

# Analysis of NPA of Public Sector Banks in India during 2014 to 2018

1. Dr. A. Oliver Bright,  
Professor,  
Dept. of Management Studies,  
St. Xavier's Catholic College of Engineering,  
Nagercoil, India.

2. Ms. Adlin Virgilt G.  
Asst. Professor,  
Dept. of Management Studies,  
St. Xavier's Catholic College of Engineering,  
Nagercoil, India.

## ABSTRACT

NPA is any asset of a bank, which is not producing any income. In other words, a loan or lease that is not meeting its stated principal and interest payments. On a bank's balance sheet, loans made to customers are listed as assets. The biggest risk to a bank is when customers who take out loans stop making their payments, causing the value of the loan assets to decline. During the period 2014 to 2018, there was a lot of changes in the financial and banking system. The demonetization and GST were introduced. The banking transactions were affected; cash flows were restricted. Lending, collections and deposits were affected. People were struggling to get hot cash. There was a problem in GDP, Agricultural loans, small and medium scale industries etc. The other side NPA was also getting accumulating. Borrowers expect loan waiver and dues are not cleared. Hence, in this study, the pattern of growth of NPA in these public sector banks during 2014 to 2018 is analyzed and studied.

## Key Words:

1. **NPA** - Non-performing Assets
2. **Write-off** - A loan write-off is a tool used by banks to clean up their balance-sheets
3. **Lok Adalat**- A mechanism Which offers expeditious, in-expensive and mutually acceptable way of settlement of disputes.
4. **CAGR** - Compound Annual Growth Rate
5. **Bad loans** - The loans which cannot be recovered

## I. Introduction

### Meaning of Non-Performing Assets

NPA is any asset of a bank, which is not producing any income. In other words, a loan or lease that is not meeting its stated principal and interest payments. On a bank's balance sheet, loans made to customers are listed as assets. The biggest risk to a bank is when customers who take out loans stop making their payments, causing the value of the loan assets to decline.

## Criteria

Loans don't go bad right away. Most loans allow customers a certain grace period. Then they are marked overdue. After a certain number of days, the loan is classified as a nonperforming loan. Banks usually classify as nonperforming assets any commercial loans which are more than 90 days overdue and any consumer loans which are more than 180 days overdue. For agricultural loans, if the interest and/or the installment or principal remains overdue for two harvest seasons; it is declared as NPAs. But, this period should not exceed two years. After two years any unpaid loan/installment will be classified as NPA.

## Stages of NPA

### *Standard Assets*

Standard Assets brings regular income to the organization, Such an asset should not be an NPA because of the risk of borrower fails. In some scenario, standard assets are led to get fixed income, if the borrower fails to make repayment regularly and on time, the standard assets said to be NPA.

### **Sub Standard Assets**

Any assets which repayment is due for more than 90 days but less than 1 year are sub-standard assets. Earlier credit card users would get 120 days before being classified as NPAs, as per new amendment if the minimum card payment is not paid within 90 days, it would be treated as sub-standard assets.

### **Doubtful asset**

Doubtful assets speak it and explain the meaning, in this category if substandard assets remain unpaid for more than 12 months. Going further, doubtful assets are those advances that have a considerable list of defaults or are regularly failing to comply with the norms of "standard asset".

### **Loss Assets**

When the performance of the assets across all the levels of substandard and doubtful category and audit team also declared the loss of the asset, An asset as NPA for a period of more than **36 months** is treated as a lost asset.

### **Loan write-off**

A loan write-off is a tool used by banks to clean up their balance-sheets. It is applied in the cases of bad loans or non-performing assets (NPA). If a loan turns bad on the account of the repayment defaults for at least three consecutive quarters, the exposure (loan) can be written off. A loan write-off sets free the money parked by the banks for the provisioning of any loan. Provision for a loan refers to a certain percentage of loan amount set aside by the banks. The standard rate of provisioning for loans in Indian banks varies from 5-20 per cent depending on the business sector and the repayment capacity of the borrower. In the cases of NPA, 100 per cent provisioning is required in accordance with the Basel-III norms. Earlier this year in a case of 12 large bankruptcy cases referred to the National Company Law Tribunal, the RBI asked banks to keep aside 50 per cent provision against secured exposure and 100 for unsecured exposure.

## Control of NPA

The simplest approach to cut down NPAs is to recover the bad loans. Apart from the regular guidelines released by the RBI, to strengthen further the recovery of dues by banks and financial institutions, Government of India promulgated:

1. The Recovery of Debts Due to Banks and Financial Institutions Act, 1993
2. The Securitization Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002.

## Legal recovery

1. The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 – The Act empowers Banks / Financial Institutions to recover their non-performing assets without the intervention of the Court, through acquiring and disposing of the secured assets in NPA accounts with outstanding amount of Rs. 1 lakh and above. The banks have to first issue a notice. Then, on the borrower's failure to repay, they can:

- Take possession of security and/or
- Take over the management of the borrowing concern.
- Appoint a person to manage the concern.

2. Recovery of Debts Due to Banks and Financial Institutions (DRT) Act: The Act provides setting up of Debt Recovery Tribunals (DRTs) and Debt Recovery Appellate Tribunals (DRATs) for expeditious and exclusive disposal of suits filed by banks / FIs for recovery of their dues in NPA accounts with outstanding amount of Rs. 10 lakhs and above. Government has set up 33 DRTs and 5 DRATs all over the country so far.

3. Lok Adalats: Section 89 of the Civil Procedure Code provides resolution of disputes through ADR methods such as Arbitration, Conciliation, Lok Adalats and Mediation. Lok Adalat mechanism offers expeditious, in-expensive and mutually acceptable way of settlement of disputes. Government has advised the public sector banks to utilize this mechanism to its fullest potential for recovery in Non-Performing Assets (NPAs) cases. Among the various channels of recovery available to banks for dealing with bad loans, the SARFAESI Act and the Debt Recovery Tribunals (DRTs) have been the most effective in terms of amount recovered.

## The recent controversy surrounding loan recovery in India – Views of the SC

Banks have been alleged to engage in coercive practices to recover the loans. Recently, there have been some judicial pronouncements by the apex court determining the scope of powers of enforcement of securities without the intervention of the courts, by the banks and FIs under the SARFAESI Act. The apex court has reiterated the need to protect the interest of borrowers, and emphasized that the exercise of extraordinary powers of recovery, by banks and FIs must be in compliance with the provisions of the SARFAESI Act.

As per the supreme court-“ Liquidity of finances and flow of money is essential for any healthy and growth oriented economy. But certainly, what must be kept in mind is that the law should not be in derogation of the rights which are guaranteed to the people under the Constitution. The procedure should also be fair, reasonable and valid, though it may vary looking to the different situations needed to be tackled and object sought to be achieved.” But, these are the steps which cure the disease of NPAs. “The issue of NPAs needs to be tackled at the level of prevention rather than cure.”

## II. Need for the study

During the period 2014 to 2018, there was lot of changes in the financial and banking system. The demonetization and GST were introduced. The banking transactions were affected; cash flows were restricted. Lending, collections and deposits were affected. People were struggling to get hot cash. There was a problem in GDP, Agricultural loans, small and medium scale industries etc. The other side NPA was also got accumulating. Borrowers expect loan waiver and dues are not cleared. Hence this study is made.

## III. Objectives

1. To find the accumulation of NPA in public sector banks during 2014 to 2018.
2. To analyze the pattern of growth of NPA in public sector banks during 2014 to 2018.

## IV. Methodology

**Data:** Secondary Data

1. All India Bank Association Manual
2. RBI Website

**Tools for analysis**

1. Simple percentage method to find out the percentage of change during the year 2014 to 2018
2. Compound Annual Growth Rate to find out the pattern of growth of NPA during the year 2014 to 2018.
3. The Standard deviation to find the deviations in NPA during 2014 TO 2018.
4. The Multiple correlation analysis to find the relationship between the Value of NPA during 2014 to 2018.

## V. Analysis and Interpenetration:

The public sector banks profit earned before provisions for bad loans, NPA Provisions made, Bad debts written off and Net Profit published during the year 2014 to 2018 are analyzed as under.

## V. 1. Gross Profit

**Table1**

Gross Profit of Public Sector Banks before provisions for bad loans

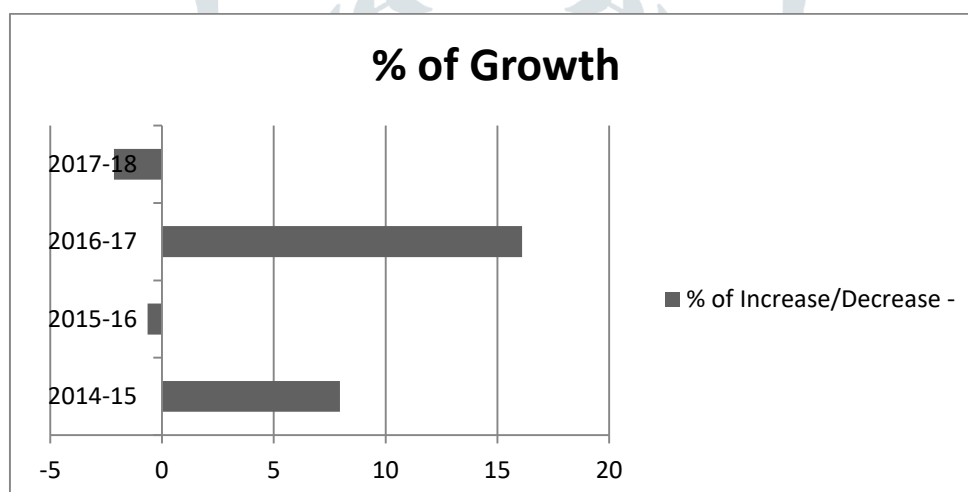
Year	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Amount in Crores</b>	127652	137817	136926	158982	155585
<b>Increase/Decrease</b>	-	10165	-891	22056	-3397
<b>% of Growth</b>	-	7.96	-0.65	16.11	-2.14

Source: Computed Data

The above computed data presented in the following chart

**Chart 1**

Gross Profit of Public Sector Banks before provisions for bad loans



It is clear that there was a negative growth of Gross profit during 2013-14 to 2017-18

## V.2.Provision for Bad Loans

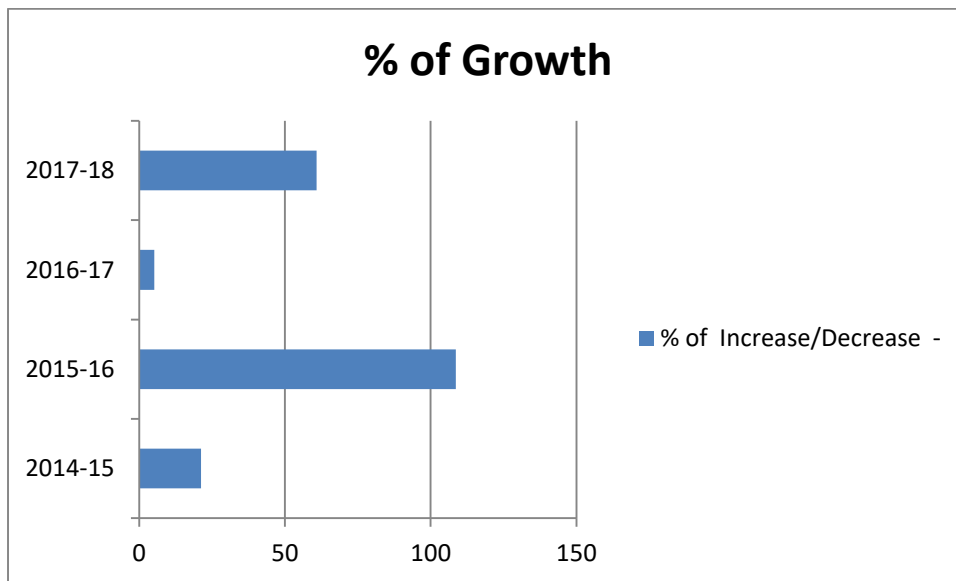
**Table 2**  
Provisions made for bad loans/ NPAs by Public Sector Banks

Year	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Amount in Crores</b>	63389	76837	160303	168469	270953
<b>Increase/Decrease</b>	-	13448	83466	8166	102484
<b>% of Growth</b>	-	21.22	108.63	5.09	60.83

Source: Computed Data

The above data presented in the following chart.

**Chart 2**  
**Provisions made for bad loans/ NPAs by Public Sector Banks**



From the above chart it is understood that there was growth of bad loans during 2013-14 to 2017-18

**V.3. Bad Loans**

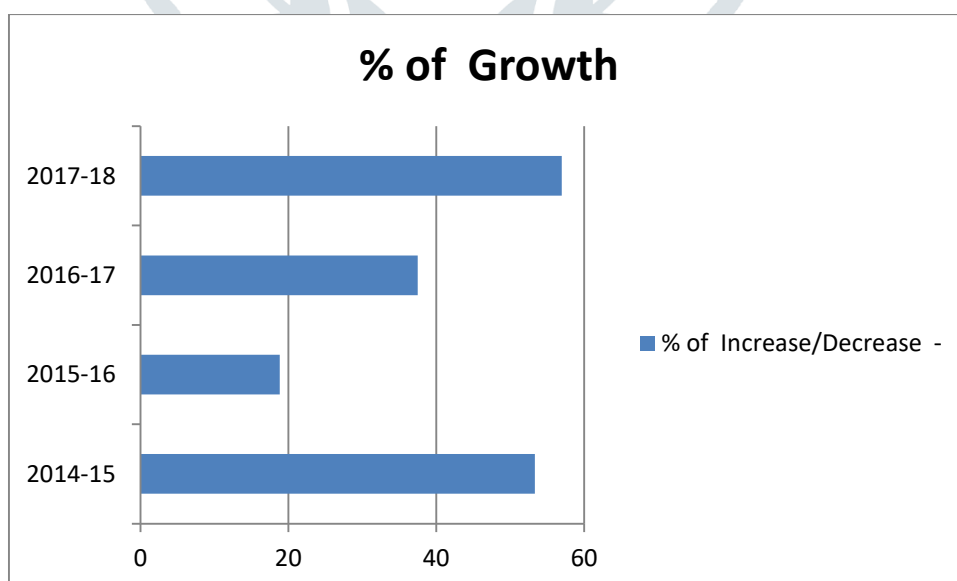
**Table 3**  
**Bad debts written off by Public Sector Banks**

Year	2014	2015	2016	2017	2018
<b>Amount in Crores</b>	32595	49976	59400	81684	128230
<b>Increase/Decrease</b>	-	17381	9424	22284	46546
<b>% of Growth</b>	-	53.32	18.86	37.52	56.98

Source: Computed Data

The above data presented in the following chart.

**Chart 3**  
**Bad debts written off by Public Sector Banks**



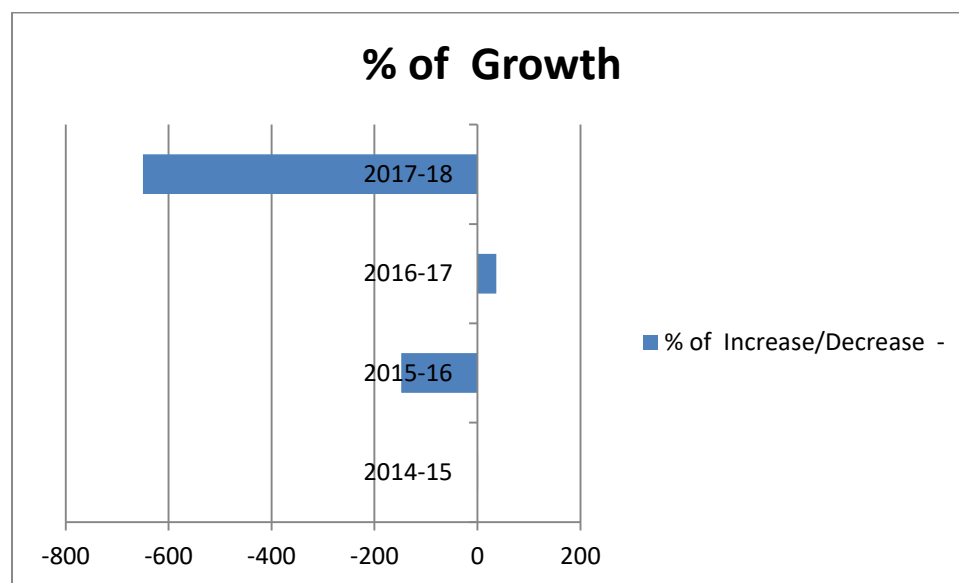
It is found that during this period all the years there was bad loan written off which is the result of long-term pending of dues.

**Table 4****Published net profit of Public Sector Banks**

year	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Amount in Crores</b>	37018	37540	-17993	-11388	-87371
<b>Increase/Decrease</b>	-	522	-55533	-48928	-134299
<b>% of Growth</b>	-	1.41	-147.93	36.71	-649.66

Source: Computed Data

The above data presented in the following chart.

**Chart 4: Published net profit of Public Sector Banks**

From the above it is observed that there was a heavy decline in the published profit during 2017-18.

#### V.4. Percentage growth of NPA

During the last five years percentage growth of NPA for each Public sector banks calculated and presented in the following table.

**Table 5**  
**The Percentage of Growth in NPA of Public Sector Banks during 2014 to 2018**

S. No	Bank	2014	2018	% Of Growth	Rank
1	Allahabad bank	8068	26563	69.63	21
2	Andhra bank	5858	28124	79.17	8
3	Bank of Baroda	11876	56480	78.97	9
4	Bank of India	11869	62328	80.96	6
5	Bank of Maharashtra	2860	18433	84.48	1
6	Bharatya Mahila bank	0	0	0.00	27
7	Canara bank	7570	47468	84.05	2
8	Central bank of India	11500	38131	69.84	20
9	Corporation Bank	4737	22213	78.67	11
10	Dena Bank	2616	16361	84.01	3
11	IDBI Bank	9960	55588	82.08	5
12	Indian Bank	4562	11990	61.95	25
13	Indian Overseas Bank	9020	38180	76.38	15
14	Oriental Bank of Commerce	5618	26134	78.50	12
15	Punjab & Sind Bank	2554	7802	67.26	23
16	Punjab National Bank	18880	86620	78.20	14
17	Syndicate Bank	4611	25759	82.10	4
18	UCO Bank	6621	30550	78.33	13
19	Union Bank of India	9564	49370	80.63	7
20	United Bank of India	7118	16553	57.00	26
21	Vijaya Bank	1986	7526	73.61	17
22	State Bank of Bikaner & Jaipur	2733	10677	74.40	16
23	State Bank of Hyderabad	5824	-	68.02	22
24	State Bank of India	61605	223427	72.43	18
25	State Bank of Mysore	2819	-	71.57	19
26	State Bank of Patiala	3758	-	78.94	10
27	State Bank of Travancore	3077	-	65.10	24
	Total	227264	895600		

Source: Computed Data

When the percentage of growth between 2014 and 2018 this period analyzed it is found that Bank of Maharashtra had the highest growth followed by Canara Bank and Dena Bank.



### V.5. Percentage of NPA to Total NPA of the Year

During the last five years the share of NPA for each bank to the total of NPA of all the Public sector banks by using the percentage method and presented in the following table.

**Table 6**  
**PSUs Bank-wise Percentage of NPA to Total NPA during 2014 to 2018**

S.No	Percentage Change	2014	2015	2016	2017	2018
1	Allahabad bank	3.550	3.001	2.849	3.021	2.966
2	Andhra bank	2.578	2.470	2.119	2.581	3.140
3	Bank of Baroda	5.226	5.839	7.505	6.239	6.306
4	Bank of India (BOI)	<b>5.223</b>	<b>7.970</b>	<b>9.238</b>	<b>7.601</b>	<b>6.959</b>
5	Bank of Maharashtra	1.258	2.299	1.923	2.510	2.058
6	Bharatya Mahila bank	0.000	0.000	0.000	0.008	0.000
7	Canara bank	3.331	4.683	5.859	4.995	5.300
8	Central bank of India	5.060	4.264	4.208	3.980	4.258
9	Corporation Bank	2.084	2.552	2.694	2.489	2.480
10	Dena Bank	1.151	1.578	1.585	1.843	1.827
11	IDBI Bank	4.383	4.555	4.607	6.536	6.207
12	Indian Bank	2.007	2.036	1.635	1.441	1.339
13	Indian Overseas Bank	3.969	5.359	5.565	5.126	4.263
14	Oriental Bank of Commerce	2.472	2.753	2.723	3.338	2.918
15	Punjab & Sind Bank	1.124	1.107	0.783	0.920	0.871
16	Punjab National Bank (PNB)	<b>8.308</b>	<b>9.227</b>	<b>10.338</b>	<b>8.086</b>	<b>9.672</b>
17	Syndicate Bank	2.029	2.313	2.562	2.572	2.876
18	UCO Bank	2.913	3.686	3.872	3.292	3.411
19	Union Bank of India	4.208	4.680	4.476	4.923	5.513
20	United Bank of India	3.132	2.353	1.754	1.599	1.848
21	Vijaya Bank	0.874	0.877	1.116	0.932	0.840
22	State Bank of Bikaner & Jaipur	1.203	1.058	0.667	1.559	0.000
23	State Bank of Hyderabad	2.563	1.790	1.221	2.660	-
24	State Bank of India (SBI)	<b>27.107</b>	<b>20.371</b>	<b>18.182</b>	<b>16.407</b>	<b>24.947</b>
25	State Bank of Mysore	1.240	0.767	0.673	1.448	-
26	State Bank of Patiala	1.654	1.566	1.253	2.606	-
27	State Bank of Travancore	1.354	0.846	0.593	1.288	-

Source: Computed Data

From the above table it is found that the SBI had the highest share (%) in all the years followed by PNB and BOI.

## V.6. Multiple correlations

In order study the year after year relationship in percentage of NPA (Share) the multiple correlation calculated and presented as follows

**Table7**  
**Multiple correlations**

	2014	2015	2016	2017	2018
2014	1				
2015	0.96524	1			
2016	0.909526	0.983438	1		
2017	0.927336	0.98079	0.978601	1	
2018	0.969251	0.986424	0.962715	0.967509	1

It is apparently proved that during the above period there is an absolute relationship in NPA percentage as the correlation for all the years during the period had high degree positive correlations.

## V.7. Standard Deviation

In order to find the amount of deviation in NPA value between the 27 banks during the last five years the standard Deviation was calculated and analyzed

**Table 8**  
**NPA of Public Sector Banks during 2014 to 2018 (Rs in Crores)**

S.No	Bank	2014	2015	2016	2017	2018
1	Allahabad bank	8068	8358	15385	20688	26563
2	Andhra bank	5858	6877	11444	17670	28124
3	Bank of Baroda	11876	16261	40521	42719	56480
4	Bank of India	11869	22193	49879	52045	62328
5	Bank of Maharashtra	2860	6402	10386	17189	18433
6	Bharatya Mahila bank	0	0	1	55	0
7	Canara bank	7570	13040	31638	34202	47468
8	Central bank of India	11500	11873	22721	27251	38131
9	Corporation Bank	4737	7107	14544	17045	22213
10	Dena Bank	2616	4393	8560	12619	16361
11	IDBI Bank	9960	12685	24875	44753	55588
12	Indian Bank	4562	5670	8827	9865	11990
13	Indian Overseas Bank	9020	14922	30049	35098	38180
14	Oriental Bank of Commerce	5618	7666	14701	22859	26134
15	Punjab & Sind Bank	2554	3082	4229	6298	7802
16	Punjab National Bank	18880	25695	55818	55370	86620
17	Syndicate Bank	4611	6442	13832	17609	25759
18	UCO Bank	6621	10265	20908	22541	30550
19	Union Bank of India	9564	13031	24171	33712	49370
20	United Bank of India	7118	6553	9471	10952	16553
21	Vijaya Bank	1986	2443	6027	6382	7526
22	State Bank of Bikaner & Jaipur	2733	2945	3602	10677	10677
23	State Bank of Hyderabad	5824	4985	6591	18212	-
24	State Bank of India	61605	56725	98173	112343	223427
25	State Bank of Mysore	2819	2136	3636	9915	-
26	State Bank of Patiala	3758	4360	6767	17847	-
27	State Bank of Travancore	3077	2357	3200	8817	-
	Total	227264	278466	539956	684733	895600
	<b>standard Deviation</b>	<b>11173.06</b>	<b>10910.60</b>	<b>20781.74</b>	<b>22113.24</b>	<b>43160.48</b>

Source: Computed Data

From the above table it is found that there is an increasing trend in the amount of deviations in NPA value and highest in 2017-18.

#### V.8. Compound Annual Growth Rate CAGR

Table 9

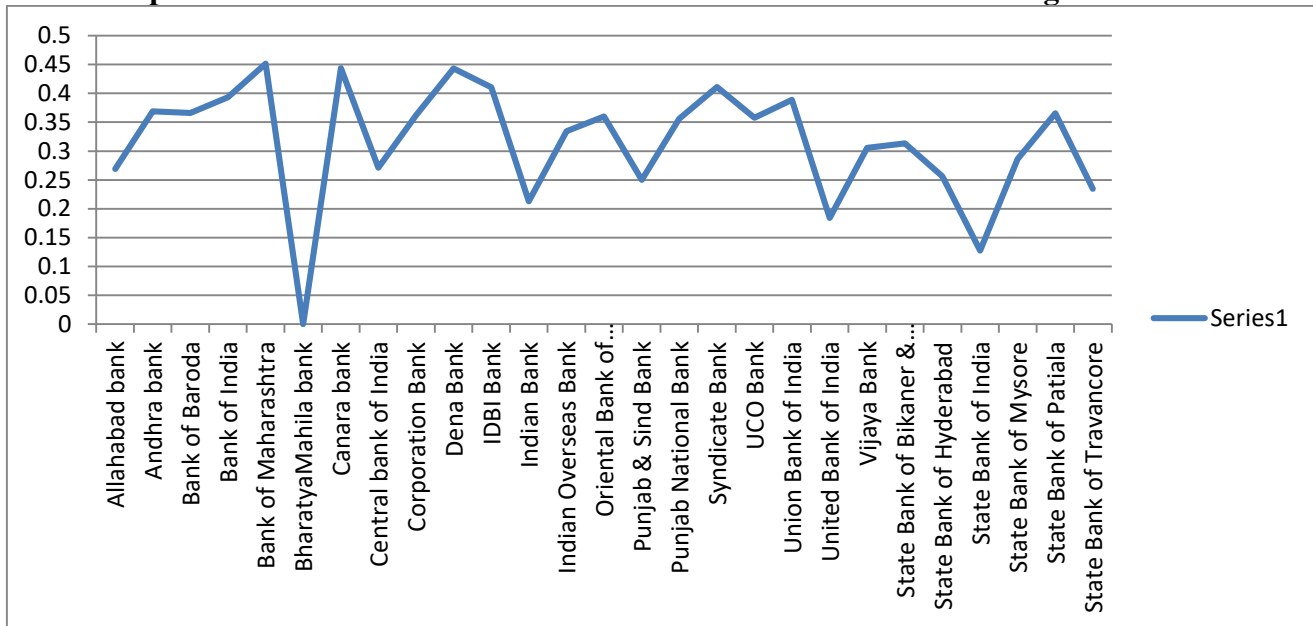
#### Compound Annual Growth Rate of NPA of Public Sector Banks during 2014 to 2018

S.No	Bank	CAGR	Rank
1	Allahabad bank	0.2691	20
2	Andhra bank	0.3686	8
3	Bank of Baroda	0.3660	9
4	Bank of India	0.3933	6
5	Bank of Maharashtra	0.4516	1
6	Bharatya Mahila bank	0.0000	27
7	Canara bank	0.4436	2
8	Central bank of India	0.2709	19
9	Corporation Bank	0.3621	11
10	Dena Bank	0.4429	3
11	IDBI Bank	0.4104	5
12	Indian Bank	0.2132	24
13	Indian Overseas Bank	0.3345	15
14	Oriental Bank of Commerce	0.3600	12
15	Punjab & Sind Bank	0.2503	22
16	Punjab National Bank	0.3562	14
17	Syndicate Bank	0.4107	4
18	UCO Bank	0.3577	13
19	Union Bank of India	0.3886	7
20	United Bank of India	0.1839	25
21	Vijaya Bank	0.3053	17
22	State Bank of Bikaner & Jaipur	0.3133	16
23	State Bank of Hyderabad	0.2561	21
24	State Bank of India	0.1277	26
25	State Bank of Mysore	0.2860	18
26	State Bank of Patiala	0.3656	10
27	State Bank of Travancore	0.2344	23
	Total		

Source: Computed Data

The above CAGR presented in the following graph.

**Chart 5**  
**Compound Annual Growth Rate of NPA of Public Sector Banks during 2014 to 2018**



From the above CAGRs it proved that all the banks had a positive annual growth in NPA accumulation. The Bank of Maharashtra had the highest CAGR followed by Canara Bank and Dena Bank.

## VI. Findings

1. The overall Percentage of Growth of NPA in Public Sector Banks during 2014 to 2018 was in increasing trend. The bad debts level found higher and the written off amount was also in increasing trend for the public sector banks during the period.
2. Comparing to individual bank's NPA to total value of NPA of Public sector banks during the last five years, it is found that The State Bank of India had highest share (percentage) of NPA accumulation during this period followed by Punjab National bank and Bank of India.
3. It is found that Bank of Maharashtra had the highest growth of NPA followed by Canara Bank and Dena Bank between 2014 and 2018
4. All the banks during this period had the same pattern in NPA accumulation rate. There is high degree of positive correlation.
5. There was constant growth in NPA value for all the banks
6. Among the 27 public sector banks it is found that the Compound Annual Growth Rate was highest for Bank of Maharashtra followed by Canara Bank and Dena Bank during 2014 to 2018.

## VII. Suggestions

1. The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act needs to be executed effectively to control the NPA.
2. The sense of Customer Accountability for loans and advances availed may be inculcated through awareness and training programs.
3. The Banks may consider the execution of Credit Rating in loans and advances more effective.

## VIII. Conclusion

Based on the study it is concluded that during the last five years, 2014 to 2018 the 27 public sector banks had a higher pattern positive growth in NPA. The NPA accumulation was in increasing trend during this period.

## IX. Acknowledgements

We convey our sincere thanks to All India Bank Association.

## X. References

1. <http://www.aibea.in/>
2. <https://www.mbarendezvous.com/general-awareness/impact-of-npas-of-indian-economy-industry-and-banks/>
3. <https://www.quora.com/What-are-the-effects-of-NPA-on-Bank>
4. <https://taxguru.in/rbi/impact-increase-npa-analysis-public-private-sector-banks.html>
5. <https://rbi.org.in/Scripts/AnnualPublications.aspx?head=Statistical%20Tables%20Relating%20to%20Bank%20in%20India>

