

# IMPACT OF NPA ON PROFITABILITY AND FLOW OF CREDIT IN INDIA

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**Abstract:** In Indian economy, banks and financial institutions plays a crucial role. Their performance indicates the direction of growth of our economy. The Indian banking sector has been facing serious problems on account of the mounting up of Non-Performing Assets (NPAs). The growth in NPA has a direct impact on the profitability and level of risk of these commercial banks. The stress created due the rising tendency of non-performing assets on the profitability, capital adequacy and operational effectiveness are highly significant. The recommendations of Narasimham committee and Verma committee helped our commercial banks to tackle the problems of NPAs only to a certain extent. There seems to be no unanimity in the proper policies to be followed in resolving this problem. An attempt is made in this paper to understand NPA, how it is effect in profitability as well as the competitiveness of commercial banks.

**Keywords:** Non-Performing Assets, Quality of assets and profitability.

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## I. INTRODUCTION

The financial system is the life-line of the economy. The changes in the economy get mirrored in the performance of the performance of the financial system, more so of the banking industry. Financial sector reforms set in motion in 1991 have greatly changed the face of the Indian banking. The banking industry has moved gradually from a regulated environment to a deregulated market economy. The market developments, kindled by liberalization, globalization and global economic slow-down has resulted in changes in the intermediation role of banks. Banks are considered to be the mart of the world, nerve center of the economies, finance of a nation and barometer of its economic perspective. They are not merely dealers in money but are in fact the ladder for development. They divert and employ the funds to make possible maximum utilization of the resources of the nation. They transfer funds from regions where it is available to where it can be effectively utilized. Hence, banks are the prime agents that create opportunities for the development of the resources to speed up the tempo of economic development.

Loans granted to customers are the most important assets of banks and the financial health of the banks depends on the quality of these loan assets. Asset classification and prudential income recognition norms suggested by the Narasimham Committee has far reaching consequences on the earning capacity, capital adequacy and the flow of credit. A Loan asset becomes non-performing when it ceases to generate income for the bank. A 'non-performing asset' (NPA) was defined as a "credit facility in respect of which the interest and / or instalment of principal has remained overdue for a period exceeding 90 days. (Singh, Rajbahdur Vivek, 2016). Recovery of non – performing assets has become critical performance area for all banks in India. As per RBI report, March 1999, the gross NPA of all the scheduled commercial banks and

primary co – operative banks have gone up to Rs. 58,554 cores (14.6%) and to Rs. 4,535 (12.2%) cores respectively. ([www.rbi.org](http://www.rbi.org)). There was a lack of specific and unanimous guidelines which resulted in mis– allocation of (banks) huge funds and ruin the sustained economic growth of nation. So, it was high time to form some specific guidelines on this. Reserve Bank of India (RBI) introduced a new set of prudential norms in April, 1992 for commercial banks and subsequently it has been extended, in stages to urban co– operative banks as well, as per the recommendations of high power committee on urban co-operative banks constituted in May 1999 under the chairmanship of K. Madharao as a need for strengthening the co– operative sector in order to enhance operational efficiency, productivity and profitability and with the objective of implementing international. Best practices in Indian banks, it is compulsory for all banking institutions to comply with prudential norms of RBI.

In the present scenario NPAs of Indian banks are in increasing trend. This movement of NPAs is not good symptom for our economy. NPAs have the following effects on our banking sector:

- Interest on NPAs is recognised as income cash basis and not on accrual basis. Hence interest on a sizable portion of loan assets identified as NPA cannot be counted as income.
- As per the prudential income recognition norms, provisions are to be created against principal amount outstanding on non-performing assets. This create a serious problem on the earning capacity of banks.
- NPAs leads to high risk weighted assets and then it leads to a reduction in the capital adequacy ratio, which is an indicator of financial health of the bank.
- The reputation of the borrower in the market is adversely affected.
- The Bankers attitude towards the borrower becomes more arrogant, authoritative and threatening, instead of extending helping hand to them to get out of the situation.
- This leads to demoralization of the borrower who has been working with the Bank for number of years.
- The principle of customer care is neglected, and customer torture begins. This brings the borrower in a helpless situation and at the mercy of the Bank.

## **STATEMENT OF THE PROBLEM**

For the last ten years, NPA of the Indian Banking sector is increasing tremendously. This study analyses the movement of NPA over a period of ten years. It also analyses the different ratios, and the impact of NPAs on the profitability and flow of credit of SCBs in India.

## **OBJECTIVES OF THE STUDY**

- To identify the trends and patterns of Stressed assets of Indian commercial banks.
- To identify the sectors contributing to non-performing assets.
- To identify the impact of NPAs on the profitability and productivity of commercial banks.
- To identify the interdependence between occurrence of NPA’s growth in GDP and flow of credit.

## RESEARCH METHODOLOGY

Secondary data has been used for the study. The required details have been collected from the annual reports of Reserve bank of India's official website (www.rbi.org.in). Further necessary details have been collected from various journals, books, magazines, periodicals, etc. Analysis of the study is conducted by using percentages and regression analysis.

## PERIOD OF STUDY

2005 - 2015

## LIMITATION OF THE STUDY

- The study is based purely on secondary data.
- Due to the lack of time study is conducted only for a period of ten years (2005-2015)

## ANALYSIS OF DATA

### 1. Trends and pattern of Stressed assets.

TABLE 1: GROSS NON-PERFORMING ASSETS, GROSS ADVANCES AND GROSS NPA RATIO OF SCHEDULED COMMERCIAL BANKS.

(Amt. in Billion)

Year	Gross Advances	Gross NPAs	Gross NPA to Gross Advances
2001-02	6809.580	708.610	10.4
2002-03	7780.430	687.170	8.8
2003-04	9020.260	648.120	7.2
2004-05	11676.835	573.960	5.2
2005-06	15457.301	517.531	3.3
2006-07	20074.130	505.170	2.5
2007-08	25034.310	566.060	2.3
2008-09	30246.518	699.537	2.3
2009-10	32620.788	817.181	2.4
2010-11	39959.815	939.969	2.5
2011-12	46488.078	1369.683	2.9
2012-13	59718.199	1927.688	3.2
2013-14	68757.479	2630.152	3.8

2014-15	75606.658	3229.161	4.2
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The above table depicts the amount of Gross Advances, Gross NPA and the percentage of Gross NPA during the period of 2001-02 to 2013-14. The amount of advances of has increased from Rs. 6810 Billion in 2001-02 to Rs. 75606.658 Billion in 2014-15. The amount of gross NPA has increased from Rs. 708.61 billion in 2001-02 to Rs. 3229.161 billion in 2014-15. Similarly, NPA percentage is also showing the rising trend from 2.3 in 2007 to 4.2 in 2015.

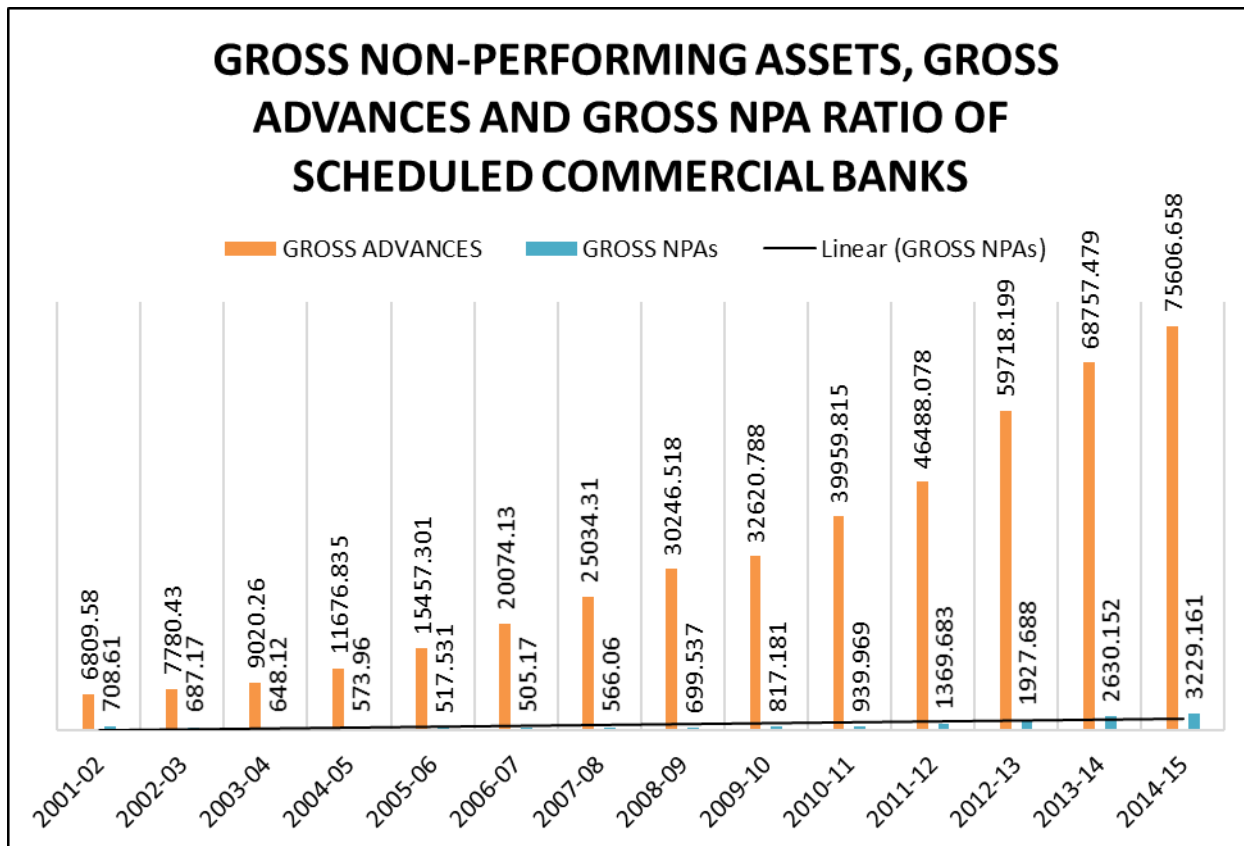
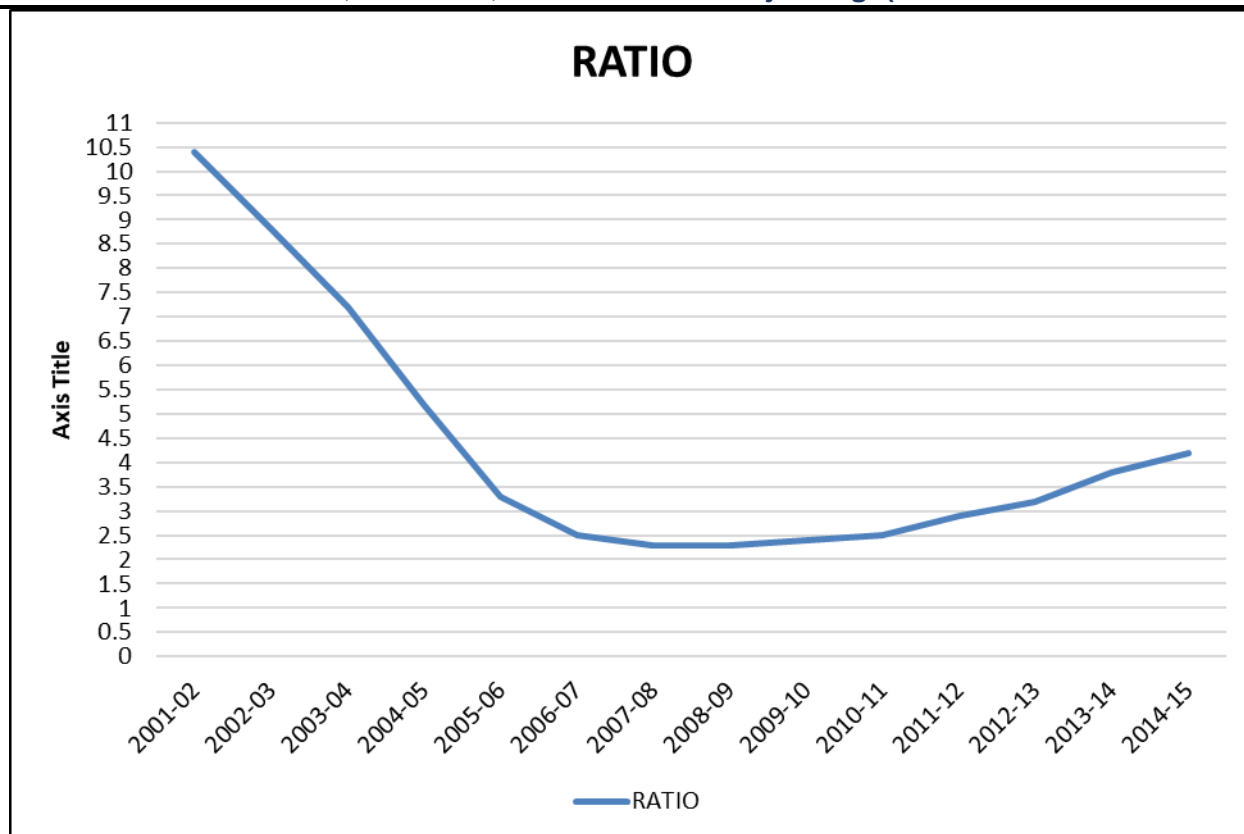


Chart 1: Gross Advances and Gross NPAs



**Chart 2: Gross NPAs ratio to Gross Advances**

**TABLE 2: NET NON-PERFORMING ASSETS, NET ADVANCES AND NET NPA RATIO OF SCHEDULED COMMERCIAL BANKS (Amt. in Billion)**

Year	Net Advances	Net NPAs	Net NPA to Net Advances
2001-02	6458.59	355.54	5.5
2002-03	7404.73	296.92	4.0
2003-04	8626.43	243.96	2.8
2004-05	11156.63	217.54	2.0
2005-06	15168.11	185.43	1.2
2006-07	19812.37	201.01	1.0
2007-08	24769.36	247.30	1.0
2008-09	29999.24	315.64	1.1
2009-10	34970.92	387.23	1.1
2010-11	42987.04	417.00	1.1
2011-12	50735.59	652.00	1.3

2012-13	58797.03	986.00	1.7
2013-14	67352.32	1426.57	2.1
2014-15	82286.542	1760.932	2.14

The above table shows the amount of Net Advances, Net NPA and the percentage of Net NPA during the period of 2001-02 to 2013-14. The amount of advances has increased from Rs. 6458.59 billion in 2001-02 to 82286.542 billion in 2014-15. Further, the amount of NPA has also increased from Rs. 355.54 billion to Rs1760.932 billion during the period (2001-02 to 2014-15). The percentage of Net NPA has first declined from 5.5 in 2001-02 to 1.0 in 2007-08. Then it has increased to 2.14% in 2014-15.

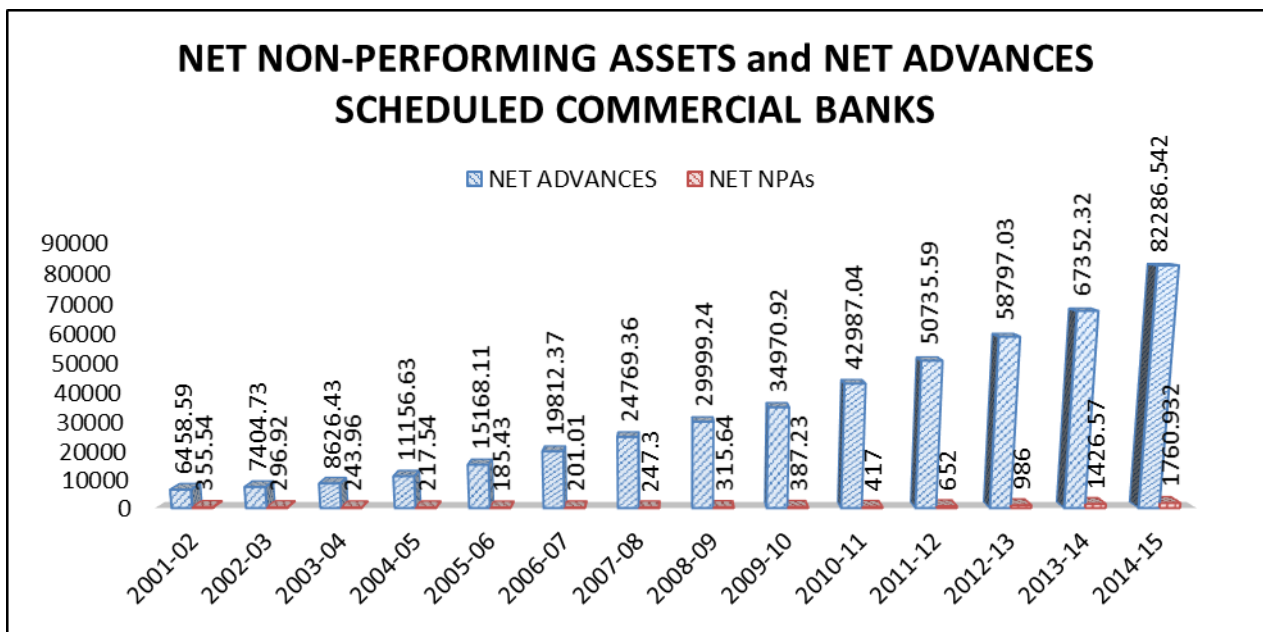


Chart 3: Net NPAs and Net advances

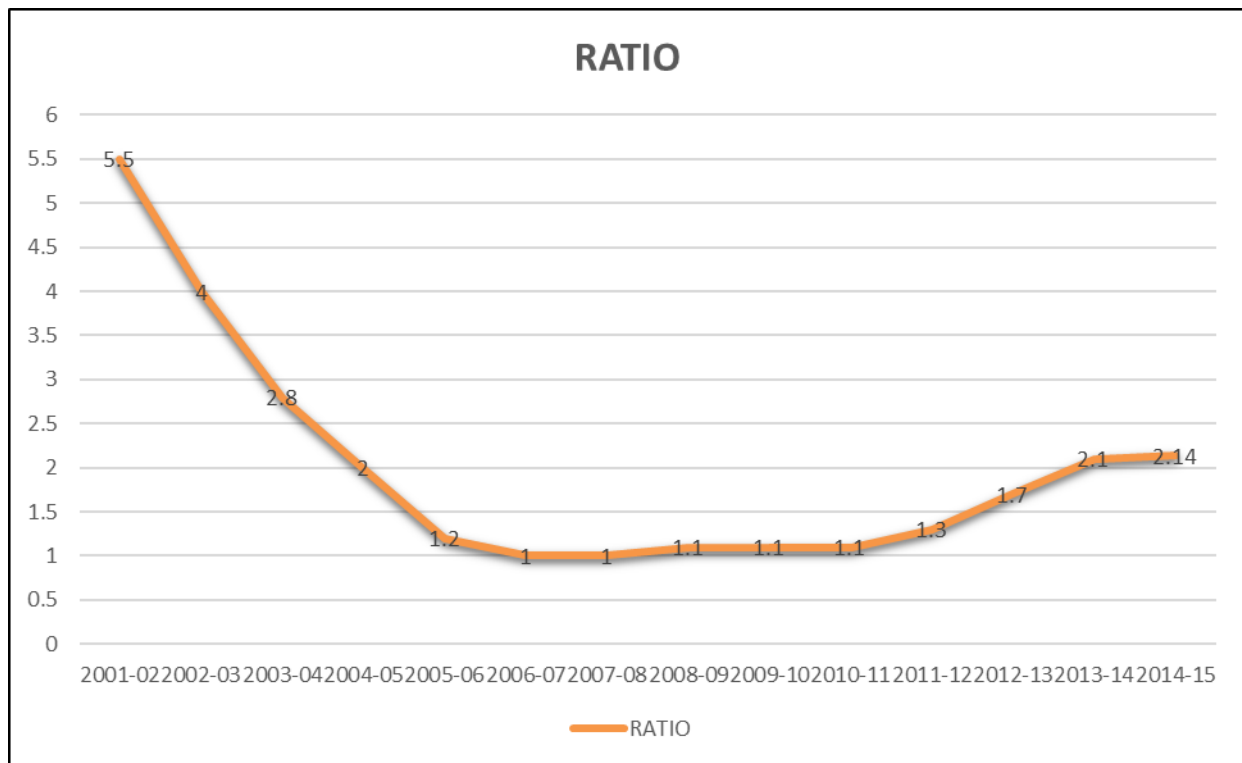


Chart 4: Net NPAs ratio to Net Advances

## 2. COMPOSITION OF NPAs OF SCHEDULED BANKS

TABLE 3: SECTORS CONTRIBUTING TO NON-PERFORMING ASSETS

(Amt. in Million)

YEAR	PRIORITY SECTOR		NON-PRIORITY SECTOR		PUBLIC SECTOR		TOTAL
	Amount	Percentage to Total	Amount	Percentage to Total	Amount	Percentage to Total	
2004-05	430.72	45%	509.87	53%	11.84	2%	952.43
2005-06	444.72	54%	365.58	44%	17.1	2%	827.4
2006-07	450.38	58%	312.06	40%	14.64	2%	777.08
2007-08	497.48	61%	300.14	37%	11.48	2%	809.1
2008-09	482.02	54%	410.56	46%	5.94	0.66%	898.52
2009-10	609.92	51%	582.28	48%	6.28	0.52%	1198.48
2010-11	803.73	54%	684.71	46%	4.85	0.32%	1493.29
2011-12	1115.6	47%	1176.52	50%	53.12	3%	2345.24
2012-13	1345.52	41%	1920.62	58%	23.1	0.70%	3289.24
2013-14	1597.98	35%	2944.7	65%	2.6	0.05%	4545.28
2014-15	1932.21	35%	3631.97	65%	5.18	0.09%	5569.36

From the above table NPA's contributing sectors are in increasing trend expect in the Public Sector. In 2004-05 NPA contribution from Priority sector is low, but in coming years it began to rise and now it is in a decreasing trend. In case of Non-Priority sector, it shows an increasing trend and its percentage to total NPAs are high compared to other sectors. In case of public sector, it has only less contribution to total NPAs and showing a decreasing trend.



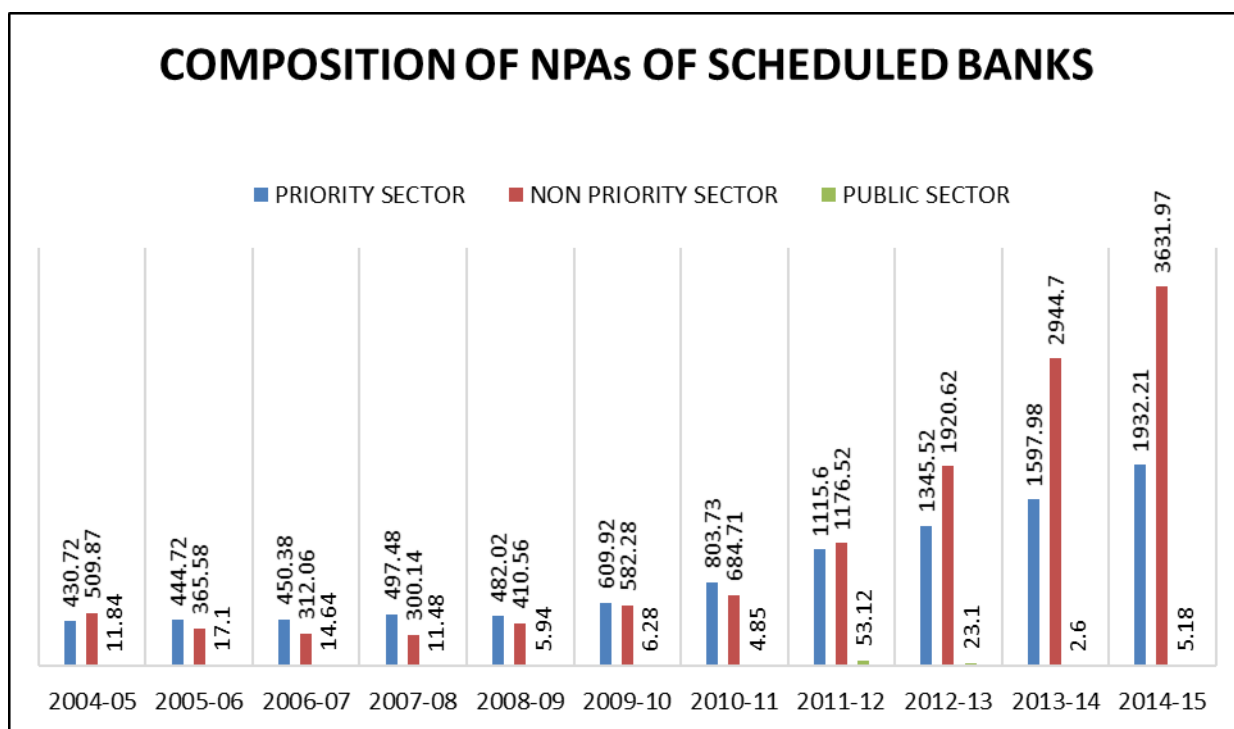


Chart 5: Composition of NPAs from various sectors.

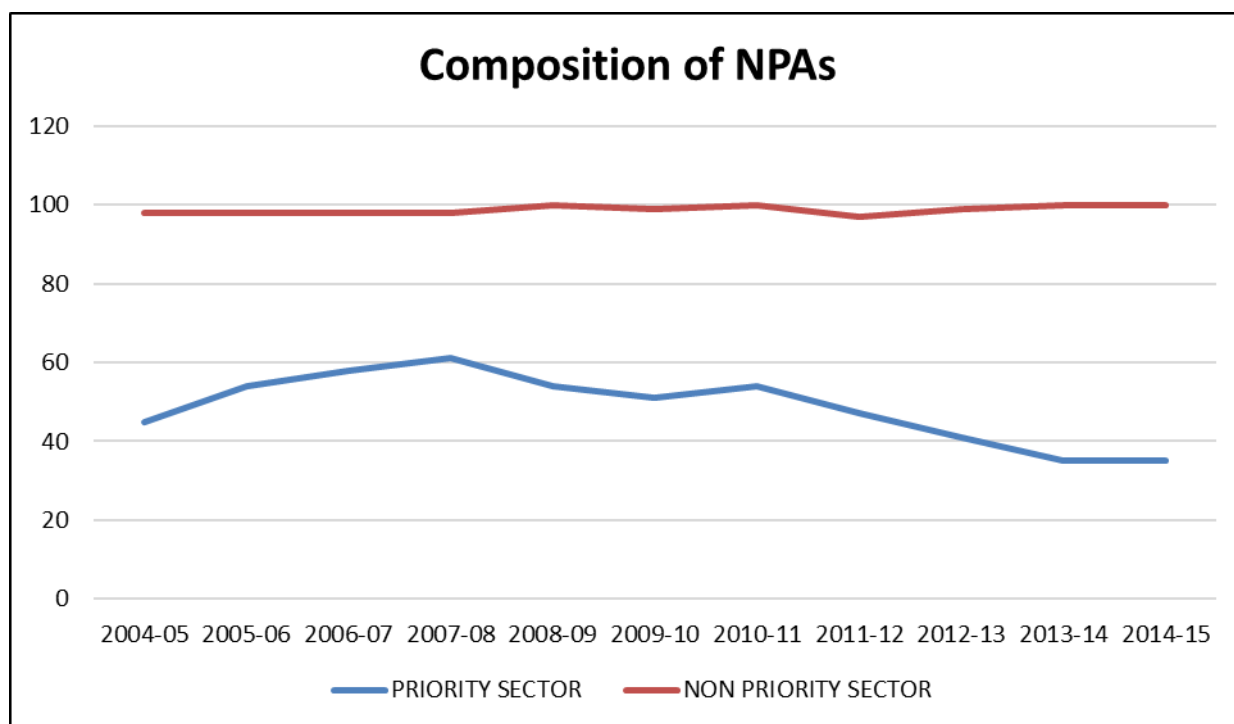


Chart 6: Percentage of contribution of NPAs from various sectors

### 3. IMPACT OF NPAs ON THE PROFITABILITY AND PRODUCTIVITY

TABLE 4: GROSS NPAs, NET PROFIT AND PROVISIONS

(Amt. in Billion)

YEAR	GROSS NPAs	NET PROFIT	PROVISIONS ON NPAs	PROVISIONS AS PERCENTAGE TO NET PROFIT
2004-05	573.960	209.582	58.762	28.03771

2005-06	517.531	245.818	53.551	21.78482
2006-07	505.170	312.026	80.821	25.90201
2007-08	566.060	427.259	133.958	31.35288
2008-09	699.537	527.499	207.347	39.30756
2009-10	817.181	571.092	306.806	53.72269
2010-11	939.969	703.313	315.788	44.90007
2011-12	1369.683	816.583	405.506	49.65888
2012-13	1927.688	911.647	495.857	54.39134
2013-14	2630.152	809.127	666.446	82.36606
2014-15	3229.161	890.777	797.835	89.56619

### Testing of dependence (Regression Analysis)

H<sub>0</sub>: Profitability of SCBs are depends on gross NPAs and Provisions against NPAs.

#### Test Results;

#### Model Summary

R	R Square	Adjusted R Square	Std.Error of the Estimate	Durbin-Watson
.951	.904	.880	90.07483	1.696

a. Predictors: (Constant), Provisions against NPAs, Gross NPA of SCBs

b. Dependent Variable: Net Profit of SCBs

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	612019.756	2	306009.878	37.716	.000
Residual	64907.796	8	8113.474		
Total	676927.552	10			

a. Predictors: (Constant), Provisions against NPAs, Gross NPA of SCBs

b. Dependent Variable: Net Profit of SCBs

#### Co Efficient

	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

	B	Std. Error	Beta		
(Constant)	313.069	46.587		6.720	.000
Gross NPA of SCBs	-3.41	.126	-1.235	-2.707	.027
Provisions against NPAs	2.176	.473	2.103	4.608	.002

a. Dependent Variable: Gross advances

From the above results of Multiple regression analysis  $R=0.951$  which is closely related to 1 i.e. the factors Gross NPAs, Provisions against NPAs and Net profit of Schedule banks are highly correlated. R Square is 0.904 which means 90.4% of Net Profit of banks are influenced by Gross NPAs and Provisions against NPAs. Since significant level is less than 0.5 the model selected by the researcher is suitable. From the Co efficient table, it's clear that there is a negative relation between Gross NPAs of SCBs and Net profit, but it shows a positive relation between provisions against NPAs and Net profit.

#### 4. Inter dependence between occurrence of NPAs growth in GDP and flow of credit

Table 5: Gross NPAs, Total Credit (Gross Advances) and GDP Value

YEAR	GROSS NPA	TOTAL CREDIT	GDP VALUE (MARKET PRICE)
2004-05	573.960	11676.835	32422.09
2005-06	517.531	15457.301	36933.69
2006-07	505.170	20074.130	42947.06
2007-08	566.060	25034.310	49870.90
2008-09	699.537	30246.518	56300.63
2009-10	817.181	32620.788	64778.27
2010-11	939.969	39959.815	77841.15
2011-12	1369.683	46488.078	90097.22
2012-13	1927.688	59718.199	99513.44
2013-14	2630.152	68757.479	112727.64
2014-15	3229.161	75606.658	124882.05

### Testing of dependence

$H_0$ : Gross advances of SCBs is dependence on Gross NPAs and GDP of the economy.

#### Test results;

##### Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
0.996	0.993	0.991	2046.68824	1.742

a. Predictors: (Constant), Gross NPA of SCBs, Absolute GDP

b. Dependent Variable: Gross advances

##### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.649E9	2	2.324E9	554.869	.000
Residual	3.351E7	8	4188932.746		
Total	4.682E9	10			

a. Predictors: (Constant), Gross NPA of SCBs, Absolute GDP

b. Dependent Variable: Gross advances

##### Co Efficient

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-7116.848	2219.963		-3.206	.013
Absolute GDP	.571	.061	.835	9.402	.000
Gross NPAs of SCBs	3.902	2.036	.170	1.916	.092

a. Dependent Variable: Gross advances

For testing the dependence of gross advance on Gross NPA and GDP multiple regression was applied. Model summary table shows the correlation between the variables and the  $R^2$  as and .996, 0.993 respectively, indicating that there is very strong correlation between the variables under study.  $R^2$  value .993 indicates that one-unit change in the independent variables will result in .993-unit change in the dependent variable. The ANOVA table shows the significance of the model proposed by the researcher. Since the significance value is zero, it is sure that the dependence of gross credit on gross NPA and the GDP is significant at even 1 per cent level of significance. The coefficients table shows the significance of both the independent variables. But the

significance value in case of Gross NPA is greater than the bench mark level of .05. Hence it clear that the occurrence of NPA is not significantly influencing the flow of credit.

## CONCLUSION

The problem arising from NPAs always affect the performance of Indian commercial banks. But this problem not only affects the performance of banks but also the growth of our economy too. Through this it is clear that the amount of gross and net NPAs are in an increasing trend. And also, the amount of NPAs has a significant portion in the Gross and Net advances. There are mainly three sectors contributing NPAs i.e. Priority, Non-priority and Public sector. While comparing their contribution to total NPAs, the role of public sector is very low, and it is showing a decreasing trend from 2004-05. The major portions of total NPAs are held by Priority and Non-Priority sectors. Within that the contribution of Non-priority sector is high. This study also reveals that there is a correlation between Gross NPAs, Net profit and provisions against NPAs. I.e. 90.4% of the Net profit of SCBs is influenced by these factors. And also, gross advances have influencing GDP of economy but gross NPAs did not play significant role in gross advances. We can conclude this study as there is an increasing trend in growth of NPAs year by year. And these NPAs are influencing the net profit of SCBs in India and GDP of our economy. So, there must be a proper care must be given to management of NPAs in order to maintain profitability and liquidity of SCBs in India.

## REFERENCES

- Singh, RajbahdurVivek, A study of NPAs of commercial banks and its recovery in India, March 2016
- [www.rbi.org.in](http://www.rbi.org.in)
- [www.indiastat.com](http://www.indiastat.com)