economic Times. The following sources also used for the purpose of data collection:Report on trends and progress of banks in India, Report on currency and finance. Statistical tables related to banks in India, RBI Bulletins, RBI Occasional Papers. Banking Statistics,Journals and other publications of the Indian Institute of bankers,Bulletins of Indian Bank Association.

1.4 STUDY PERIOD:

The study is conducted for the period of 12 years from 2005-06 to 2016-17 and with the help of liner growth model forecasting is performed for the period of 10 years from 2017-18 to 2026-27.

1.5 STATISTICAL TOOLS USED:

The research employs linear growth model and ANOVA for hypothesis testing.

TABLE 1

NATION GROSS DOMESTIC PRODUCT AND NPA FORECASTING OF SCHEDULED COMMERCIAL BANKS IN INDIA-*RS. In Billion*

YEAR	GDP	GROSS NPA	NET NPA	GDP TREND VALUE	GROSS NPA TREND VALUE	NET NPA TREND VALUE	FORCAST YEAR	GDP FORECAST VALUE	GROSS NPA FORECAST VALUE	NET NPA FORECAST VALUE
2005-06	36933.69	517.53	185.43	28403.99	-881.415	-595.157	**2017-18**	156007.5	5990.923	3323.843
2006-07	42947.06	505.17	202.8	39037.61	-308.72	-268.573	**2018-19**	166641.2	6563.618	3650.427
2007-08	49870.9	566.06	247.3	49671.24	263.9745	58.00992	**2019-20**	177274.8	7136.313	3977.01
2008-09	56300.63	699.54	315.64	60304.87	836.6694	384.5933	**2020-21**	187908.4	7709.008	4303.594
2009-10	64778.28	817.18	391.27	70938.5	1409.364	711.1766	**2021-22**	198542	8281.703	4630.177
2010-11	77841.16	939.97	417.99	81572.13	1982.059	1037.76	**2022-23**	209175.7	8854.398	4956.76
2011-12	87363.29	1369.68	652.05	92205.76	2554.754	1364.343	**2023-24**	219809.3	9427.093	5283.344
2012-13	99440.13	1927.69	986.93	102839.4	3127.449	1690.927	**2024-25**	230442.9	9999.788	5609.927

2013-14	112335.2	2630.15	1426.56	113473	3700.144	2017.51	**2025-26**	241076.6	10572.48	5936.51
2014-15	124679.6	3229.16	1758.41	124106.6	4272.839	2344.093	**2026-27**	251710.2	11145.18	6263.094
2015-16	137640.4	6116.07	3498.14	134740.3	4845.534	2670.677	***SOURCE:RBI AND COMPUTED***			
2016-17	152537	7902.68	4330.1	145373.9	5418.229	2997.26				

TABLE 2

NATION GROSS DOMESTIC PRODUCT AND NPA FORECASTING OF PUBLIC SECTOR BANKS- *RS. In Billion*

YEAR	**GDP**	**GROSS NPA**	**NET NPA**	**GDP TREND VALUE**	**GROSS NPA TREND VALUE**	**NET NPA TREND VALUE**	**FORCAST YEAR**	**GDP FORECAST VALUE**	**GROSS NPA FORECAST VALUE**	**NET NPA FORECAST VALUE**
2005-06	36933.69	421.17	145.66	28403.99	-871.416	-578.4	**2017-18**	156007.5	5217.703	3007.307
2006-07	42947.06	389.68	153.25	39037.61	-363.99	-279.591	**2018-19**	166641.2	5725.129	3306.116
2007-08	49870.9	406	178.36	49671.24	143.437	19.21796	**2019-20**	177274.8	6232.556	3604.925
2008-09	56300.63	459.18	211.55	60304.87	650.8636	318.0269	**2020-21**	187908.4	6739.982	3903.734
2009-10	64778.28	573.01	296.43	70938.5	1158.29	616.8358	**2021-22**	198542	7247.409	4202.543
2010-11	77841.16	710.42	360.55	81572.13	1665.717	915.6447	**2022-23**	209175.7	7754.836	4501.352
2011-12	87363.29	1124.88	593.91	92205.76	2173.143	1214.454	**2023-24**	219809.3	8262.262	4800.161
2012-13	99440.13	1644.61	900.37	102839.4	2680.57	1513.263	**2024-25**	230442.9	8769.689	5098.97
2013-	112335.	2272.6	1306.3	113473	3187.99	1812.07	**2025-26**	241076.6	9277.115	5397.778

14	2	4	5		6	1				
2014-15	124679.6	2784.68	1599.51	124106.6	3695.423	2110.88	**2026-27**	251710.2	9784.542	5696.587
2015-16	137640.4	5399.56	3203.76	134740.3	4202.85	2409.689	***SOURCE:RBI AND COMPUTED***			
2016-17	152537	6847.33	3830.89	145373.9	4710.276	2708.498				

TABLE 3

NATION GROSS DOMESTIC PRODUCT AND NPA FORECASTING OF PRIVATE SECTOR BANKS- *RS. In Billion*

YEAR	**GDP**	**GROSS NPA**	**NET NPA**	**GDP TREND VALUE**	**GROSS NPA TREND VALUE**	**NET NPA TREND VALUE**	**FORCAST YEAR**	**GDP FORECAST VALUE**	**GROSS NPA FORECAST VALUE**	**NET NPA FORECAST VALUE**
2005-06	36933.69	75.99	31.7	28403.99	-24.5212	-30.2129	**2017-18**	156007.5	621.5232	288.5008
2006-07	42947.06	91.45	40.28	39037.61	29.31587	-3.65347	**2018-19**	166641.2	675.3602	315.0602
2007-08	49870.9	129.22	56.47	49671.24	83.1529	22.906	**2019-20**	177274.8	729.1972	341.6197
2008-09	56300.63	167.87	74.12	60304.87	136.9899	49.46548	**2020-21**	187908.4	783.0343	368.1792
2009-10	64778.28	173.07	65.06	70938.5	190.827	76.02495	**2021-22**	198542	836.8713	394.7387
2010-11	77841.16	179.05	44.32	81572.13	244.664	102.5844	**2022-23**	209175.7	890.7083	421.2981
2011-12	87363.29	182.1	44.01	92205.76	298.501	129.1439	**2023-24**	219809.3	944.5453	447.8576
2012-13	99440.13	203.82	59.94	102839.4	352.338	155.7034	**2024-25**	230442.9	998.3824	474.4171
2013-14	112335.2	241.84	88.62	113473	406.1751	182.2629	**2025-26**	241076.6	1052.219	500.9766

2014-15	124679.6	336.9	141.28	124106.6	460.0121	208.8223	**2026-27**	251710.2	1106.056	527.536
2015-16	137640.4	558.53	266.77	134740.3	513.8491	235.3818	***SOURCE:RBI AND COMPUTED***			
2016-17	152537	919.15	477.8	145373.9	567.6862	261.9413				

TABLE 4

REGRESSION ANALYSIS: GDP VERSUS GROSS NPA OF SCHEDULED COMMERCIAL BANKS

ANALYSIS OF VARIANCE

Source	DF	SS	MS	F	P	S /NS
Regression	1	13412970669	13412970669	44.58	0.000	S
Residual Error	10	3008950738	300895074			
Total	11	16421921407				

The regression equation is :GDP = 54032 + 14.5 Gross NPA

TABLE 5

REGRESSION ANALYSIS: GDP VERSUS NET NPA OF SCHEDULED COMMERCIAL BANKS

ANALYSIS OF VARIANCE

Source	DF	SS	MS	F	P	S /NS
Regression	1	13415822121	13415822121	44.63	0.000	S
Residual Error	10	3006099286	300609929			
Total	11	16421921407				

The regression equation is: GDP = 56362 + 25.4 Net Npa

TABLE 7

REGRESSION ANALYSIS: GDP VERSUS GROSS NPA OF PUBLIC SECTOR BANKS

ANALYSIS OF VARIANCE

Source	DF	SS	MS	F	P	S /NS
Regression	1	13426469681	13426469681	44.82	0.000	S
Residual Error	10	2995451726	299545173			
Total	11	16421921407				

GDP = 55516 + 16.3 Gross NPA

TABLE 8

REGRESSION ANALYSIS: GDP VERSUS NET NPA OF PUBLIC SECTOR BANKS

Analysis of Variance

Source	DF	SS	MS	F	P	S /NS
Regression	1	13615624753	13615624753	48.52	0.000	S
Residual Error	10	2806296653	280629665			
Total	11	16421921407				

The regression equation is GDP = 56832 + 28.2 Net Npa

TABLE 9

REGRESSION ANALYSIS: GDP VERSUS GROSS NPA OF NEW PRIVATE SECTOR BANKS

ANALYSIS OF VARIANCE

Source	DF	SS	MS	F	P	S /NS
Regression	1	13426469681	13426469681	44.82	0.000	S
Residual Error	10	2995451726	299545173			
Total	11	16421921407				

GDP = 55516 + 16.3 Gross NPA

TABLE 10

REGRESSION ANALYSIS: GDP VERSUS NET NPA OF NEW PRIVATE SECTOR BANKS

ANALYSIS OF VARIANCE

Source	DF	SS	MS	F	P	S /NS
Regression	1	13615624753	13615624753	48.52	0.000	S
Residual Error	10	2806296653	280629665			
Total	11	16421921407				

The regression equation is GDP = 56832 + 28.2 Net Npa

1.6 MAJOR INFERENCE: NATION GROSS DOMESTIC PRODUCT AND NPA FORECASTING OF SCHEDULED COMMERCIAL BANKS IN INDIA

It is observed form the analysis that the GDP of the nation is 36933.69 billion in the year 2005-06 and it reached 152537 billion during the year 2016-17 which is a steady increase throughout the selected years and it is also observed form the analysis that gross NPA of scheduled commercial banks started increasing from 517.53 billion to 7902.68 during the year 2016-17 and in the case of Net NPA it started with the value of 185.43 billion during the year 2005-06 and increased to 4330.1 in the year 2016-17. With the help of linear trend model trend value and forecasting of predicted growth of GDP and Net NPA AND GROSS NPA is also tabulated for the projection period 2017-18 to 2026-26 . In order to find the relationship between nation GDP and GROSS and NET NPA of scheduled commercial banks ANOVA Is employed. The result of ANOVA shows there is a significance relationship between National GDP and GROSS and NET NPA of scheduled commercial banks In India.

1.7 NATION GROSS DOMESTIC PRODUCT AND NPA FORECASTING OF PUBLIC SECTOR BANKS IN INDIA

It is observed form the analysis that the GDP of the nation is 36933.69 billion in the year 2005-06 and it reached 152537 billion during the year 2016-17 which is a steady increase throughout the selected years and it is also observed form the analysis that gross NPA of public sector banks started increasing from 421.17 billion to 6847.33 during the year 2016-17 and in the case of Net NPA it started with the value of 145.66 billion during the year 2005-06 and increased to 3830.89 in the year 2016-17. With the help of linear trend model trend value and forecasting of predicted growth of GDP and Net NPA and Gross Npa is also tabulated for the projection period 2017-18 to 2026-26 . In order to find the relationship between nation GDP and GROSS and NET NPA of public sector banks ANOVA Is employed. The result of ANOVA shows there is a significance relationship between National GDP and GROSS and NET NPA of Public sector banks In India.

1.8 NATION GROSS DOMESTIC PRODUCT AND NPA FORECASTING OF PRIVATE SECTOR BANKS IN INDIA

It is observed form the analysis that the GDP of the nation is 36933.69 billion in the year 2005-06 and it reached 152537 billion during the year 2016-17 which is a steady increase throughout the selected years and it is also observed form the analysis that gross NPA of private banks started increasing from 75.99 billion to 919.15 during the year 2016-17 and in the case of Net NPA it started with the value of 31.7 billion during the year 2005-06 and increased to 477.8 in the year 2016-17. With the help of linear trend model trend value and forecasting of predicted growth of GDP and Net NPA AND GROSS NPA is also tabulated for the projection period 2017-18 to 2026-26 . In order to find the relationship between nation GDP and GROSS and NET NPA of private sector banks ANOVA Is employed. The result of ANOVA shows there is a significance relationship between National GDP and GROSS and NET NPA of private sector banks In India.

1.9 CONCLUSION:

Public Sector Banks, which currently account for more than 78 percent of total banking industry assets are saddled with NPAs, falling revenues from traditional sources, lack of modern technology and a massive workforce while the new private sector banks are forging ahead and rewriting the traditional banking business model by way of their sheer innovation and service and adoption of modern technology. The best indicator for the health of the banking industry in a country is its level of Nonperforming assets. NPAs generally give the impression that banks have strengthened their credit appraisal process over the years and NPAs involves the necessity of provisions, which bring down the overall profitability of banks. The Indian banks are facing a serious problem of NPA. The magnitude of NPAs is comparatively higher in public sectors banks. For better efficiency and profitability of banks the NPAs needs to be reduced and controlled.The present study clearly revels that there is significant association between NPA and GDP of the nation during the study period.

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