OF NOTIFICATION OF STATE OF ST

International Research Journal of Management and Commerce

ISSN: (2348-9766)

Impact Factor- 5.564, Volume 4, Issue 9, September 2017 **Website-** <u>www.aarf.asia</u>, **Email** : <u>editor@aarf.asia</u> , <u>editoraarf@gmail.com</u>

IMPACT OF NON-PERFORMING ASSETS (NPA) ON WORKING OF PUBLIC SECTOR BANKS': A BANK-WISE CASE STUDY

Avani Ojha¹, Hem Chandra Jha²

ABSTRACT

To determine impact of NPA on working of public sector banks' (PSBs), a research project was undertaken during FY 2016-17 and thereafter it was concluded that all public sector banks' had witnessed unprecedented growth in substandard, doubtful and loss assets. Gross advances were reduced and such downsized the credit-deposit ratio of the PSBs. Repayments of advances were poor and this had bad impact on net interest income and net interest margin (%) of PSBs. Moreover, the gross and net NPAs (in volume and percentage) of PSBs were increased and to combat this problem, banks' had to make more provisions for NPA which increased total expenses of PSBs. Accordingly, Yield average on advances (%) and average return on assets (%) had declined those resulted in very poor per employee profit as ₹-0.51 lacs. Ultimately, in comparison to net loss worth ₹ -16133 crores during last year 2015-16, PSBs earned a net profit worth ₹ 3435 crores this year 2016-17. However, keeping in view the huge total business had by these 21 PSBs during 2016-17 worth ₹ 1,29,59,113 crores, such a low net profit is never acceptable. Therefore, certainly this reflects the impact of NPA on working and profitability of PSBs.

Keywords: Impact, NPA, performance indicators, public sector banks', working

¹ Corresponding Author & Ph.D. Research Scholar, University Department of Commerce & Business Administration, Lalit Narayan Mithila University, Darbhanga-846004, Bihar,

² Associate Professor, Department of Commerce, Ganesh Dutt College, Begusarai-851101, Bihar, INDIA

Introduction

Non-Performing Assets

In the general term, an asset is classified as Non-performing Assets (NPA), if interest or installment payment of principal remain due and unpaid for more than 180 days. However, since March 2004, default status had to be given to a borrower, if dues are not paid for 90 days. If any advance or credit facility granted by a bank to a borrower becomes non-performing then the bank will have to treat all the advances and credit facilities granted to that borrower as non-performing regardless existence of some performing advances or credit facilities. As per guidelines of the RBI (1992), banks' in India must adopt the international banking norms on Income Recognition, Asset Classification, Provisioning and Capital Adequacy (Basu, 2005).

Public Sector Banks' in India

In term of businesses, the public sector banks' now have a dominant position. They amounted for 70.5% of assets, 73.9% of deposits, 72.7% of advances and 69.9% of investments of all scheduled commercial banks' as on 31st March 2017. The 21 nationalized banks' had 85018 offices all over the country. In recent years, in order to meet credit needs of weaker sections, artisans, small and marginal farmers' etc., regional rural banks' were set-up in different parts of the country. On June 30, 2017 their branches numbered to 24,524 (RBI, 2017).

The public sector banks' (PSBs) in India have made significant contribution to almost all the sectors of the Indian economy such as agriculture, industries of various categories, trade, employment and infrastructure. The ever increasing trends in deposits and credits represents the performance of banks' in India. With over ₹ 7573085 crores as deposits and over ₹ 5237045 crores as loans on March 2017, the public sector banks' commands the heights of the Indian economy (RBI, 2017).

However, Non-Performing Assets (NPA) in credit portfolios in PSBs have become a serious issue since last two decades. NPA have not only affected the productivity and the profitability of banks' but also damaged the image of the Indian banking and a drain on the valued system of the society. Hence, the all-round cry is over the volume of NPA those have risen to an alarming level of over ₹ 330322 crores on March 2017 and this caused mainly because of wilful defaults on the part of the borrowers' (RBI, 2017).

Review of Literature

The non-performing assets (NPAs) engrossed the attention of researchers in the late 1980's when the necessity to transform the banking sector was felt in Indian economy.

Naidu, B.R. and Naidu, A.P.S. (2004) assessed the impact of NPA on the profitability of PSBs. The authors identified the diversion of funds as the number one reason for the NPA in the banking sector.

Gopalakrishnan, T.V. (2004), explained that NPA pose significant blow on the balance sheets and profitability of PSBs and high level of NPAs in bank books is a great risk to bank's health, stability, viability and soundness.

Basu, P. (2005) recommended various banking reforms, integration of best practices from abroad and the development of capital market to counteract the threat of financial distress.

Shiralashetu and Akash (2006) reported that the priority sector, in particular the SSI sector contributed NPA significantly and PSBs accounts for 91.07% of the total NPA of priority sector.

Chakrabarti, R. (2006) discussed the major contemporary issues on public sector bank performance, and the nature and management of NPAs in Indian commercial banking. The author briefed that Indian banking sector is suffering from considerable NPAs in their asset portfolio.

Vallabh, *et al.*, (2007) examined the impact of NPA on banks' macroeconomic factors and bank-specific parameters. The other notable observation is that the banks' exposure to priority sector lending reduces the NPA.

Rajeev (2008) analyzed the level of NPA and its relationship with key performance indicators in Indian banking. Inference based on analysis revealed that rural branches contribute more NPA in SSI sector. Regarding the generation of the NPA, the study pointed out that inadequate funds and higher amounts of accumulated NPAs resulted in the creation of the more NPA in SSI.

Dash, M.K. and Kabra, G. (2010) concluded that the commercial banks' that are aggressive and charge relatively higher interest rates incurred greater NPAs.

Faizanuddin, Md. and Mishra R.K. (2011) examined the dimensional approach of NPA in the banking system in India with special focus on State Bank of India, Patna Circle, Bihar. Findings and inferences based on analysis recommended major changes in the recovery policy, project financing norms, legal aspects and supervision of NPA accounts.

Prasad and Veena, D. (2011) recommended revitalizing the PSBs and incorporating the best practices in operations, technology and management to improve financial performance.

Siraj, K.K. and Pillai, P.S. (2011) recommended improvements in the management of the loan portfolio to withhold the impact created by the financial crisis.

Yadav, M.S. (2011) explained that the level of the NPAs of PSBs affected fifty percent profitability of the banks and its impact has increased at very large extent with other strategic banking variables in terms of business per employee and operating profit per employee.

Siraj, K.K. and Pillai, P.S. (2012) recognized that NPA remains a major threat and the incremental component explained through additions to NPA poses a great question mark on the efficiency of credit risk management practices of banks' in India.

Ahmad, *et al.*, (2013) concluded the causes for NPA in public sector banks'. Secondary data was collected for a period of five years and analysed by CAGR, average, ANOVA and banks' ranking. Banks' were ranked according to their performance to manage the NPA's.

Arora, N. and Ostwal, N., (2014) concluded that the NPA's are a big issue for the banks'. According to them, the financial companies and public sector banks' have higher NPA's as compared to Private sector banks'.

Satpal (2014) has made the proper definition of NPA and the factors responsible to NPAs, reasons for high values of NPA's and their impact on various banking systems.

Kavitha, *et al.*, (2016) concluded that the extent of NPA is comparatively very high in public sector banks' as compared to private banks'.

Singh, V. R., (2016) concluded that Non-Performing Assets have always created a big problem for banks' in India and the NPAs level of our banks' is still high as compared to the foreign banks'.

Statement of the problem

Adherence to newly defined prudential norms of accounting saw a heavy build-up of NPA portfolios in books of many banks'. In 1992, NPA were alarmingly high for most of the public sector banks' accounting for more than 80% of the banking business in the country. In case of some banks', ratio of NPA to capital funds was disturbingly high and it exceeded even to their net worth which undermined solvency (Aravanan, and Vijaykumar,

2007). As per latest report of the RBI, "Trends and Progress of Banking in India 2016-17" the Gross NPA of public sector banks' have increased from ₹5,02,068 (9.83%) crores in 2016 to ₹5,89,502 (11.82%) crores in 2017. So after publication of the Narasimham Committee Report (1991) profitability and its related issues including reduction of NPA received priority in the agenda of all public sector banks' in the country. (Joshi and Little, 1996).

Objectives of the study

The main objectives of the present study are under the following heads:

- 1. To undertake study regarding working mechanisms of Public Sector Banks'.
- 2. To study the impact of NPA on working of Public Sector Banks'.
- 3. To make analyses of the profitability of Public Sector Banks'.

Research Methodology

To achieve the stated objectives, data have been collected from various sources and include:-

- (1) Research reports, published articles, news reports and conference proceedings available in both national and international level related to NPA. The information obtained from these sources have been used for critical evaluation of the subject and identify research gap in the area of study.
- (2) Statistical Data on NPA, bank-specific and economic indicators during 2015-16 to 2016-17, have been collected mainly from the RBI and the SBI websites, websites of other public sector banks, Indian Banks Association, India Stat and Ministry of Finance.
 - (3) Unpublished reports on the above topic.

Results and Discussion

1.1: Impact of NPA on public sector banks' (2015-16 to 2016-17)

Table-1 represents various performance indicators as below:

Table elaborates that the quality of assets have been deteriorated in PSBs during this period. Doubtful-3 assets have badly deteriorated as 86.77% from ₹ 53370 crores to ₹ 99681 crores, followed by Doubtful-2 assets as 73.84% from ₹ 366671 crores to ₹ 637426 crores, Doubtful-1 assets as 34.87% from ₹ 384113 crores ₹ 518077

1	able-1: Overall performance of Public Sector	r Banks' (20	015-16 & 20	16-17)
Sl.	Performance indicators	2015-16	2016-17	% Change
1	Total Number of Branches	82764	85018	2.72
2	Total Number of Employees	775476	790204	1.89
3	Total Assets (₹ in Crores)	7819575	8849658	13.17
4	Total Business (₹ in Crores)	12438512	12959113	4.18
5	Per Employee Business Average (₹ in Crores)	15.64	15.82	1.15
6	Capital Adequacy Ratio (%) Average (Basel-III)	11.36	11.73	0.37
7	Total Deposits (₹ in Crores)	6988889	7573085	8.35
8	Cost of Deposit (%) Average	6.65	6.03	-0.62
9	Credit-Deposit Ratio (%) Average	79.9	70.59	-3.31
10	Total Gross Advances (₹ in Crores)	5464223	5237045	-4.15
11	Total Priority Sector Advances (₹ in Crores)	1502271	1589374	5.79
12	Total Substandard Assets (₹ in Crores)	465099	469164	0.87
13	Total Doubtful-1 Assets (₹ in Crores)	384113	518077	34.87
14	Total Doubtful-2 Assets (₹ in Crores)	366671	637426	73.84
15	Total Doubtful-3 Assets (₹ in Crores)	53370	99681	86.77
16	Total Loss Assets (₹ in Crores)	46617	53087	13.87
17	Total Gross NPA (₹ in Crores)	519778	623867	20.02
18	Gross NPA (%) Average	9.51	12.32	2.81
19	Total Net NPA (₹ in Crores)	280419	330322	17.79
20	Net NPA (%) Average	6.08	7.7	1.62
21	Total Provisions for NPA (₹ in Crores)	143110	152386	6.48
22	Total Income (₹ in Crores)	679457	713163	4.96
23	Total Net Interest Income (₹ in Crores)	457790	423802	-7.42
24	Net Interest Income (%) Average	8.25	7.4	-0.85
25	Total Other Income (₹ in Crores)	85882	114790	33.66
26	Other Income (%) Average	1.57	1.7	0.13
27	Total Expenses (₹ in Crores)	622502	637823	2.46
28	Cost to Income Ratio (%) Average	53.49	52.96	-0.53

34	Total Net Profit (₹ in Crores)	-16133	3435	121.29
33	Per Employee Profit Average (₹ in Lacs)	-1.11	-0.51	54.05
32	Total Operating Profit (₹ in Crores)	126982	149909	18.05
31	Average Return on Assets (%)	0.24	0.09	-0.15
30	Yield Average on Advances (%)	10.23	9.49	-0.74
29	Net Interest Margin (%) Average	2.34	2.28	-0.06

crores, Loss assets as 13.87% from ₹ 46617 crores to ₹ 53087 crores and Substandard assets as 0.87% from ₹ 465099 crores to ₹ 469164 crores.

Accordingly the situation of NPA has become more terrible. Gross NPA has been increased as 20.02% from ₹ 519778 crores to ₹ 623867 crores, Gross NPA (%) increased as 2.81% from 9.51 to 12.32, Net NPA increased as 17.79% from ₹ 280419 crores to ₹ 330322 crores, Net NPA (%) increased as 1.62% from 6.08 to 7.7. Due to such bad loans, Provisions for NPA has been increased as 6.48% from ₹ 143110 crores to ₹ 152386 crores. [8]

This all hampered the overall working of PSBs as Credit-Deposit ratio (%) has been decreased as -3.31% from 79.9 to 70.59, Gross advances decreased as -4.15% from ₹ 5464223 crores to ₹ 5237045 crores, Net interest income decreased as -7.42% from ₹ 457790 crores to ₹ 423802 crores, Net interest income (%) decreased as -0.85% from 8.25 to 7.4, Net interest margin (%) decreased as -0.06% from 2.34 to 2.28, Yield average on advances (%) decreased as -0.74% from 10.23 to 9.49, Average return on assets (%) decreased as -0.15% from 0.24 to 0.09.

Overall due to such negative impacts, total expenses of PSBs increased as 2.46% from ₹ 622502 crores to ₹ 637823 crores which adversely effected the per employee profit as ₹ - 0.51 lacs. However, Net profit have increased as 121.29% from ₹-16133 crores to ₹ 3435 crores, but keeping in view such a large transactions made by these 21 public sector banks' such a low cumulative net profit is not acceptable and this shows a picture of bad impacts of NPA on public sector banks' in India.

1.2: Impact of NPA on Allahabad Bank (2015-16 to 2016-17) [1]

Table-2A & 3A represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Total assets had declined by -1.03% (PSBs 13.17%), when substandard assets increased by 8.42% (PSBs 0.87%), Doubtful-1 assets increased by 43.17% (PSBs 34.87%),

Doubtful-2 assets increased by 48.63% (PSBs 73.84%), Doubtful-3 assets increased by 280.89% (PSBs 86.77%) and Loss assets increased by 234.5% (PSBs 13.87%).

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 34.47% (PSBs 20.02%), Gross NPA (%) increased by 3.33% (PSBs 2.81%), Net NPA increased by 30.51% (PSBs 17.79%), Net NPA (%) increased by 2.16% (PSBs 1.62%), similarly provisions for NPA has been increased by 16.67% (PSBs 6.48%).

This all hampered the overall working of the bank as total business of the bank had decreased by -0.45% (PSBs 4.18%), Credit-Deposit ratio (%) decreased by -0.4% (PSBs -3.31%), Net interest income decreased by -4.19% (PSBs -7.42%), Net interest income (%) decreased by -0.92% (PSBs -0.85%), Net interest margin (%) by -0.11% (PSBs -0.06%), Yield average on advances (%) decreased by -0.83% (PSBs -0.74%), Average return on assets (%) decreased by -0.20% (PSBs -0.15%).

TABLE-2A: PERFORMANCE INDICATORS OF PUBLIC SECTOR BANKS (2015-16)											
Performance	ALB	ANB	BOB	BOI	ВО	CAN	CBI	СО	DB	IB	
indicators					M			R			
Number of Branches	2962	2803	5330	4920	1895	5849	4624	2440	1846	2565	
Number of	2274	1865	5123	4618	1195	5400	3768	1956	1390	2014	
Employees	2	6	7	0	7	8	5	9	6	0	
Total Assets (₹ in	2404	2026	2274	6099	1609	5842	3066	1139	1334	1347	
Crores)	57	87	95	13	57	15	21	90	41	80	
Total Business (₹ in	3599	3106	9578	8709	2502	8045	4563	3454	2032	3109	
Crores)	74	73	08	35	30	06	36	93	42	18	
Per Empl. Business (₹	14.8	15.1	16.8	17.9	18.1	14.4	11.9	18.7	14.6	15.3	
in Cr.)	5	2		6	8	4	5	9	2	1	
CAR % (Basel-III)	11.0	11.5	13.1	12.0	11.2	11.0	10.4	10.5	11	13.2	
	2	8	7	1		8	1	6			
Total Deposits (₹ in	2006	1743	5740	5130	1389	4797	2661	2051	1174	1782	
Crores)	44	02	38	05	90	92	84	70	31	86	
Cost of Deposit (%)	6.61	7.18	5.08	5.25	6.75	6.31	6.86	7.51	7.2	6.76	
Credit-Deposit Ratio	79.4	78.2	78.2	72.8	80.0	68.6	71.4	68.3	69.1	73.3	
(%)	3		9	5	3	6	4	9		5	
Gross Adv. (₹ in Cr.)	1577	1363	4051	3579	1112	3247	1901	1403	8581	1326	
	07	71	26	30	40	15	52	22	1	32	

[©] Associated Asia Research Foundation (AARF)

(₹ in Cr.) 5 3 8 2 5 8 1 4 7 0 Substandard Assets (₹ 5356 in Cr.) 9 56 6 7 3 2104 2527 in Cr.) 9 56 6 7 3 3488 2482 in Cr.) 2 6 60 9 2 9 4282 in Cr.) 6 60 9 2 9 1928 3482 in Cr.) 6 2465 1169 1929 917 0 1773 658 211 in Cr.) 1843 2599 3186 2433 5442 0 3983 111 378 122 Gross NPA (₹ in Cr.) 1538 1144 4052 5178 1038 3163 2272 1454 8560 8827 Gross NPA (%) 9.76 8.39 9.99 13.0 9.34 9.4 11.9 9.98 6.66 Net NPA (%	Priority Sector Adv.	6269	2437	9217	8923	4148	1455	8277	5755	3411	4649
in Cr.) 9 56 6 7 3 Doubtful-I Assets (₹ in Cr.) 2 566 2576 1497 2280 8116 5377 1183 3488 2482 in Cr.) 6 6 60 9 2 9	(₹ in Cr.)	5	3	8	2	5	8	1	4	7	0
Doublful-I Assets (₹ 3617 2566 2576 1497 2280 8116 5377 1183 3488 2482 in Cr.)	Substandard Assets (₹	5356	3337	1156	1439	5342	1749	9396	6379	2104	2527
in Cr.) 2 6 60 9 2 9 1 Doubtful-2 Assets (₹ 5479 4328 in Cr.) 1654 2126 6237 5775 3 1928 3482 3	in Cr.)	9		9	56	6	7	3			
Doubtful-2 Assets (₹ 5479 4328 1654 2126 6237 5775 1928 3482 in Cr.	Doubtful-1 Assets (₹	3617	2566	2576	1497	2280	8116	5377	1183	3488	2482
in Cr.) 6 29 2 3 8 211 Doubtful-3 Assets (₹ in Cr.) 169 1929 917 0 1773 658 211 in Cr.) Loss Assets (₹ in Cr.) 1843 2599 3186 2433 5442 0 3983 111 378 122 Gross NPA (₹ in Cr.) 1538 1144 4052 5178 1038 3163 2272 1454 8560 8827 Gross NPA (%) 9.76 8.39 9.99 13.0 9.34 9.4 11.9 9.98 9.98 6.66 Net NPA (%) 9.76 8.39 9.99 13.0 2.94 11.9 9.98 9.98 6.66 Net NPA (%) 6.76 4.61 5.06 7.79 6.35 6.42 7.36 6.53 6.35 4.2 Provisions for NPA (₹ 4180 5394 1376 1410 3425 9608 4913 5378 1181 2926 in Cr.) 9	in Cr.)	2		6	60	9		2	9		
Doubtful-3 Assets (₹ 2465 1169 1929 917 0 1773 5 658 211 in Cr.)	Doubtful-2 Assets (₹	5479	4328		1654	2126	6237	5775		1928	3482
in Cr.) 9 5 1 Loss Assets (₹ in Cr.) 1843 2599 3186 2433 5442 0 3983 111 378 122 Gross NPA (₹ in Cr.) 1538 1144 4052 5178 1038 3163 2272 1454 8560 8827 Gross NPA (%) 9.76 8.39 9.99 13.0 9.34 9.4 11.9 9.98 9.98 6.66 Net NPA (₹ in Cr.) 1029 6035 1940 2799 6832 2096 1324 9160 5230 5419 Net NPA (₹ in Cr.) 1029 6035 1940 2799 6832 2096 1324 9160 5230 5419 Net NPA (%) 6.76 4.61 5.06 7.79 6.35 6.42 7.36 6.53 6.35 4.2 Provisions for NPA (₹ al80 5394 1376 1410 3425 9608 4913 5378 1181 2926 Gr.) 9<	in Cr.)	6			29	2		3			
Loss Assets (₹ in Cr.) 1843 2599 3186 2433 5442 0 3983 111 378 122 Gross NPA (₹ in Cr.) 1538 1144 4052 5178 1038 3163 2272 1454 8560 8827 Gross NPA (%) 9.76 8.39 9.99 13.0 9.34 9.4 11.9 9.98 9.98 6.66 Net NPA (₹ in Cr.) 1029 6035 1940 2799 6832 2096 1324 9160 5230 5419 Net NPA (%) 6.76 4.61 5.06 7.79 6.35 6.42 7.36 6.53 6.35 4.2 Provisions for NPA (₹ 4180 5394 1376 1410 3425 9608 4913 5378 1181 2926 in Cr.) 6 1 1 4 2 7 5 6 3 1 Net Interest Income (₹ in Cr.) 9 0 4 2 7 5 6 <td>Doubtful-3 Assets (₹</td> <td>2465</td> <td>1169</td> <td></td> <td>1929</td> <td>917</td> <td>0</td> <td>1773</td> <td></td> <td>658</td> <td>211</td>	Doubtful-3 Assets (₹	2465	1169		1929	917	0	1773		658	211
Gross NPA (₹ in Cr.) 1538 1144 4052 5178 1038 3163 2272 1454 8560 8827 Gross NPA (%) 9.76 8.39 9.99 13.0 9.34 9.4 11.9 9.98 9.98 6.66 Net NPA (₹ in Cr.) 1029 6035 1940 2799 6832 2096 1324 9160 5230 5419 Net NPA (%) 6.76 4.61 5.06 7.79 6.35 6.42 7.36 6.53 6.35 4.2 Provisions for NPA (₹ 4180 5394 1376 1410 3425 9608 4913 5378 1181 2926 in Cr.) 6 1 1 4 2 7 5 6 3 1 Total Income (₹ in 994 1919 4196 4576 1407 4889 2782 2114 1136 1825 Cr.) 9 0 4 2 7 5 6 3	in Cr.)				9			5			
Gross NPA (₹ in Cr.) 1538 1144 4052 5178 1038 3163 2272 1454 8560 8827 Gross NPA (%) 9.76 8.39 9.99 13.0 9.34 9.4 11.9 9.98 9.98 6.66 Net NPA (₹ in Cr.) 1029 6035 1940 2799 6832 2096 1324 9160 5230 5419 Net NPA (%) 6.76 4.61 5.06 7.79 6.35 6.42 7.36 6.53 6.35 4.2 Provisions for NPA (₹ al80 5394 1376 1410 3425 9608 4913 5378 1181 2926 in Cr.) 6 1 1 4 2 7 5 6 3 1 Net Interest Income (₹ in Cr.) 9 0 4 2 7 5 6 3 1 Net Interest Income (₹ in Cr.) 1 4 2 2 7 1 6 4	Loss Assets (₹ in Cr.)	1843	2599	3186	2433	5442	0	3983	111	378	122
Gross NPA (%) 4 4 1 1 5 7 1 4 4 Gross NPA (%) 9.76 8.39 9.99 13.0 9.34 9.4 11.9 9.98 9.98 6.66 Net NPA (₹ in Cr.) 1029 6035 1940 2799 6832 2096 1324 9160 5230 5419 Net NPA (%) 6.76 4.61 5.06 7.79 6.35 6.42 7.36 6.53 6.35 4.2 Provisions for NPA (₹ alwo sight of the control of the contr					1						
Gross NPA (%) 9.76 8.39 9.99 13.0 9.34 9.4 11.9 9.98 9.98 6.66 Net NPA (₹ in Cr.) 1029 6035 1940 2799 6832 2096 1324 9160 5230 5419 Net NPA (%) 6.76 4.61 5.06 7.79 6.35 6.42 7.36 6.53 6.35 4.2 Provisions for NPA (₹ d180 5394 1376 1410 3425 9608 4913 5378 1181 2926 in Cr.) 6 1 1 4889 2782 2114 1136 1825 Cr.) 9 0 4 2 7 5 6 3 1 Net Interest Income (₹ in Cr.) 1 4 2 2 7 1 6 4 Net Interest Income (₹ in Cr.) 1 4 2 2 7 1 6 4 Net Interest Income (₹ in Cr.) 6557 1564 <	Gross NPA (₹ in Cr.)	1538	1144	4052	5178	1038	3163	2272	1454	8560	8827
Net NPA (₹ in Cr.) 1029 6035 1940 2799 6832 2096 1324 9160 5230 5419 Net NPA (%) 6.76 4.61 5.06 7.79 6.35 6.42 7.36 6.53 6.35 4.2 Provisions for NPA (₹ 4180 5394 1376 1410 3425 9608 4913 5378 1181 2926 in Cr.) 6 1 1 3425 9608 4913 5378 1181 2926 in Cr.) 9 41919 4196 4576 1407 4889 2782 2114 1136 1825 Cr.) 9 0 4 2 7 5 6 3 1 Net Interest Income (₹ 4436 5320 4406 1172 1305 4402 2588 1941 1064 1624 in Cr.) 1 4 2 2 7 1 6 4 Net Interest Income (₹ in Cr.) 6557 1564 4999 3653 1019 4875 1938 7035 717<		4	4	1	1	5	7	1	4		
Net NPA (₹ in Cr.) 1029 6035 1940 2799 6832 2096 1324 9160 5230 5419 Net NPA (%) 6.76 4.61 5.06 7.79 6.35 6.42 7.36 6.53 6.53 4.2 Provisions for NPA (₹ 4180 5394 1376 1410 3425 9608 4913 5378 1181 2926 in Cr.) 6 1 1 1407 4889 2782 2114 1136 1825 1825 Cr.) 9 0 4 2 7 5 6 3 1 1 1 1407 4889 2782 2114 1136 1825 1825 Cr.) 9 0 4 2 7 5 6 3 1 1 1 1407 4889 2782 2114 1136 1825 1825 Cr.) 9 0 4 2 7 5 6 3 1 3 1 2 2 7 1	Gross NPA (%)	9.76	8.39	9.99	13.0	9.34	9.4	11.9	9.98	9.98	6.66
Net NPA (%) 6.76 4.61 5.06 7.79 6.35 6.42 7.36 6.53 6.35 4.2 Provisions for NPA (₹ 4180 5394 1376 1410 3425 9608 4913 5378 1181 2926 in Cr.) 6 1 1 5378 1181 2926 in Cr.) 2 Total Income (₹ in Cr.) 994 1919 4196 4576 1407 4889 2782 2114 1136 1825 67.) 2 5 6 3 1 1 Net Interest Income (₹ 4436 5320 4406 1172 1305 4402 2588 1941 1064 1624 in Cr.) 1 4 2 2 7 1 6 4 4 4 1 6 4 Net Interest Income (₹ in Cr.) 8.49 7.7 6.31 9.98 8.71 8.11 8.85 8.23 8.25 8.13 (%) 8.23 8.25 8.13 8.13 Other Income (₹ in Cr.) 6557 1564 4999 3653 1019 4875 1938 7035 717 1781 1781 781 781 Cr.) 0.86 8.15 0.72 1.54 0.68 0.9 0.66 8.21 0.68 0.89 Total Expenses (₹ in 2172 1523 5445 5209 1172 4175 2518 1805 1043 1499 (Cr.) 6 9 5 9 7 1 3 3 1 7 3 3 Cost to Income Ratio 47.0 42.4 50.3 39.1 52.1 50.6 70.6 48.2 71.0 51.3 (%) 6 9 5 9 7 1 3 3 1 7 3 5 Net Interest Margin 2.65 3.18 2.05 2.5 2.5 2.59 2.19 2.78 2.06 2.16 2.33					7			5			
Net NPA (%) 6.76 4.61 5.06 7.79 6.35 6.42 7.36 6.53 6.35 4.2 Provisions for NPA (₹ 4180 5394 in Cr.) 4180 5394 1376 1410 3425 9608 4913 5378 1181 2926 226 1 226 1 226 1 226 1 226 1 226 1 226 1 226 1 226 1 226 1 226 1 226 2 2 1 1 226 2 2 1 1 1 226 2 2 1 1 1 2 2 2 1 1 1 1 2 2 7 1 6 3 1 1 4 2 2 7 1 6 4 4 2 2 7 1 6 4 4 2 2 7 1 6 4 4 2 2 7 1 6 4 4 4 2	Net NPA (₹ in Cr.)	1029	6035	1940	2799	6832	2096	1324	9160	5230	5419
Provisions for NPA (₹ in Cr.) 4180 5394 1376 1410 3425 9608 4913 5378 1181 2926 Total Income (₹ in Cr.) 994 1919 4196 4576 1407 4889 2782 2114 1136 1825 Cr.) 9 0 4 2 7 5 6 3 1 Net Interest Income (₹ in Cr.) 1 4 2 2 7 1 6 4 Net Interest Income (₹ in Cr.) 8.49 7.7 6.31 9.98 8.71 8.11 8.85 8.23 8.25 8.13 (%) 0ther Income (₹ in Cr.) 6557 1564 4999 3653 1019 4875 1938 7035 717 1781 Cr.) 0ther Income (%) 0.86 8.15 0.72 1.54 0.68 0.9 0.66 8.21 0.68 0.89 Total Expenses (₹ in 2172 1523 5445 5209 1172 4175 2518 1805 1043 1499 Cr.) 6 9		2		6	6		7	2			
in Cr.) 6 1 4196 4576 1407 4889 2782 2114 1136 1825 Cr.) 9 0 4 2 7 5 6 3 1 Net Interest Income (₹ 4436 5320 4406 1172 1305 4402 2588 1941 1064 1624 in Cr.) 1 4 2 2 7 1 6 4 Net Interest Income (₹ in Cr.) 8.49 7.7 6.31 9.98 8.71 8.11 8.85 8.23 8.25 8.13 (%) 0ther Income (₹ in Cr.) 6557 1564 4999 3653 1019 4875 1938 7035 717 1781 Cr.) 0ther Income (%) 0.86 8.15 0.72 1.54 0.68 0.9 0.66 8.21 0.68 0.89 Total Expenses (₹ in 2172 1523 5445 5209 1172 4175 2518 1805 1043 1499 Cr.) 6 9 5 9 7 1	Net NPA (%)	6.76	4.61	5.06	7.79	6.35	6.42	7.36	6.53	6.35	4.2
Total Income (₹ in Cr.) 994 1919 4196 4576 1407 4889 2782 2114 1136 1825 Cr.) 9 0 4 2 7 5 6 3 1 Net Interest Income (₹ in Cr.) 1 4 2 2 7 1 6 4 Net Interest Income (₹ in Cr.) 8.49 7.7 6.31 9.98 8.71 8.11 8.85 8.23 8.25 8.13 (%) 0ther Income (₹ in Cr.) 6557 1564 4999 3653 1019 4875 1938 7035 717 1781 Cr.) 0ther Income (%) 0.86 8.15 0.72 1.54 0.68 0.9 0.66 8.21 0.68 0.89 Total Expenses (₹ in Cr.) 2172 1523 5445 5209 1172 4175 2518 1805 1043 1499 Cr.) 6 9 5 9 7 1 3	Provisions for NPA (₹	4180	5394	1376	1410	3425	9608	4913	5378	1181	2926
Cr.) 9 0 4 2 7 5 6 3 1 Net Interest Income (₹ 4436 5320 4406 1172 1305 4402 2588 1941 1064 1624 in Cr.) 1 4 2 2 7 1 6 4 Net Interest Income (%) 8.49 7.7 6.31 9.98 8.71 8.11 8.85 8.23 8.25 8.13 8.23 8.25 8.13 8.13 8.25 8.13 8.11 8.85 8.23 8.25 8.13 8.23 8.25 8.13 Other Income (₹ in Cr.) 6557 1564 4999 3653 1019 4875 1938 7035 717 1781 1781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781 781	in Cr.)			6	1						
Net Interest Income (₹ in Cr.) 4436 5320 4406 1172 1305 4402 2588 1941 1064 1624	Total Income (₹ in	994	1919	4196	4576	1407	4889	2782	2114	1136	1825
in Cr.) 1 4 2 2 7 1 6 4 Net Interest Income (%) 8.49 7.7 6.31 9.98 8.71 8.11 8.85 8.23 8.25 8.13 Other Income (₹ in Cr.) 6557 1564 4999 3653 1019 4875 1938 7035 717 1781 Other Income (%) 0.86 8.15 0.72 1.54 0.68 0.9 0.66 8.21 0.68 0.89 Total Expenses (₹ in Cr.) 2172 1523 5445 5209 1172 4175 2518 1805 1043 1499 Cr.) 6 9 5 9 7 1 3 1 7 3 Cost to Income Ratio (%) 47.0 42.4 50.3 39.1 52.1 50.6 70.6 48.2 71.0 51.3 (%) 6 9 2 5 5 3 5 Net Interest Margin 2.65 3.18 2.05 2.5 2.59 2.19 2.78 2.06	Cr.)		9	0	4	2	7	5	6	3	1
Net Interest Income 8.49 7.7 6.31 9.98 8.71 8.11 8.85 8.23 8.25 8.13 Other Income (₹ in Cr.) 6557 1564 4999 3653 1019 4875 1938 7035 717 1781 Other Income (%) 0.86 8.15 0.72 1.54 0.68 0.9 0.66 8.21 0.68 0.89 Total Expenses (₹ in Cr.) 2172 1523 5445 5209 1172 4175 2518 1805 1043 1499 Cr.) 6 9 5 9 7 1 3 1 7 3 Cost to Income Ratio 47.0 42.4 50.3 39.1 52.1 50.6 70.6 48.2 71.0 51.3 (%) 6 9 2 5 5 3 5 Net Interest Margin 2.65 3.18 2.05 2.5 2.59 2.19 2.78 2.06 2.16 <td< td=""><td>Net Interest Income (₹</td><td>4436</td><td>5320</td><td>4406</td><td>1172</td><td>1305</td><td>4402</td><td>2588</td><td>1941</td><td>1064</td><td>1624</td></td<>	Net Interest Income (₹	4436	5320	4406	1172	1305	4402	2588	1941	1064	1624
(%) Other Income (₹ in Cr.) 6557 1564 4999 3653 1019 4875 1938 7035 717 1781 Cr.) Other Income (%) 0.86 8.15 0.72 1.54 0.68 0.9 0.66 8.21 0.68 0.89 Total Expenses (₹ in Cr.) 2172 1523 5445 5209 1172 4175 2518 1805 1043 1499 Cr.) 6 9 5 9 7 1 3 1 7 3 Cost to Income Ratio 47.0 42.4 50.3 39.1 52.1 50.6 70.6 48.2 71.0 51.3 (%) 6 9 2 5 5 3 5 Net Interest Margin 2.65 3.18 2.05 2.5 2.59 2.19 2.78 2.06 2.16 2.33	in Cr.)			1	4	2	2	7	1	6	4
Other Income (₹ in Cr.) 6557 1564 4999 3653 1019 4875 1938 7035 717 1781 Other Income (%) 0.86 8.15 0.72 1.54 0.68 0.9 0.66 8.21 0.68 0.89 Total Expenses (₹ in Cr.) 2172 1523 5445 5209 1172 4175 2518 1805 1043 1499 Cr.) 6 9 5 9 7 1 3 1 7 3 Cost to Income Ratio 47.0 42.4 50.3 39.1 52.1 50.6 70.6 48.2 71.0 51.3 (%) 6 9 2 5 5 3 5 Net Interest Margin 2.65 3.18 2.05 2.5 2.59 2.19 2.78 2.06 2.16 2.33	Net Interest Income	8.49	7.7	6.31	9.98	8.71	8.11	8.85	8.23	8.25	8.13
Cr.) Other Income (%) 0.86 8.15 0.72 1.54 0.68 0.9 0.66 8.21 0.68 0.89 Total Expenses (₹ in Cr.) 2172 1523 5445 5209 1172 4175 2518 1805 1043 1499 Cr.) 6 9 5 9 7 1 3 1 7 3 Cost to Income Ratio (%) 47.0 42.4 50.3 39.1 52.1 50.6 70.6 48.2 71.0 51.3 (%) 6 9 2 5 5 3 5 Net Interest Margin 2.65 3.18 2.05 2.5 2.59 2.19 2.78 2.06 2.16 2.33	(%)										
Other Income (%) 0.86 8.15 0.72 1.54 0.68 0.9 0.66 8.21 0.68 0.89 Total Expenses (₹ in Cr.) 2172 1523 5445 5209 1172 4175 2518 1805 1043 1499 Cr.) 6 9 5 9 7 1 3 1 7 3 Cost to Income Ratio 47.0 42.4 50.3 39.1 52.1 50.6 70.6 48.2 71.0 51.3 (%) 6 9 2 5 5 3 5 Net Interest Margin 2.65 3.18 2.05 2.5 2.59 2.19 2.78 2.06 2.16 2.33	Other Income (₹ in	6557	1564	4999	3653	1019	4875	1938	7035	717	1781
Total Expenses (₹ in Cr.) 2172 1523 5445 5209 1172 4175 2518 1805 1043 1499 Cr.) 6 9 5 9 7 1 3 1 7 3 Cost to Income Ratio 47.0 42.4 50.3 39.1 52.1 50.6 70.6 48.2 71.0 51.3 (%) 6 9 2 5 5 3 5 Net Interest Margin 2.65 3.18 2.05 2.5 2.59 2.19 2.78 2.06 2.16 2.33	Cr.)										
Cr.) 6 9 5 9 7 1 3 1 7 3 Cost to Income Ratio 47.0 42.4 50.3 39.1 52.1 50.6 70.6 48.2 71.0 51.3 (%) 6 9 2 5 5 3 5 Net Interest Margin 2.65 3.18 2.05 2.5 2.59 2.19 2.78 2.06 2.16 2.33	Other Income (%)	0.86	8.15	0.72	1.54	0.68	0.9	0.66	8.21	0.68	0.89
Cost to Income Ratio 47.0 42.4 50.3 39.1 52.1 50.6 70.6 48.2 71.0 51.3 (%) 6 9 2 5 5 3 5 Net Interest Margin 2.65 3.18 2.05 2.5 2.59 2.19 2.78 2.06 2.16 2.33	Total Expenses (₹ in	2172	1523	5445	5209	1172	4175	2518	1805	1043	1499
(%) 6 9 2 5 5 3 5 Net Interest Margin 2.65 3.18 2.05 2.5 2.59 2.19 2.78 2.06 2.16 2.33	Cr.)	6	9	5	9	7	1	3	1	7	3
Net Interest Margin 2.65 3.18 2.05 2.5 2.59 2.19 2.78 2.06 2.16 2.33	Cost to Income Ratio	47.0	42.4	50.3	39.1	52.1	50.6	70.6	48.2	71.0	51.3
	(%)	6	9			2	5	5		3	5
(%)	Net Interest Margin	2.65	3.18	2.05	2.5	2.59	2.19	2.78	2.06	2.16	2.33
	(%)										

Yield Average on	9.24	10.7	11.5	8.28	7.06	8.11	10.0	10.2	10.0	9.63
Adv. (%)		1	6				9	3	5	
Average Return on	-0.33	0.28	-0.78	0.94	0.07	-0.52	-0.48	-0.23	-0.75	0.36
Assets (%)										
Operating Profit (₹ in	4134	3960	8816	6036	2345	7147	2642	3095	925	3032
Cr.)										
Per Employee Prof.(₹	-3.08	2.89	-0.1	-12.2	0.73	-5	-3.76	-3	-2.35	3.53
in Lacs)										
Net Profit/Loss (₹ in	-743	540	-	-	101	-	-	-506	-935	711
Cr.)			5396	6089		2813	1418			
(Compile	d from	annual	reports	of publ	ic sector	r banks'			

TABLE-3A: PERFORMANCE INDICATORS OF PUBLIC SECTOR BANKS (2016-17)										
Performance										
indicators	ALB	ANB	ВОВ	BOI	вом	CAN	CBI	COR	DB	IB
Number of Branches	3246	2908	5422	5016	1897	6083	4714	2517	1874	2682
Number of Employees	2394	1938		4775	1297	5571	3174	1966	1398	2092
	4	0	52420	0	4	7	4	7	5	4
Total Assets (₹ in	2379	2254	69487	6263	1593	5961	3334	1274	1296	1446
Crores)	62	46	5	09	32	58	01	90	23	10
Total Business (₹ in	3583	3396	10132	9338	2405	8372	4496	3609	1914	3146
Crores)	52	73	66	20	90	84	79	16	81	54
Per Empl. Business (₹										
in Cr.)	15.03	16.61	17.49	19.4	18.54	14.42	11.81	19.58	13.69	14.88
CAR % (Basel-III)	11.45	12.38	12.24	12.14	11.18	12.86	10.95	11.32	11.39	13.64
Total Deposits (₹ in	2018	1954	60167	5400	1390	4952	2966	2205	1139	1825
Crores)	17	41	5	32	53	75	71	59	43	09
Cost of Deposit (%)	5.94	6.43	4.82	4.84	6.05	5.59	6.2	6.74	6.43	6.03
Credit-Deposit Ratio										
(%)	79.03	73.8	71.86	68.91	73.02	68.38	51.57	63.64	66.95	72.4
Gross Adv. (₹ in Cr.)	1581	1442	38325	2803	1015	3420	1530	1403	7753	1321
	03	32	9	02	37	09	08	56	8	45
Priority Sector Adv. (₹	6537	2664	10407	9817	4038	1602	8808	6060	3699	5376
in Cr.)	8	3	6	5	8	6	5	4	2	5
Substandard Assets (₹	5808			1086	5284	8081	6033			
in Cr.)	3	6611	8804	26	2	9	3	5094	4381	1797

Doubtful-1 Assets (₹ in	5179	3692		1249	6644	1424	8855			
Cr.)	1	3	29186	52	1	1	6	7991	2212	2042
Doubtful-2 Assets (₹ in	8144	6259		2361	4604	1202	9087			
Cr.)	6	7		46	4	4	6		4371	5334
Doubtful-3 Assets (₹ in		1047		2770			2592			
Cr.)	9389	6		8	4774	0	4		1091	285
Loss Assets (₹ in Cr.)				2530						
	6165	590	4729	7	1783	586	6824	173	562	40
Gross NPA (₹ in Cr.)	2068	1767		5204	1717	3420	2725	1704	1261	
	7	0	42719	4	9	2	1	5	9	9865
Gross NPA (%)	13.09	12.25	10.46	13.22	16.93	9.63	17.81	11.7	16.27	7.47
Net NPA (₹ in Cr.)	1343	1035		2530	1123	2173	1421	1169		
	3	4	18080	3	0	8	8	2	7735	5606
Net NPA (%)	8.92	7.57	4.72	6.9	11.76	6.33	10.2	8.33	10.66	4.39
Provisions for NPA (₹				1167						
in Cr.)	4877	7302	7679	2	5794	7437	6216	3860	1743	3788
Total Income (₹ in Cr.)		2033		4640	1357	4894	2753	2256	1143	1802
	1330	6	48957	4	0	2	7	1	7	5
Net Interest Income (₹				1182	1206	4138	2466	1947	1018	1604
in Cr.)	4250	5531	13513	6	1	7	1	1	2	0
Net Interest Income (%)	7.57	8.38	6.27	2.03	7.55	7.35	8.1	9.81	7.87	7.67
Other Income (₹ in Cr.)	1222									
	9	2308	6758	6772	1508	7554	2876	3090	1251	2211
Other Income (%)	1.13	1.07	1	1.45	0.94	1.34	0.94	13.7	0.97	1.06
Total Expenses (₹ in	2085	1594		4799	1174	4002	2444	1812	1004	1425
Cr.)	7	8	47574	8	3	8	8	2	2	0
Cost to Income Ratio										
(%)	51.25	44.03	45.86	76.38	60.98	48.85	67.31	41.13	62.01	45.62
Net Interest Margin (%)	2.54	3.07	2.19	2.6	1.99	2.23	2.51	2.12	2	2.59
Yield Average on Adv.										
(%)	8.41	9.77	8804	7.98	8.42	7.35	9.01	9.85	8.98	9.17
Average Return on										
Assets (%)	-0.13	0.08	0.2	-0.24	-0.86	0.2	-0.8	0.23	-0.67	0.67
Operating Profit (₹ in										
Cr.)	3867	4388	10975	9733	1827	8914	3089	4439	1390	4001
Per Employee Prof.(₹ in					-					
Lacs)	-1.3	1	0.26	-3.2	10.58	2	-6.49	3	-6.18	6.72
Net Profit/Loss (₹ in										
Cr.)	-314	174	1383	-1558	-1373	1122	-2439	561	-863	1406
		iled fron								

Overall due to such negative impacts, cost to income ratio (%) had increased as 4.19% (PSBs -0.53%), operating profit of the bank decreased by -6.45% (PSBs 18.05%), per employee profit decreased as ₹ -1.3 Lacs (PSBs ₹ -0.51 Lacs) and ultimately to the net profit of the bank as ₹ -314 Crores. This all reflects bad impact of NPA on workings of Allahabad Bank.

1.3: Impact of NPA on Andhra Bank (2015-16 to 2016-17) [2]

Table-2A & 3A represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Credit-Deposit ratio (%) had declined by –4.4% (PSBs -3.31%), when substandard assets increased by 98.11% (PSBs 0.87%), Doubtful-1 assets increased by 1338.93% (PSBs 34.87%), Doubtful-2 assets increased by 1346.32% (PSBs 73.84%), Doubtful-3 assets increased by 796.15% (PSBs 86.77%) and Loss assets increased by 77.29% (PSBs 13.87%).

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 54.4% (PSBs 20.02%), Gross NPA (%) increased by 3.86% (PSBs 2.81%), Net NPA increased by 71.56% (PSBs 17.79%), Net NPA (%) increased by 2.96% (PSBs 1.62%), similarly provisions for NPA has been increased by 35.37% (PSBs 6.48%).

This all hampered the overall working of the bank as other income (%) of the bank had decreased by -7.08% (PSBs 0.13%), total expenses increased by 4.65% (PSBs 2.46%), Net interest margin (%) decreased by -0.11% (PSBs -0.06%), Yield average on advances (%) decreased by -0.94% (PSBs -0.74%), Average return on assets (%) decreased by -0.20% (PSBs -0.15%).

Overall due to such negative impacts, cost to income ratio (%) had increased as 1.54% (PSBs -0.53%), per employee profit decreased as -65.39% (PSBs 54.05%) and ultimately to the net profit of the bank was decreased by -67.77% in comparison to the previous year 2015-16. This all reflects bad impact of NPA on workings of Andhra Bank.

1.4: Impact of NPA on Bank of Baroda (2015-16 to 2016-17) [3]

Table-2A & 3A represents various performance indicators as below:

Table elaborates that Capital adequacy ratio (%) had decreased by -0.93% (PSBs 0.37%), Credit-Deposit ratio (%) decreased by -6.43% (PSBs -3.31%), Gross advances decreased by -5.39% (PSBs -4.15%). When quality of assets have been deteriorated in the bank during this period. Doubtful-1 assets increased by 13.27% (PSBs 34.87%), and Loss assets increased by 48.43% (PSBs 13.87%).

However, the bank was quite successful to retain its NPA on comfortable levels, but amount of Gross NPA increased by 5.42% (PSBs 20.02%), gross NPA (%) increased by 0.47% (PSBs 2.81%).

Overall due to such negative impacts, Net interest income of the bank was decreased by -69.33% (PSBs -7.42%), Net interest income (%) was decreased by -0.04% (PSBs -0.85%), Yield average on advances (%) decreased by -2.7% (PSBs -0.74%). This all reflects bad impact of NPA on workings of Bank of Baroda.

1.5: Impact of NPA on Bank of India (2015-16 to 2016-17) [4]

Table-2A & 3A represents various performance indicators as below:

Table elaborates that during the period the bank was having the largest quantity of bad quality assets among all public sector banks around $1/4^{th}$ in quantity. During 2016-17 the bank had substandard assets as ₹ 108626 crores, Doubtful-1 assets as ₹ 124952 crores, Doubtful-2 assets as ₹ 236146 crores, Doubtful-3 assets as ₹ 27708 crores, and loss assets as ₹ 25307 crores.

Due to such heavy amount of bad assets, cost-deposit ratio (%) had decreased by -0.41% (PSBs -0.62%), Credit-Deposit ratio (%) decreased by -3.94% (PSBs -3.31%), and gross advances decreased by -21.68% (PSBs -4.15%).

However, the bank was quite successful to retain its NPA on comfortable levels, but amount of Gross NPA increased by 0.5% (PSBs 20.02%), gross NPA (%) increased by 0.15% (PSBs 2.81%).

This all hampered the overall working of the bank as Net interest income (%) decreased by -7.95% (PSBs -0.85%), Yield average on advances (%) decreased by -0.3% (PSBs -0.74%), Average return on assets (%) decreased by -1.18% (PSBs -0.15%), other income (%) decreased by -0.09% (PSBs 0.13%) where cost to income ratio (%) was increased by 37.28% (PSBs -0.53%).

Overall due to such negative impacts, per employee profit of the bank was noted as ₹ -3.2 lacs in 2016-17 accordingly the net profit of the bank in the same year as ₹ -1558 crores which reflects bad impact of NPA on workings of Bank of India.

1.6: Impact of NPA on Bank of Maharashtra (2015-16 to 2016-17) [5]

Table-2A & 3A represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Total assets had declined by -1.0 % (PSBs 13.17%), when Doubtful-1 assets increased by 191.29% (PSBs 34.87%), Doubtful-2 assets increased by 116.55% (PSBs 73.84%), Doubtful-3 assets increased by 420.61% (PSBs 86.77%).

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 65.42% (PSBs 20.02%), Gross NPA (%) increased by 7.59% (PSBs 2.81%), Net NPA increased by 64.37% (PSBs 17.79%), Net NPA (%) increased by 5.41% (PSBs 1.62%), similarly provisions for NPA has been increased by 69.16% (PSBs 6.48%).

This all hampered the overall working of the bank as total business of the bank had decreased by -3.85% (PSBs 4.18%), Credit-Deposit ratio (%) decreased by -7.01% (PSBs -3.31%), Gross advances decreased by -8.72% (PSBs -4.15%), priority sector advances decreased by -2.64% (PSBs 5.79%), total income decreased by -3.56% (PSBs 4.96%), Net interest income decreased by -7.59% (PSBs -7.42%), Net interest income (%) decreased by -1.16% (PSBs -0.85%), Net interest margin (%) by -0.6% (PSBs -0.06%), Average return on assets (%) decreased by -0.93% (PSBs -0.15%).

Overall due to such negative impacts, cost to income ratio (%) had increased as 8.86% (PSBs -0.53%), total expenses had increased by 0.13% (PSBs 2.46%), operating profit of the bank decreased by -22.08% (PSBs 18.05%), per employee profit decreased as ₹ -10.58 Lacs (PSBs ₹ -0.51 Lacs) and ultimately to the net profit of the bank decreased as ₹ -1373 Crores. This all reflects bad impact of NPA on workings of Bank of Maharashtra.

1.7: Impact of NPA on Canara Bank (2015-16 to 2016-17) [6]

Table-2A & 3A represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. As substandard assets increased by 361.9% (PSBs 0.87%), Doubtful-1 assets increased by 7.54% (PSBs 34.87%), Doubtful-2 assets increased by 92.78% (PSBs 73.84%), and Loss assets increased by ₹ 586 crores.

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 8.1% (PSBs 20.02%), Gross NPA (%) increased by 2.44% (PSBs 2.81%), Net NPA increased by 3.67% (PSBs 17.79%).

This all hampered the overall working of the bank as per employee business of the bank had decreased by -0.13% (PSBs 1.15%), Credit-Deposit ratio (%) decreased by -0.28% (PSBs -3.31%), Net interest income decreased by -5.98% (PSBs -7.42%), Net interest income (%) decreased by -0.76% (PSBs -0.85%), Yield average on advances (%) decreased by -0.76% (PSBs -0.74%). This all reflects bad impact of NPA on workings of Canara Bank.

1.8: Impact of NPA on Central Bank of India (2015-16 to 2016-17) [7]

Table-2A & 3A represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Doubtful-1 assets increased by 64.68% (PSBs 34.87%), Doubtful-2 assets increased

by 57.35% (PSBs 73.84%), Doubtful-3 assets increased by 46.17% (PSBs 86.77%) and Loss assets increased by 73.58% (PSBs 13.87%).

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 19.93% (PSBs 20.02%), Gross NPA (%) increased by 5.86% (PSBs 2.81%), Net NPA increased by 7.37% (PSBs 17.79%), Net NPA (%) increased by 2.84% (PSBs 1.62%), similarly provisions for NPA has been increased by 26.52% (PSBs 6.48%).

This all hampered the overall working of the bank as total business of the bank had decreased by -1.45% (PSBs 4.18%), per employee business decreased by -1.17% (PSBs 1.15%), Credit-Deposit ratio (%) decreased by -19.87% (PSBs -3.31%),

Gross advances decreased by -19.53% (PSBs -4.15), total income decreased by -1.03% (PSBs 4.96%), Net interest income decreased by -4.73% (PSBs -7.42%), Net interest income (%) decreased by -0.75% (PSBs -0.85%), Net interest margin (%) decreased by -0.27% (PSBs -0.06%), Yield average on advances (%) decreased by -1.08% (PSBs -0.74%), Average return on assets (%) decreased by -0.32% (PSBs -0.15%).

Overall due to such negative impacts, per employee profit decreased to ₹ -6.49 Lacs (PSBs ₹ -0.51 Lacs) and ultimately to the net profit of the bank to ₹ -2439 Crores. This all reflects bad impact of NPA on workings of Central Bank of India.

1.9: Impact of NPA on Corporation Bank (2015-16 to 2016-17) [8]

Table-2A & 3A represents various performance indicators as below:

After going through the figures it appears that there was a little impact of NPA on working of Corporation Bank. Credit-Deposit ratio (%) was decreased by -4.75% (PSBs - 3.31), Loss assets was increased by 55.85% (PSBs 13.87%)

Accordingly, Gross NPA increased by 17.19% (PSBs 20.02%), Gross NPA (%) increased by 1.72% (PSBs 2.81%), Net NPA increased by 27.64% (PSBs 17.79%), Net NPA (%) increased by 1.8% (PSBs 1.62%).

This all hampered the overall working of the bank as other income of the bank had decreased by -56.07% (PSBs 33.66%), total expenses was increased by 0.39% (PSBs 2.46%), and Yield average on advances (%) was decreased by -0.38% (PSBs -0.74%). Ultimately the bank had net profit as ₹ 561 crores during 2016-17 and keeping in view its large total business such net profit is not desirable.

1.10: Impact of NPA on Dena Bank (2015-16 to 2016-17) [9]

Table-2A & 3A represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Total assets had declined by -2.86% (PSBs 13.17%), when substandard assets

increased by 108.22% (PSBs 0.87%), Doubtful-2 assets increased by 126.71% (PSBs 73.84%), Doubtful-3 assets increased by 65.8% (PSBs 86.77%) and Loss assets increased by 48.67% (PSBs 13.87%).

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 47.41% (PSBs 20.02%), Gross NPA (%) increased by 6.29% (PSBs 2.81%), Net NPA increased by 47.89% (PSBs 17.79%), Net NPA (%) increased by 4.31% (PSBs 1.62%), similarly provisions for NPA has been increased by 47.58% (PSBs 6.48%).

This all hampered the overall working of the bank as total business of the bank had decreased by -5.78% (PSBs 4.18%), per employee business decreased by -6.36% (PSBs 1.15%), Credit-Deposit ratio (%) decreased by -2.15% (PSBs -3.31%),

Gross advances decreased by -9.64% (PSBs -4.15%), Net interest income decreased by -4.35% (PSBs -7.42%), Net interest income (%) decreased by -0.38% (PSBs -0.85%), Net interest margin (%) decreased by -0.16% (PSBs -0.06%), Yield average on advances (%) decreased by -1.07% (PSBs -0.74%),

Overall due to such negative impacts, per employee profit decreased to ₹ -6.18 Lacs (PSBs ₹ -0.51 Lacs) and ultimately to the net profit of the bank as ₹ -863 Crores. This all reflects bad impact of NPA on workings of Dena Bank.

1.11: Impact of NPA on Indian Bank (2015-16 to 2016-17) [10]

Table-2A & 3A represents various performance indicators as below:

Doubtful-2 assets increased by 53.18% (PSBs 73.84%), Doubtful-3 assets increased by 35.07% (PSBs 86.77%). Accordingly, Gross NPA increased by 11.75% (PSBs 20.02%), Gross NPA (%) increased by 0.81% (PSBs 2.81%), Net NPA increased by 3.5% (PSBs 17.79%), Net NPA (%) increased by 0.19% (PSBs 1.62%), similarly provisions for NPA has been increased by 29.46% (PSBs 6.48%).

This all hampered the overall working of the bank as per employee business of the bank had decreased by -2.8% (PSBs 1.15%), Credit-Deposit ratio (%) decreased by -0.95% (PSBs -3.31%), gross advances decreased by -0.36% (PSBs -4.15%). Total income decreased by -1.23% (PSBs 4.96%), Net interest income decreased by -1.25% (PSBs -7.42%), Net interest income (%) decreased by -0.46% (PSBs -0.85%), Yield average on advances (%) decreased by -0.46% (PSBs -0.74%).

This all reflects bad impact of NPA on workings of Indian Bank, however performance of the bank was much comfortable in comparison to other public sector banks'.

1.12: Impact of NPA on Indian Overseas Bank (2015-16 to 2016-17) $^{[11]}$

Table-2B & 3B represents various performance indicators as below:

© Associated Asia Research Foundation (AARF)

Table elaborates that quality of assets have been deteriorated in the bank during this period. Substandard assets increased by 24.61% (PSBs 0.87%), Doubtful-1 assets increased by 15.91% (PSBs 34.87%), and Loss assets increased by 82.57% (PSBs 13.87%).

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 65.43% (PSBs 20.02%), Gross NPA (%) increased by 3.35% (PSBs 2.81%), Net NPA increased by 73.43% (PSBs 17.79%), Net NPA (%) increased by 2.48% (PSBs 1.62%), similarly provisions for NPA has been increased by 48.86% (PSBs 6.48%).

This all hampered the overall working of the bank as per employee business of the bank had decreased by -3.14% (PSBs 1.15%), capital adequacy ratio (%) was decreased by -0.67% (PSBs 0.37%), Credit-Deposit ratio (%) decreased by -1.55% (PSBs -3.31%), gross advances decreased by -1.12% (PSBs -4.15%), other income was decreased by -1.42% (PSBs 33.66%), other income (%) decreased by -0.03% (PSBs 0.13%), total expenses was increased by 9.4% (PSBs 2.46%), Yield average on advances (%) decreased by -0.58% (PSBs -0.74%), Average return on assets (%) decreased by -1.53% (PSBs -0.15%).

Overall due to such negative impacts, operating profit of the bank decreased by -16.88% (PSBs 18.05%), per employee profit decreased to ₹ -1.2 Lacs (PSBs ₹ -0.51 Lacs) and ultimately to the net profit of the bank decreased to ₹ -454 Crores. This all reflects bad impact of NPA on workings of Indian Overseas Bank.

TABLE-2B: PERFORMANCE INDICATORS OF PUBLIC SECTOR BANKS (2015-16)										
Performance indicators	IOB	ОВС	PNB	SYB	UNB	PSB	UCO	IDBI	UТВ	VB
Number of Branches	3265	2351	6888	3764	4200	1481	3077	1846	2011	1863
Number of Employees	3124	2086	7080	3205	3547		2472	1757	1498	1454
	1	3	1	7	3	9403	4	0	1	4
Total Assets (₹ in	2749	2397	6673	3079	4073	1025	9720	3753	1294	1454
Crores)	04	68	90	67	64	81	0	89	31	08
Total Business (₹ in	4090	3625	9653	4681	6204	1565	3426	4816	1878	2162
Crores)	57	54	77	85	45	27	26	12	13	06
Per Empl. Business (₹ in										
Cr.)	13.67	16.88	13.59	14.61	15.51	16.2	13.81	25.18	12.37	14.58
CAR % (Basel-III)	10.78	11.76	11.28	11.16	10.56	10.91	9.63	11.67	10.08	12.58
Total Deposits (₹ in	2279	2089	5530	2617	3427	9124	2171	2657	1164	1254
Crores)	76	14	51	36	20	9	18	19	01	41
Cost of Deposit (%)	7.81	7.19	5.85	6.27	7	7.47	6.11	6.27	6.58	7.34

Credit-Deposit Ratio										
(%)	70.68	73.61	74.55	78.88	83.69	71.8	65.43	80.73	59.86	69.41
Gross Adv. (₹ in Cr.)	1810	1488	4123	2064	2673	6527	1355	2158	7141	9076
	81	79	26	49	54	7	08	93	2	5
Priority Sector Adv. (₹	5809	6225	1392	6255	1025	2450	4503	5517	2980	3800
in Cr.)	0	4	33	2	96	8	2	4	9	3
Substandard Assets (₹ in										
Cr.)	5516	8439		6506	3405	1836	5968	1143	2221	3077
Doubtful-1 Assets (₹ in										
Cr.)	6734	2425		3659	997	1180	5815	3069	1964	1170
Doubtful-2 Assets (₹ in										
Cr.)		3706		3119		1053	7457		2068	1540
Doubtful-3 Assets (₹ in										
Cr.)		0		508		154	781		261	224
Loss Assets (₹ in Cr.)	132	130		385	65	4.82	885	0	37	14
Gross NPA (₹ in Cr.)		1470	5581	1383	2417		2090	2487		
	9020	1	8	2	1	4229	7	5	9471	6027
Gross NPA (%)	4.98	9.57	12.9	6.7	8.7	6.48	15.43	10.07	13.26	6.64
Net NPA (₹ in Cr.)			3542		1402		1144	1464		
	5658	9932	3	9014	6	2949	3	3	6110	4277
Net NPA (%)	3.2	6.7	8.61	4.48	5.25	4.62	9.09	6.78	9.04	4.81
Provisions for NPA (₹			1814							
in Cr.)	2994	3649	5	3638	4655	854	6318	9204	338	1459
Total Income (₹ in Cr.)	2485	2193	5342	2570	3583		2015	3145	1192	
	3	4	4	7	1	9222	7	3	7	3634
Net Interest Income (₹	2268	2016	4742	2319	3219		1856	2804		
in Cr.)	3	8	4	7	9	8744	1	2	2014	2760
Net Interest Income (%)	8.99	8.78	7.02	7.92	8.37	8.91	8.29	8.33	7.92	8.77
Other Income (₹ in Cr.)	2169	1766	6000	2508	3632	478	1596	3410	1467	873
Other Income (%)	0.85	0.77	1.06	0.86	0.94	0.49	0.71	1.01	1.17	0.63
Total Expenses (₹ in	2425	1825		2590	3010		1655	2608		1257
Cr.)	1	2	9972	6	8	8886	4	3	2361	5
Cost to Income Ratio										
(%)	63.53	48.44	46.79	60.83	52.1	52.16	47.19	43.47	79.31	57.39
Net Interest Margin (%)	2.05	2.66	2.6	2.28	2.16	1.8	2.16	1.88	2.01	2.27
Yield Average on Adv.										
(%)	14.62	13.55	9.1	8.63	9.63	10.7	10.17	12.99	9.93	10.52
Average Return on										
Assets (%)	0.23	0.07	-0.61	-0.56	6.84	0.34	-1.25	1.09	-0.22	0.28
Operating Profit (₹ in	3997	3682	1133	3251	5722	1269	3603	5370	1811	1548

Cr.)			9							
Per Employee Prof.(₹ in							-			
Lacs)	2.01	0.73	-6	-5.51	16.13	4	11.29	-21	12.09	3
Net Profit/Loss (₹ in										
Cr.)	601	156	-3974	-1643	1352	335	-2799	-3664	-281	381
	Compi	led from	annual	reports	of public	sector b	anks'			

TABLE-3B: PERFORMANCE INDICATORS OF PUBLIC SECTOR BANKS (2016-17)										
Performance	<u> </u>	1	1	<u> </u>	1	<u> </u>		Ī	Ī	
indicators	IOB	OBC	PNB	SYB	UNB	PSB	uco	IDBI	UTB	VB
Number of Branches	3381	2376	6937	3933	4282	1500	3100	1896	2053	2031
Number of Employees	3194	2155		3498	3687		2462	1818	1496	1567
	7	2	73919	9	7	9400	0	7	2	9
Total Assets (₹ in	2856	2530	72033	2990	4556	9664	1003	3617	1410	1548
Crores)	36	64	1	73	68	3	70	67	53	81
Total Business (₹ in	4250	3857	10411	4676	6800	1458	3329	4593	1974	2298
Crores)	90	77	97	26	76	03	40	63	42	33
Per Empl. Business (₹										
in Cr.)	13.24	17.9	14.17	13.51	16.43	15.34	13.48	23.45	13.04	14.17
CAR % (Basel-III)	10.11	11.64	11.66	12.03	11.79	11.05	10.93	10.7	11.14	12.73
Total Deposits (₹ in	2460	2193	62170	2605	3783	8554	2012	2685	1269	1330
Crores)	49	39	4	61	92	0	85	38	39	12
Cost of Deposit (%)	7.84	6.33	5.33	5.86	6.28	6.73	5.83	5.06	6	6.5
Credit-Deposit Ratio										
(%)	69.13	75.92	67.47	79.47	81.45	69.15	65.41	76.13	55.54	72.79
Gross Adv. (₹ in Cr.)	1790	1577	41949	2070	3016	6026	1316	1908	7050	9682
	41	06	3	65	84	3	55	25	3	1
Priority Sector Adv. (₹	6363	6556	14023	6726	1118	2492	4208	6056	3062	4059
in Cr.)	5	2	9	2	61	8	4	0	3	4
Substandard Assets (₹										
in Cr.)	6874	7831		4873	2312	2628	5007	4692	1602	1726
Doubtful-1 Assets (₹ in		1060								
Cr.)	7806	6		6171	6311	1681	4530	5924	3343	2480
Doubtful-2 Assets (₹ in										
Cr.)		4421		5212		1784	9281		4647	1867
Doubtful-3 Assets (₹ in										
Cr.)		0		1204		195	2574		1116	271
Loss Assets (₹ in Cr.)	241	0		148	431	75	1147	34	221	36
Gross NPA (₹ in Cr.)	1492	2285	55317	1760	3371	6297	2254	4475	1095	6382

	2	9		9	2		0	2	2	
Gross NPA (%)	8.33	13.73	12.53	8.5	11.17	10.45	17.12	19.11	15.53	6.69
Net NPA (₹ in Cr.)		1411		1041	1883		1070	2520		
	9813	7	32702	0	3	4375	3	5	6592	4118
Net NPA (%)	5.68	8.96	7.81	5.21	6.57	7.51	8.94	13.21	10.02	4.36
Provisions for NPA (₹								1535		
in Cr.)	4457	6284	15881	3545	6031	1135	4387	7	1136	1558
Total Income (₹ in Cr.)	2607	2118		2646	3762		1844	3175	1140	
	6	7	56227	1	5	8750	0	8	4	5157
Net Interest Income (₹	2393	1842		2300	3266		1632	2779		
in Cr.)	8	2	47275	3	0	8172	6	1	1927	3506
Net Interest Income (%)	9.16	7.66	6074	7.6	7.6	8.17	6.65	7.39	7.01	8.14
Other Income (₹ in Cr.)	2138	2765	8951	3457	4965	578	2114	3967	2186	1651
Other Income (%)	0.82	1.15	1.28	1.14	1.16	0.58	0.86	1.06	1.63	1.09
Total Expenses (₹ in	2653	1701		3616	3019		1551	2718		1328
Cr.)	1	7	9379	6	5	8549	4	0	2507	0
Cost to Income Ratio										
(%)	57.37	45.67	41.57	56.51	46.42	54.63	50.67	52.89	62.26	53.06
Net Interest Margin (%)	2.21	2.42	2.38	2.37	2.07	2.22	1.56	1.62	1.6	2.77
Yield Average on Adv.										
(%)	14.04	11.68	8.29	8.34	8.72	9.73	9.6	14.56	8.95	9.89
Average Return on										
Assets (%)	-1.3	-0.46	0.19	0.12	2.86	0.2	-0.75	1.37	0.16	0.49
Operating Profit (₹ in										
Cr.)	3322	4170	14565	4233	7430	1241	2926	4578	1552	2421
Per Employee Prof.(₹ in										
Lacs)	-1.2	-5.08	2	1.1	20.15	2	-7.5	-28	10.38	5
Net Profit/Loss (₹ in										
Cr.)	-454	-1094	1325	359	555	201	-1851	-5158	219	750
	Comp	iled fron	n annual	reports	of public	sector b	anks'			

1.13: Impact of NPA on Oriental Bank of Commerce (2015-16 to 2016-17) $^{[12]}$

Table-2B & 3B represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Doubtful-1 assets increased by 337.36% (PSBs 34.87%), Doubtful-2 assets was increased by 19.29% (PSBs 73.84%).

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 55.49% (PSBs 20.02%), Gross NPA (%) increased by 4.16% (PSBs 2.81%), Net NPA

© Associated Asia Research Foundation (AARF)

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories.

increased by 42.13% (PSBs 17.79%), Net NPA (%) increased by 2.26% (PSBs 1.62%), similarly provisions for NPA has been increased by 72.21% (PSBs 6.48%).

This all hampered the overall working of the bank as capital adequacy ratio (%) was decreased by -0.12% (PSBs 0.37%), total income was decreased by -3.4% (PSBs 4.96%), Net interest income decreased by -8.65% (PSBs -7.42%), Net interest income (%) decreased by -1.12% (PSBs -0.85%), Net interest margin (%) decreased by -0.24% (PSBs -0.06%), Yield average on advances (%) decreased by -1.87% (PSBs -0.74%), Average return on assets (%) decreased by -0.53% (PSBs -0.15%).

Overall due to such negative impacts, per employee profit decreased to ₹ -5.08 Lacs (PSBs ₹ -0.51 Lacs) and ultimately to the net profit of the bank decreased to ₹ -1094 Crores. This all reflects bad impact of NPA on workings of Oriental Bank of Commerce.

1.14: Impact of NPA on Punjab National Bank (2015-16 to 2016-17) [13]

Table-2B & 3B represents various performance indicators as below:

Performance of the bank was much comfortable in comparison to other public sector banks' as it was successful to contain the NPA at desired levels. However, the bank had gross NPA (%) during 12.53% and it was higher than PSBs average of 12.32% similarly Net NPA (%) during this period was as 7.81% which was higher than PSBs average of 7.7% during 2016-17.

During this period net interest income was decreased by -0.31% (PSBs -7.42%), net interest income (%) was decreased by -0.95% (PSBs -0.85%), credit-deposit ratio (%) was decreased by -7.08% (PSBs -3.31%), net interest margin (%) was decreased by -0.22% (PSBs -0.06%) and Yield average on advances (%) was decreased by -0.81% (PSBs -0.74%). This all reflects bad impact of NPA on workings of Punjab National Bank.

1.15: Impact of NPA on Syndicate Bank (2015-16 to 2016-17) [14]

Table-2B & 3B represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Total assets had declined by -2.88% (PSBs 13.17%), when Doubtful-1 assets increased by 68.65% (PSBs 34.87%), Doubtful-2 assets increased by 67.1% (PSBs 73.84%), Doubtful-3 assets increased by 137% (PSBs 86.77.

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 27.3% (PSBs 20.02%), Gross NPA (%) increased by 1.8% (PSBs 2.81%), Net NPA increased by 15.48% (PSBs 17.79%), Net NPA (%) increased by 0.73% (PSBs 1.62%).

This all hampered the overall working of the bank as total business of the bank had decreased by -0.11% (PSBs 4.18%), per employee business was decreased by -7.52% (PSBs

1.15%), total deposits was decreased by -0.44% (PSBs 8.35%), Net interest income decreased by -0.83% (PSBs -7.42%), Net interest income (%) decreased by -0.32% (PSBs -0.85%), Yield average on advances (%) decreased by -0.29% (PSBs -0.74%).

Overall due to such negative impacts, the bank had earned a net profit of ₹ 359 Crores and keeping in view such a large total business, this net profit is not desirable. This all reflects bad impact of NPA on workings of Syndicate Bank.

1.16: Impact of NPA on Union Bank of India (2015-16 to 2016-17) [15]

Table-2B & 3B represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Doubtful-1 assets increased by 532% (PSBs 34.87%), and Loss assets increased by 563% (PSBs 13.87%).

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 39.47% (PSBs 20.02%), Gross NPA (%) increased by 2.47% (PSBs 2.81%), Net NPA increased by 34.27% (PSBs 17.79%), Net NPA (%) increased by 1.32% (PSBs 1.62%), similarly provisions for NPA has been increased by 29.55% (PSBs 6.48%).

This all hampered the overall working of the bank as Credit-Deposit ratio (%) decreased by -2.24% (PSBs -3.31%), Net interest income (%) decreased by -0.77% (PSBs -0.85%), Net interest margin (%) by -0.09% (PSBs -0.06%), Yield average on advances (%) decreased by -0.91% (PSBs -0.74%), Average return on assets (%) decreased by -3.98% (PSBs -0.15%).

Overall due to such negative impacts, the bank had earned a net profit of ₹ 555 Crores and keeping in view such a large total business, this net profit is not desirable. This all reflects bad impact of NPA on workings of the Union Bank of India.

1.17: Impact of NPA on Punjab and Sind Bank $(2015-16 \text{ to } 2016-17)^{[16]}$

Table-2B & 3B represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Total assets had declined by -5.78% (PSBs 13.17%), when substandard assets increased by 43.13% (PSBs 0.87%), Doubtful-1 assets increased by 42.45% (PSBs 34.87%), Doubtful-2 assets increased by 69.42% (PSBs 73.84%), Doubtful-3 assets increased by 26.62% (PSBs 86.77%) and Loss assets increased by 1456% (PSBs 13.87%).

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 48.9% (PSBs 20.02%), Gross NPA (%) increased by 3.97% (PSBs 2.81%), Net NPA increased by 48.35% (PSBs 17.79%), Net NPA (%) increased by 2.89% (PSBs 1.62%), similarly provisions for NPA has been increased by 32.9% (PSBs 6.48%).

This all hampered the overall working of the bank as total business of the bank had decreased by -6.85% (PSBs 4.18%), per employee business was decreased by -5.3% (PSBs 1.15%), total deposits was decreased by -6.25% (PSBs 8.35%), gross advances was decreased by -7.68% (PSBs -4.15%), Credit-Deposit ratio (%) decreased by -2.65% (PSBs -3.31%), gross advances was decreased by -7.68% (PSBs -4.15%), total income was decreased by -5.11% (PSBs 4.96%), Net interest income decreased by -6.54% (PSBs -7.42%), Net interest income (%) decreased by -0.74% (PSBs -0.85%), Yield average on advances (%) decreased by -0.97% (PSBs -0.74%), Average return on assets (%) decreased by -0.14% (PSBs -0.15%).

Overall due to such negative impacts, cost to income ratio (%) had increased as 2.47% (PSBs -0.53%), operating profit of the bank decreased by -2.2% (PSBs 18.05%). However, the bank earned per employee profit as ₹ 2.0 Lacs (PSBs ₹ -0.51 Lacs) and ultimately to the net profit as ₹ 201 Crores but keeping in view such a large total business, this net profit is not desirable. This all reflects bad impact of NPA on workings of the Punjab and Sind Bank.

1.18: Impact of NPA on Uco Bank (2015-16 to 2016-17) [17]

Table-2B & 3B represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Doubtful-2 assets increased by 24.46% (PSBs 73.84%), Doubtful-3 assets increased by 229.57% (PSBs 86.77%) and Loss assets increased by 29.6% (PSBs 13.87%).

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 7.81% (PSBs 20.02%), Gross NPA (%) increased by 1.69% (PSBs 2.81%). It's a point to note that the bank was having the quite high level of NPA during the period. Gross NPA (%) was noted as 17.12% in comparison to PSBs average of 12.32% similarly Net NPA (%) was noted as 8.94% in comparison to PSBs average of 7.7%.

This all hampered the overall working of the bank as total business of the bank had decreased by -2.82% (PSBs 4.18%), per employee business was decreased by -2.38% (PSBs 1.15%), total deposits was decreased by -7.29% (PSBs 8.35%), gross advances was decreased by -2.84% (PSBs -4.15%), Credit-Deposit ratio (%) decreased by -0.02% (PSBs -3.31%), priority sector advances was decreased by -6.54% (PSBs 5.79%), total income was decreased by -8.51% (PSBs 4.96%), Net interest income decreased by -12.04% (PSBs -7.42%), Net interest income (%) decreased by -1.64% (PSBs -0.85%), Net interest margin (%) was decreased by -0.6% (PSBs -0.06%), Yield average on advances (%) decreased by -0.57% (PSBs -0.74.

Overall due to such negative impacts, cost to income ratio (%) had increased as 3.48% (PSBs -0.53%), operating profit of the bank decreased by -18.78% (PSBs 18.05%). Ultimately, the bank earned a net loss of ₹ -1851 Crores and this is never desirable. This all reflects bad impact of NPA on workings of the Uco Bank.

1.19: Impact of NPA on IDBI Bank Limited (2015-16 to 2016-17) [18]

Table-2B & 3B represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Total assets was declined by -3.62% (PSBs 4.18%), substandard assets was increased by 310.49% (PSBs 0.87%), and Doubtful-1 assets was increased by 93.02% (PSBs 34.87%).

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 79.9% (PSBs 20.02%), Gross NPA (%) increased by 9.04% (PSBs 2.81%). Net NPA was increased by 72.13% (PSBs 17.79%), Net NPA (%) was increased by 6.43% (PSBs 1.62%), and provisions for NPA was increased by 66.85% (PSBs 6.48%).

It's a point to note that the bank was having the quite high level of NPA during the period. Gross NPA (%) was noted as 19.11% in comparison to PSBs average of 12.32% similarly Net NPA (%) was noted as 13.21% in comparison to PSBs average of 7.7%.

This all hampered the overall working of the bank as total business of the bank had decreased by -4.61% (PSBs 4.18%), per employee business was decreased by -6.87% (PSBs 1.15%), gross advances was decreased by -11.61% (PSBs -4.15%), Credit-Deposit ratio (%) decreased by -4.6% (PSBs -3.31%), capital adequacy ratio (%) was decreased by -0.97% (PSBs 0.37%), Net interest income decreased by -0.89% (PSBs -7.42%), Net interest income (%) decreased by -0.94% (PSBs -0.85%), Net interest margin (%) was decreased by -0.26% (PSBs -0.06%).

Overall due to such negative impacts, cost to income ratio (%) had increased as 9.42% (PSBs -0.53%), total expenses was increased by 4.2% (PSBs 2.46%), operating profit of the bank decreased by -14.74% (PSBs 18.05%). Ultimately, the bank earned per employee loss as ₹ -28 lacs (PSBs -0.51 lacs) and a net loss of ₹ -5158 crores and this is never desirable. This all reflects bad impact of NPA on workings of the IDBI Bank Limited.

1.20: Impact of NPA on United Bank of India (2015-16 to 2016-17) [19]

Table-2B & 3B represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Doubtful-1 assets was increased by 70.21% (PSBs 34.87%), Doubtful-2 assets increased by 124.7% (PSBs 73.84%), Doubtful-3 assets increased by 327.58% (PSBs 86.77%) and Loss assets increased by 497.29% (PSBs 13.87%).

Accordingly, the position of NPA had become more drastic as Gross NPA increased by 15.63% (PSBs 20.02%), Gross NPA (%) increased by 2.27% (PSBs 2.81%). Net NPA was increased by 7.88% (PSBs 17.79%), Net NPA (%) was increased by 0.98% (PSBs 1.62%), and provisions for NPA was increased by 236.09% (PSBs 6.48%).

This all hampered the overall working of the bank as gross advances was decreased by -1.27% (PSBs -4.15%), Credit-Deposit ratio (%) decreased by -4.32% (PSBs -3.31%), total income was decreased by -4.38% (PSBs 4.96%), Net interest income decreased by -4.31% (PSBs -7.42%), Net interest income (%) decreased by -0.91% (PSBs -0.85%), Net interest margin (%) was decreased by -0.41% (PSBs -0.06%), Yield average of advances (%) was decreased by -0.98% (PSBs -0.74%).

Overall due to such negative impacts, total expenses was increased by 6.18% (PSBs 2.46%), operating profit of the bank decreased by -14.3% (PSBs 18.05%). Ultimately, the bank earned per employee profit as ₹ 10.38 lacs (PSBs -0.51 lacs) and a net profit of ₹ 219 crores. This all reflects bad impact of NPA on workings of the United Bank of India.

1.21: Impact of NPA on Vijya Bank (2015-16 to 2016-17) [20]

Table-2B & 3B represents various performance indicators as below:

Table elaborates that quality of assets have been deteriorated in the bank during this period. Doubtful-1 assets was increased by 111.96% (PSBs 34.87%), Doubtful-2 assets increased by 21.23% (PSBs 73.84%), Doubtful-3 assets increased by 20.98% (PSBs 86.77%) and Loss assets increased by 157.14% (PSBs 13.87%).

Accordingly, the Gross NPA increased by 5.89% (PSBs 20.02%), Gross NPA (%) increased by 0.05% (PSBs 2.81%) and provisions for NPA was increased by 6.78% (PSBs 6.48%).

This all hampered the overall working of the bank as Net interest income (%) decreased by -0.63% (PSBs -0.85%), Yield average of advances (%) was decreased by -0.63% (PSBs -0.74%).

Overall due to such negative impacts, total expenses was increased by 5.6% (PSBs 2.46%), and the bank earned a net profit of ₹ 750 crores. However, performance of the bank was much better in comparison to other public sector banks' but keeping in view its huge business such a low net profit is not desirable. This all reflects bad impact of NPA on workings of the Vijya Bank.

Conclusion

Commercial banks' especially the PSBs in India have heightening contribution to the development of the economy. The wide-spread branch network, increasing volume of deposits and credit deployment have significant contribution to the economy. However, the mounting pressure of NPA on workings of banks' has attained an alarming position since last two decades. The NPA have affected adversely the profitability, liquidity, capital adequacy norms, risk-management strategies, financial performance and working results of banks', especially to the PSBs in the country. Banking Reforms in two phases have suggested guidelines for improvement of the situations. The RBI have taken serious steps in this matter and directed to banks' to improve the situation of NPA in their workings and keep their operational efficiency at par with the international standards.

Acknowledgements

Authors are thankful to Shri Rajeev Kumar Das (Assistant General Manager to State Level Bankers Committee, Bihar) for providing all the necessary and updated data regarding Non-performing Assets and performance indicators of SBI & other public sector banks'. We are also thankful to Prof. B.B.L. Das (Head of the University Department of Commerce & Business Administration, Lalit Narayan Mithila University, Darbhanga) for his everlasting kind co-operation.

References

- 1. Ahmad, Z., Jegadeeshwaran, M. (2013). "Comparative Study on NPA Management of Nationalized Banks". *International Journal of Marketing, Financial Services and Management Research*, 2 (8): 66-78.
- 2. Aravanan, S. and Vijayakumar, N. (2007). Impact of NPAs on Performance of Banks. *Indian Economic Panorama*, **Vol.17**, No. 3, pp.18-21.
- 3. Arora, N. and Ostwal, N. (2014). "Unearthing the Epidemic of Non-Performing Assets: A Study of Public and Private Sector Banks". *SMS Varanasi*, **Vol. X**, No. 1.
- 4. Basu, P. (2005). How distress is India's Banking System? India's Financial Sector-Recent Reforms, Future Challenges. First Edition (Reprint), McMillan India Limited.
- 5. Chakrabarti, R. (2006). Banking in India Reforms and Reorganization. *United Nations Public Administration Network*, URL: http://unpan1.un.org/

- 6. Dash, M.K. and Kabra, G. (2010). The Determinants of Non-Performing Assets in Indian Commercial Bank: An Econometric Study. *Middle Eastern Finance and Economics*, Issue 7 (2010).
- 7. Faizanuddin, Md. and Mishra, R.K. (2011). Non-Performing Assets in Indian Banks, First Edition, APH Publishing Corporation, New Delhi.
- 8. Gopalakrishnan, T.V. (2004). Management of Non Performing Advances A Study with reference to Public Sector Banks. Northern Book Centre Publications.
- 9. Joshi, Vijay and Little I.M.D. (1996). India's Economic Reforms (1999-2000), Oxford University Press, New Delhi.
- 10. Kavitha N.A. and Muthumeenakshi, M. (2016). "A Comparative Study of Non-Performing Assets of Public and Private Sector Banks". *IJMTST*, 2 (3): 37-40.
- 11. Naidu, B.R. and Naidu, A.P.S. (2004). Impact of Non-Performing Assets on the Profitability of Public Sector banks. *Paper presented in UGC funded National Seminar on Non-Performing Assets*, Department of Commerce, Sri Venkateswara University, Tirupathy.
- 12. Prasad, V.B. and Veena, D. (2011). NPAs Reduction Strategies for Commercial Banks in India. *International Journal of Management & Business Studies*, 1 (3):47-53.
- 13. Rajeev, R. (2008). Asset as Liability: NPAs in the Commercial Banks of India, South Asia Network of Research Institutes.
- 14. RBI. Annual Reports of the Reserve Bank of India (2007-17). https://rbi.org.in (accessed 10-12 June 2017).
- 15. RBI. Report on the Trend and progress of Banking in India (2007-17). https://rbi.org.in (accessed 10-12 June 2017).
- 16. Satpal, (2014). "A Comparative study of Non-Performing Assets in Public and Private Sector Banks in the New Age of Technology". *International Journal of Current Engineering and Technology*, pp. 2468-2475.
- 17. Shiralashetu and Akash (2006). Management of Non-Performing Assets in Commercial Banks- Some Issues, *Journal on Banking and Finance*, February 2006, pp 14-16.
- 18. Singh, V.R. (2016). "A Study of Non-Performing Assets of Commercial Banks and it's recovery in India". *Annual Research Journal of Symbiosis Centre for Management Studies*, Vol. 4, pp.110-125.
- 19. Siraj, K.K. and Pillai, P.S. (2011). Asset Quality and Profitability of Indian Scheduled Commercial Banks during Global financial crisis. *International Research Journal of Finance and Economics*, Issue 80.

- 20. Siraj, K.K. and Pillai, P.S. (2012). Management of NPAs in Indian SCBs: Effectiveness of SARFAESI Act, DRT & Lok Adalat during 2004-2011. *International Journal for Business and Management Tomorrow*, Vol.2, No. 4.
- 21. Vallabh, G., Bhatia, A. and Mishra, S. (2007). Non-Performing Assets of Indian Public, Private and Foreign Sector Banks: An Empirical Assessment, *ICFAI Journal of Bank Management*, 6 (3):7-28.
- 22. Yadav, M.S. (2011). Impact of Non-Performing Assets on Profitability and Productivity of Public Sector Banks in India. *AFBE Journal*, **Vol. 4**, No. 1.

Reports

- 1. Annual Report of the Allahabad Bank (2015-17).
- 2. Annual Report of the Andhra Bank (2015-17).
- 3. Annual Report of the Bank of Baroda (2015-17).
- 4. Annual Report of the Bank of India (2015-17).
- 5. Annual Report of the Bank of Maharashtra (2015-17).
- 6. Annual Report of the Canara Bank (2015-17).
- 7. Annual Report of the Central Bank of India (2015-17).
- 8. Annual Report of the Corporation Bank (2015-17).
- 9. Annual Report of the Dena Bank (2015-17).
- 10. Annual Report of the Indian Bank (2015-17).
- 11. Annual Report of the Indian Overseas Bank (2015-17).
- 12. Annual Report of the Oriental Bank of Commerce (2015-17).
- 13. Annual Report of the Punjab National Bank (2015-17).
- 14. Annual Report of the Syndicate Bank (2015-17).
- 15. Annual Report of the Union Bank of India (2015-17).
- 16. Annual Report of the Punjab and Sind Bank (2015-17).
- 17. Annual Report of the Uco Bank (2015-17).
- 18. Annual Report of the IDBI Bank Limited (2015-17).
- 19. Annual Report of the United Bank of India (2015-17).
- 20. Annual Report of the Vijaya Bank (2015-17).