# TRENDS IN NON-PERFORMING ASSETS OF PUBLIC SECTOR BANKS

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Abstract: The present study is carried out with the major objective of analysing the trends in NPAs of Public sector banks by using secondary data collected from website of Reserve Bank of India under the reports on Trends and Progress of Banking in India for a period of 16 years. The collected data were analysed using statistical tools such as percentages, growth rates, correlation and regression. The analysis found that PSBs had witnessed marginal fall in the share of standard assets by 0.6 per cent, substandard assets by 0.1 per cent and loss assets by 0.4 per cent. NPA of PSBs had increased by a whopping 12.11 times during 2002-17. PSBs share in total NPA of the system had increased by 6.9 per cent during the period of study. Among all the bank groups PSBs alone had recorded a rise in the GNPA ratio during the study period. In order to ascertain the extent of relationship between gross NPAs of different bank groups, Karl Pearson's co-efficient of correlation is calculated. It is found that a positive correlation exists between the Gross NPAs of PSBs and SCBs and the extent of relationships is 0.984. The regression analysis points out that NPA of SBI group and other Nationalised Banks have a significant positive impact on the level of gross NPA of all banks in India.

Keywords: NPA, Loan Assets, Advance and Gross NPA, Public Sector Banks

#### INTRODUCTION

A bank is an institution which deals in money and credit. Thus, bank is an intermediary which handles other people's money both for their advantage and to its own profit. But bank is not merely a trader in money but also an important manufacturer of money. In other words, a bank is a factory of credit. The primary function of every bank is to accept deposits and lending money. Among the primary functions, lending of money to public creates lots of risk to the banker. The default in repayment of money by the customer leads to the formation of Non- Performing Assets (NPA) in Banks. A Non-Performing Asset (NPA) is a loan or advance for which the principal or interest payment remained overdue for a period of ninety days. Based on the period of NPA, it is classified as substandard assets, doubtful

ISSN: 2278-6236

assets and loss assets. The level of NPAs is an indicator of the efficiency of banker's credit risk management and efficiency of resource allocation to productive sectors. The Reserve Bank of India, in its annual reports related to banks pointed out that the NPAs still pose a significant threat to the banking sector. An NPA account not only reduces profitability of banks by provisioning in the profit and loss account, but their carrying cost is also increased which results in excess and avoidable management attention. Apart from this, a high level of NPA also puts strain on a bank's net worth because banks are under pressure to maintain a desired level of Capital Adequacy and in the absence of comfortable profit level. Banks eventually look towards their internal financial strength to fulfil the norms thereby slowly eroding the net worth. Hence there need more concentration on NPAs of Banks in order to improve its efficiency in operation and also to increase its profitability.

# STATEMENT OF THE PROBLEM

Credit creation is an important function of commercial banks. The credits are created from the deposits made by the customers of banks. But the risk involved in the delivery of credit is the non-repayment of money by customers. The practice o non repayment leads to the formation of NPA in the banks. NPA affect the operational efficiency, there by create an adverse impact on the profitability, liquidity and solvency of banks (Michael, et al 2006)<sup>1</sup>. Consequences of NPA are manifold such as reduction in interest income, increased provisions, strained profitability, inability to meet rising cost, stresses on Net Interest Margin (NIM) bringing down competitiveness, gradual depletion of capital and obstacles in capital augmentation (Batra, 2003)<sup>2</sup>. The problems of asset quality could be contagious because the down side impact of loan losses can quickly spread to earnings, capital and liquidity. They will be insidious too since it will be difficult to recognize the problem instantly. Further these problems will make the weak banks as prey, which are more easily assailable with a lean capital base to absorb unexpected losses<sup>3</sup>.

Improper management of NPA may lead to bank failures. Empirical evidence denotes that globally bank failures and deteriorating asset quality of banks are inter linked (Chijorgia, 2000 and Dash, et al, 2010)<sup>4...</sup> As a consequence, banking crises may follow, which may bloat as financial crises. In other words though financial crises tend to arise primarily due to poor macroeconomic fundamentals, decline in asset quality may be a vital cause (Bovio and Love, 2002)<sup>5</sup>. The issue assumed much significance after the emergence of the Sub Prime Crisis of

ISSN: 2278-6236

2008, marked by the failure of reputed banks in USA and the subsequent bail outs. In the Indian context too, empirical evidence points out that asset quality is a major determinant of credit, apart from deposits and rate of interest (RBI, RCF, 2006-08)<sup>6</sup>.

Banks are playing a stellar role in the Indian financial system with a market share 63 per cent of total financial assets in the economy (D.Subbaro 2013)<sup>7</sup>. In the post reform period, the credit allocation process of banks has been changed much, with greater role for market forces as against micro management of credit in earlier years. Profile of borrowers/products of credit and pricing of credit have also been transformed much. With more freedom in operations and entry of new players both from the banking and non banking segments, competitiveness of Indian banks have improved a lot.

In order to keep a close watch on the financial health of the banks and to identify the problems if any at an early stage, the RBI launched a Structured Intervention System called as Prompt Corrective Action (PCA) in 2003. It focused on three indicators viz., Capital to Risk Assets Ratio (Capital adequacy) Net NPA to Net Advances (Asset quality) and Return on Assets (Profitability). An analysis of PCA exercises conducted by the RBI reveals that

- Capital to Risk Asset Ratio of Banks rose to 12.8 per cent in 2005 from 10.05 in 1997.
- From 0.67 per cent, the return on assets increased to 0.91per cent during 1997-2005.
- Asset quality had improved as the Net NPA ratio had fallen from 8.1 per cent in 1997 to 2 per cent in 2005 (Ghosh, Arpita)<sup>8</sup>.

The improvement in performance continued till the global financial crisis of 2008 with the capital adequacy ratio, return on assets and Net NPA ratio improving to 13 per cent, 1 per cent, and 1.01 per cent respectively.

In the period immediately following the global financial crises, Indian banks exhibited remarkable resilience as against the serious impairment in the asset quality suffered by banks in advanced and emerging economies (RBI, 2011-12)<sup>9</sup> But in recent years, particularly since 2012, asset quality of Indian Bank is worser than its counter parts in other countries as put forth by Table. 1

Financial Stability Reports of RBI released during December 2011 and 2013 reported that risk dimensions of all Banks Stability Indicators had shown continuous vulnerabilities in the

ISSN: 2278-6236

aftermath of the urgent need to address the problem of rising NPAs; the daunting task being resolving the problems arising out of billowing NPA of PSBs.

The problems of deteriorating asset quality, especially of PSBs have attracted lot of media attention too. Moody's Investors service downgraded its outlook on the financial credentials of SBI, the market leader of the Sector from stable to Negative (Economic times 2013)<sup>10</sup>

Table 1 Ratio of Bank Non-Performing Loans to Total Loans (%)

Country	2010	2011	2012	2013	2014	2015	
Advanced Economies							
Australia	2.1	2.0	1.8	1.5	1.1	1.0	
Canada	1.2	0.8	0.7	0.6	0.5	0.5	
France	3.8	4.3	4.3	4.5	4.2	4.0	
Germany	3.2	3.0	2.9	2.7	2.3	-	
Greece	9.1	14.4	23.3	31.9	33.8	34.7	
Italy	10.0	11.7	13.7	16.5	18.0	18.0	
Japan	2.5	2.4	2.4	2.3	1.9	1.6	
Spain	4.7	6.0	7.5	9.4	8.5	6.3	
United Kingdom	4.0	4.0	3.6	3.1	1.8	1.4	
United States	4.4	3.8	3.3	2.5	1.9	1.5	
<b>Emerging and Develo</b>	ping Econor	nies					
Brazil	3.1	3.5	3.4	2.9	2.9	3.3	
China	1.1	1.0	1.0	1.0	1.1	1.5	
India	2.4	2.7	3.4	4.0	4.3	5.9	
Russia	8.2	6.6	6.0	6.0	6.7	8.3	
South Africa	5.8	4.7	4.0	3.6	3.2	3.1	

Source: Financial Stability Tables, April 2016 Database, IMF

Higher NPA level of PSBs have also made its deposits and bonds as ineligible investments not fulfilling the criteria for safety as per the guidelines of Employers' Provident Fund Organization (EPFO). As a result, the PSBs had lost an opportunity of funds inflow from EPFO to the tune of Rs. 50,000/- crore.

Hence the present study focus on the "Trends in Non Performing Assets of Public Sector Banks"

#### **OBJECTIVES OF THE STUDY**

- To identify the trends in NPA level of Public Sector Banks
- To compare the trend in the NPA of PSBs with that of its counterparts
- To analyse the composition of loan assets of PSBs.

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### **METHODOLOGY**

The study is based on secondary data collected from the website of Reserve Bank of India under report on Trends and Progress of Banking in India for a period of 16 years from 2002 to 2017. The collected data are analysed using statistical tools such as percentages, growth rates, correlation and regression.

## DATA INTERPRETATION AND DISCUSSION

This part of the study deals with discussion of results and its interpretation.

Gross NPA of PSBs during 2002-2017

Gross non-performing assets are a term used by financial institutions to refer to the sum of all the unpaid loans which are classified as non-performing loans. The gross NPA includes sub standard assets, doubtful assets and loss assets. The following Table deals with the Gross NPA of Public Sector Banks from 2002 to 2017.

**Table 2 Gross NPA of PSBs** 

Year	Gross NPA (Amount In Rs. billion)	Incremental Gross NPA	Growth rate (in per cent)	Gross NPA as percentage of Gross Advances	Gross NPA as percentage of Total Assets
2002	565	18.0	3.3	11.1	4.9
2003	541	-24	-4.2	9.4	4.2
2004	515	-26	-4.7	7.8	3.5
2005	484	-31	-6.1	5.5	2.7
2006	414	-70	-14.5	3.6	2.1
2007	390	-24	-5.8	2.7	1.6
2008	405	15	3.8	2.2	1.3
2009	450	45	11.1	2.0	1.2
2010	599	150	33.3	2.2	1.3
2011	746	147	24.5	2.2	1.4
2012	1125	379	50.8	2.9	1.9
2013	1645	520	46.2	3.6	2.4
2014	2273	628	38.2	4.4	2.9
2015	2785	512	22.5	5.0	3.2
2016	5400	2615	93.9	9.3	-
2017	6847	1447	26.8	11.7	-
Average	1574	3934	19.9	5.4	2.5

**Source:** Reports on Trend and Progress of Banking in India, RBI, various years

An analysis of the trend points out that NPA of PSBs had increased by a whopping 12.11 times during 2002-17. Their average volume of Gross NPA stood at Rs, 1574 billion. In 2002, PSBs had accumulated NPA for Rs. 565 billion representing 11.1 per cent of total advances

ISSN: 2278-6236

and 4.9 per cent of total assets. In the subsequent years, volume of NPAs of PSBs had dipped and reached the level of 390 billion in 2007. This reduction may be ascribed to a series of reform measures introduced in the banking system. Banks were offered a menu of options to manage the problem of NPA. These included increased usage of Debt Recovery Tribunals,Lok Adalats, Asset Reconstruction Companies, Corporate Debt Restructuring and the SARFAESI Act, 2001.Moreover banks were granted freedom to buy or sell NPA.But the NPA of PSBs had registered a reverse trend since 2008. From Rs. 390 billion in 2007, the amount of NPA magnified many times and reached to Rs. 6847 billion in 2017. The rise in the level of NPAwas very steep since 2012 and size of NPA of PSBs had been very large from 2015 onwards. Such alarming figures of NPA can be associated with factors such as spill over effects of global recession, sluggish domestic economy and poor performance of the corporate borrowers.

Share of PSBs in the total GNPA of the system

Table 3 Share of PSBs in the total GNPA of the system

	PSI	Bs	OPS	Bs	NPS	Bs	F	Bs	All Banks
Year	GNPA (Rs in billion)	Per cent to Total GNPAs	GNPA (Rs in billion)	Per cent to Total GNPAs	GNPA (Rs in billion)	Per cent to Total GNPAs	GNPA (Rs in billion)	Per cent to Total GNPAs	GNPA (Rs in billion
2002	565	79.6	46	6.5	70	9.9	28	3.9	710
2003	541	75.4	43	6.2	75	14.2	29	4.2	688
2004	515	79.4	44	6.8	60	9.2	30	4.6	649
2005	484	81.1	42	7.2	46	7.8	23	4.0	587
2006	414	80.8	37	7.3	40	7.9	21	4.0	512
2007	390	76.6	30	5.9	63	12.5	24	4.9	505
2008	405	71.1	26	4.6	104	18.7	31	5.6	565
2009	450	64.5	31	4.5	139	20.3	73	10.7	693
2010	599	70.8	36	4.3	140	16.5	71	8.4	847
2011	746	76.3	37	3.8	145	14.8	51	5.2	979
2012	1125	82.6	42	3.0	143	10.1	63	4.4	1421
2013	1645	84.8	52	2.8	156	8.0	80	4.3	1932
2014	2273	86.2	60	2.2	183	6.93	116	4.3	2634
2015	2785	86.1	92	2.8	245	7.19	108	3.3	3233
2016	5400	88.2	118	1.9	440	7.19	158	2.5	6116
2017	6847	86.5	932*	NA	NA	11.8	136	1.7	7918
Average	1574	79.4	104	4.7	137	11.43	65	4.8	1874

**Source:** Reports on Trend and Progress of Banking in India, RBI, various years

ISSN: 2278-6236

PSBs share a heavy burden of NPA among different bank groups. Its share in total NPA of the system had increased by 6.9 per cent during the period of study .Its average share is identified at 79.4 per cent during 2002-2017. PSBs' share of GNPA in the total GNPAs of the system had exceeded 80 per cent in half of the study period (8 years); it was more than 70 per cent in all years of the study period except in 2009.During 2004-2009 (comprising of mostly pre crisis years) the share of GNPA of PSBs had fallen by 16.6 per cent.Old Private Sector Banks (OPSBs) too witnessed a fall in their share of GNPA during 2004-2009 by 2.77 per cent.Conversely the share of GNPAs of New Private Sector Banks (NPSBs).and foreign banks had increased by 12.5 per cent and 6.7 per cent respectively during 2004-2009.During 2010-2017, PSBs registered substantial increase in their share of GNPA (15.7 per cent) while the other three segments managed to decrease their shares of GNPA.

Gross NPA Ratios of PSBs Vs other segments of the industry

Table 4 Gross NPA of PSBs Vs other segments of the industry

Vasu	All Banks	PSBs	PVSBs	FBs
Year	(in percent)	(in per cent)	(in percent)	(in per cent)
2002	10.4	11.1	10	5.5
2003	9.1	9.4	9.5	5.3
2004	7.2	7.8	6.3	4.8
2005	4.9	5.4	4.5	3.0
2006	3.3	3.7	3.1	2.1
2007	2.5	2.7	2.5	1.9
2008	2.3	2.2	2.4	1.9
2009	2.3	2.0	2.8	4.3
2010	2.4	2.2	2.6	4.3
2011	2.3	2.2	2.2	2.5
2012	2.8	3.0	1.9	2.7
2013	3.2	3.6	1.9	3.0
2014	3.8	4.4	1.8	3.9
2015	4.3	5.0	2	3.2
2016	7.5	9.3	1.4	4.2
2017	9.3	11.7	2.2	3.9
Average	4.9	5.4	3.6	3.5

Source: Reports on Trend and Progress of Banking in India, RBI, various years

In accordance with the trend in the volume of gross NPA, the GNPA ratio of PSBs had abated till 2009. During 2011-2017 its ratios were swelling i.e., from 2.2 per cent in 2011 to 11.7 per cent 2017. Among all the bank groups PSBs alone had recorded a rise in the GNPA ratio during the study period. GNPA ratio of ASCBs, Private Sector Bank and Foreign Banks had

ISSN: 2278-6236

registered a fall of 1.1 per cent, 7.8 per cent and 1.6 per cent respectively. Similarly PSBs had the highest average GNPA ratio of 5.4 per cent among all bank groups. The relevant figures for ASCBs, PVSBs and Foreign Banks stood at 4.9 per cent, 3.6 per cent and 3.5 per cent respectively.

# Overall growth rates of GNPA

Overall growth rates of GNPAs are compared with those of other segments during three different phases as presented in Table 5

Table 5Overall growth rates of GNPA

Bank Groups	2002-2006	2007-09	2010-17
Public Sector Banks	(-)36.5	13.3	91.3
Old Private Sector Banks	(-)24.3	3.2	69.5
New Private Sector Banks	(-)75	54.6	68.2
Foreign Banks	(-)33	67.1	47.8
All Scheduled Commercial Banks	38.7	26.1	89.3

**Source:** Reports on Trend and Progress of Banking in India, RBI, various years

The Table reveals that during 2002-2007, GNPA of PSBs was reduced by 36.5 per cent. This reduction in growth rate of GNPA of PSBs is the second best reduction, preceded by New Private banks with a reduced growth rate of 75 per cent. In 2007-2009 (post crisis years) PSBs were ahead of all segments except old private banks with an overall growth rate of 13.3 per cent. In the phase of 2010-2017, PSBs had suffered severe setback with their additions to NPAs growing at 91.3 per cent, the highest among the various groups.

#### Test of Correlation for Gross NPAs

In order to ascertain the extent of relationship between gross NPAs of different bank groups, Karl Pearson's co-efficient of correlation is calculated. The test result is summarised in the following Table.

Table 6 Correlation Coefficient (based on Gross NPA statistics 2000-01 to 2011-12)

Bank Groups	Nationalized Banks	Public Sector	Foreign Banks	Private Sector	All SCBs
	banks	Banks	Danks	Banks	Jebs
SBI &Associates	0.944*	0.985*	0.656**	0.688**	0.988*
Nationalized Banks		0.989*	0.456	0.517	0.944*
Public Sector Banks			0.554	0.604**	0.984*
Foreign Banks				0.885*	0.691**
Private Sector Banks					0.753*

Researchers' own computation

ISSN: 2278-6236

(\*) denotes significance at 01 per cent.

# (\*\*) denotes significance at 05 per cent.

It could be inferred from the table that a positive correlation exists between the Gross NPAs of PSBs and SCBs and the extent of relationships is 0.984. The positive correlation between the GNPAs of SBI group and all SCBs is identified at 0.988. There exists a positive correlation between the GNPAs of nationalised banks and ASCBs with the r being 0.988. The relationship between different bank groups in terms of NPAs is influenced by the ownership of banks; a significant correlation is noticed between SBI group and nationalised banks as well as between private banks and foreign banks. But the correlation between public sector and private sector banks does not show much significance.

# Gross NPA – Regression Analysis

The correlation analysis has pointed out the extent of significance of relationship between different bank groups. The researcher has formulated a regression equation for further analysis. The equation views that the gross NPAs of SCBs is a function of gross NPAs of PSBs (SBI group and Nationalised Banks). It is stated as under:

$$X_{ASCB} = f(X_{SBI} X_{NAT})$$

The Run of the regression equation was preceded by the multi co linearity test by using the Tolerance and Variance Influence factor identified at 9.081 and 0.110 respectively. Results are summarised in Table 7

Table 7 Linear Multiple Regression Coefficient with Dependent variable as Gross NPA of all SCBs

Variables				
X <sub>SBI</sub>	2.107*			
X <sub>NAT</sub>	0.219			
Constant	15.487*			
Adjusted R Square	0.976			
F Statistics	220.491*			

Researchers' own computation

# (\*) denotes significance at 01 per cent.

Table 7 points out that NPA of SBI group and other Nationalised Banks have a significant positive impact on the level of gross NPA of all banks in India. The relationship between gross NPA of SBI group and ASCBs is statistically significant i.e., Gross NPA of ASCBs (dependent variable) depends up on the behaviour of gross NPA of SBI group (explanatory

ISSN: 2278-6236

variable) to a statistically significant extent. Though there is a positive influence of the gross NPA of Nationalised Banks on the level of gross NPA of ASCBs, such a relationship is found to be statistically insignificant. Thus one can conclude that SBI being the market leader is a strong force in the Indian banking system.

#### Net NPA of PSBs

Net NPA refers to the difference between the amount of gross NPA and the amount of provision for NPA. It indicates the extent to which banks set aside a part of their profits

**Table 8 Net NPA of PSBs** 

	Net NPA	Ingramantal	Growth	Net NPA as	Net NPA as
Year	(Amount Rs.	Incremental Net NPA	Rate	percentage of	percentage of
	In billion)	NEL NPA	(in per cent)	Net Advances	<b>Total Assets</b>
2002	280	-0.2	-0.1	5.8	2.4
2003	249	-30.8	-11.0	4.5	1.9
2004	193	-55.4	-22.3	3.1	1.3
2005	169	-24.3	-12.6	2.1	1.0
2006	146	-23.4	-13.8	1.3	0.7
2007	151	5.8	4.0	1.1	0.6
2008	178	26.9	17.8	1.0	0.6
2009	212	33.2	18.6	-0.9	0.6
2010	294	82.2	38.9	1.1	0.7
2011	360	66.3	22.6	1.2	0.7
2012	593	233	64.7	1.5	1.0
2013	900	307	51.8	2.0	1.3
2014	1304	404	44.9	2.6	1.6
2015	1600	296	22.7	2.9	1.8
2016	3204	1604	100.3	5.7	3.5
2017	3831	627	19.6	6.9	NA
Average	854	222	21.6	2.6	1.3

Source: Reports on Trend and Progress of Banking in India, RBI, various years

Net NPA of PSBs had grown by 13.7 times during the period of study. This is in tune with the increase in the gross NPA of these banks by 12.1 times during the period. Net NPA ratio (Net NPA expressed as a percent of net advances) of PSBs had increased during the study period. It had gone up by 1.1per cent i.e., from 5.8 per cent to 6.9 per cent during 2002-2017. Similarly Net NPA as a percentage of total assets of PSBs is on the increasing trend during the study period, i.e., from 2.4 per cent it had moved to 3.5 per cent. These movements in the different dimensions of Net NPApoint out the constraints faced by PSBs in recovery of dues during the post crisis years.

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Net NPA of PSBs Vs Other segments of the industry

Table 9 compares the trends in the Net NPA ratio of PSBs with those of other bank groups

Table 9 Net NPAs of PSBs Vs Other segments of the industry

Vacu	All Banks	PSBs	PVSBs	FBs
Year	(in percent)	(in percent)	(in percent)	(in percent)
2002	5.5	5.8	6.1	1.9
2003	4.4	4.5	5.1	1.8
2004	2.8	3.1	3.1	1.5
2005	2.0	2.1	2.1	0.9
2006	1.2	1.3	1.3	0.8
2007	1.0	1.1	1.0	0.7
2008	1.0	1.0	1.0	0.8
2009	1.1	-0.9	1.2	1.8
2010	1.1	1.1	1.0	1.8
2011	1.0	1.2	0.6	0.7
2012	1.3	1.5	0.5	0.6
2013	1.6	2.0	0.7	1.0
2014	2.1	2.6	0.7	1.1
2015	2.4	2.9	0.9	0.5
2016	4.4	5.7	1.4	0.8
2017	5.3	6.9	2.2	0.6
Average	2.4	2.6	1.8	1.1

**Source:** Reports on Trend and Progress of Banking in India, RBI, various years

Average Net NPA ratio is the highest for PSBs (2.6 per cent) followed by private banks (1,8 per cent) and Foreign Banks(1.1 per cent). Net NPA ratio of private sector banks and Foreign Banks had shown downward trends during 2002-2016 as against the upward movement of Net NPA ratio of PSBs. The other divergent trends among bank groups are:

- During 2002-2006, NPA ratios of all segments move in tandem.
- During 2010-2016, gap between Net NPA ratios of PSBs and other groups began to widen.

Test of Correlation for Net NPA

Results of the test of correlation meant for assessing the extent of relationship between the Net NPA of different bank group is summarised in Table 10

Table 10 Coefficient of Correlation - Net NPA Bank-Group wise

Bank Groups	Nationalized Bank	Public Sector Banks	Foreign Banks	Private Sector Banks	All SCBs
SBI & Associates	0.879*	0.946*	0.438	0.238	0.970*
Nationalized Banks		0.988*	0.056	-0.049	0.957*

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Public Sector Banks		0.186	0.054	0.989*
Foreign Banks			0.816*	0.330
Private Sector				0.210
Banks				0.210

Researchers' own computation

### (\*) denotes significance at 01 per cent.

Significant positive correlation between Net NPAs of different bank groups is noticed in case of:

- Nationalised Banks and PSBs with r value of 0.988.
- ➤ SBI group and ASCBs with r value of 0.970 and
- PSBs and All Scheduled Commercial Banks with r value 0.989.

Similarly the extent of relationship between PSBs on the one side and Private Sector Banks and Foreign Banks on the other confirms the impact of bank ownership on the level of Net NPA of the system.

Net NPA of PSBs – Regression study

The researcher has framed a regression equation by expressing the net NPA of ASCBs as a function of Net NPA of PSBs. The equation is:

 $X_{ASCB} = f(X_{SBI}, X_{NAT})$ 

Table 11 Linear Multiple Regression Coefficients with Dependent variable as Net NPA of all SCBs

Independent Variables	
XSBI	1.712*
XNAT	0.687*
Constant	4074*
Adjusted R Square	0.981
F Statistics	318.420*

Researchers' own computation

Note: A single (\*) asterisk indicated that the coefficients denote significant at 01% level of significance.

The result of the regression study given in Table11 points out that net NPA of SBI group and Nationalised Banks strongly influence the level of NPA of ASCBs and the extent of dependence is statistically significant.

Loan assets of a bank can be segmented as standard assets, substandard assets, doubtful assets and loss assets. Gross NPA include substandard assets, doubtful assets and loss

ISSN: 2278-6236

assets. In other words the difference between total advances and gross NPA can be called as standard assets. Such classification of loan assets is an important yardstick for assessing theloan quality of banks. Table 12 exhibit the classification of loan assets of PSBs during the study period

Table 12 Classification of Loan Assets of PSBs (Rs. In Crore)

Year	Standard Assets		Sub-Standard Assets		Doubtful Assets		Loss Assets	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
2002	4529	88.9	157	3.1	336	6.6	70	1.4
2003	5237	90.6	149	2.6	323	5.6	68	1.2
2004	6104	92.2	169	2.6	287	4.3	58	0.9
2005	8379	94.6	110	1.2	308	3.5	59	0.7
2006	10926	96.4	113	1.0	246	2.2	55	0.5
2007	14262	97.4	143	1.0	198	1.4	48	0.3
2008	17786	97.8	173	1.0	192	1.1	40	0.2
2009	22378	98.0	203	0.9	206	0.9	41	0.2
2010	26735	97.8	288	1.1	254	0.9	58	0.2
2011	32718	97.8	350	1.1	332	1.0	65	0.2
2012	38255	97.0	623	1.6	490	1.2	60	0.2
2013	43957	96.4	815	1.8	761	1.7	68	0.2
2014	49887	95.6	958	1.8	1216	2.3	99	0.2
2015	53382	95.0	1054	1.9	1630	2.9	100	0.2
2016	52875	90.7	2005	3.4	3232	5.5	163	0.3
2017	51816	88.3	1731	3.0	4904	8.4	212	0.4
Average	54903	94.7	565	1.8	932	3.1	79	0.5

Source: Reports on Trend and Progress of Banking in India, RBI, various years

During the period of study PSBs had witnessed marginal fall in the share of standard assets by 0.6 per cent, substandard assets by 0.1 per cent and loss assets by 0.4 per cent. In contrast, the proportion of doubtful assets in the total loan assets of PSBs had increased by 1.8 per cent. The average share of standard assets stood at 94.7 per cent. Year wise trend in the share of standard assets shows mixed movements. During the pre-crisis period of 2002–2008, its share had risen to 97.8 per cent from 88.9 per cent. Even in the year of financial crisis i.e., 2008-2009 its share had marginally scaled by 0.2 per cent. From 2010 onwards there is a steady decrease in the share of standard assets and in 2017 its share had dropped below 90 per cent.

ISSN: 2278-6236

In case of substandard assets the proportion is falling from 2002 to 2009. Since 2010 its share had registered upward moments with a minor decline of 0.4 per cent noticed in 2017. Similar trend is discernible in case of substandard assets too. But among all categories of assets the share of substandard assets had increased steeply during 2013-2017.

### CONCLUSION

Public Sector Banks are the major players of the financial system. But the performances of such banks were affected by huge amount of NPAs. The rise in the level of NPAwas very steep since 2012 and size of NPA of PSBs had been very large from 2015 onwards. Such alarming figures of NPA can be associated with factors such as spill over effects of global recession, sluggish domestic economy, wilful defaults and poor performance of the corporate borrowers. Priority sector had contributed lower volume of NPA than non-priority sector in the total NPA of PSBs, in contrary to the popular perception. PSBs had generated much NPA from stressed sectors such as infrastructure, iron and steel, textiles etc., in the post crisis period PSBs resorted to the techniques of write off and restructuring in order to bring down the level of NPA. Hence, in order to reduce the level of NPA, the banks should make improvements in the appraisal standards and strengthen their credit department through better HRD practices.

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ISSN: 2278-6236