

## **Non Performing Assets (NPAs) And Indian Public Sector Banks**

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### **ABSTRACT**

*The Banking Industry is one of the most important pillars of the Indian economy. Its operations and efficiency in working directly affects the growth and development of the country. Every year numerous loans are granted to various sectors and individuals which may constitute of small as well as big borrowers. But the recovery of all the loans is not guaranteed. These unpaid loans get converted into Non-Performing Assets (NPAs) after a period of time. High NPAs reflect the bad recovery of loans and inefficiency in working. Therefore efforts should be made to reduce the NPAs and increase the profitability. The public sector banks accounts for higher level of NPAs than the private sector banks. The present study is an attempt to analyse the NPAs trends of all public sector banks. In the present study, Secondary data have been collected from annual reports of Reserve Bank of India considering a period of 2008 to 2018. The collected data have been analysed using Mean, Standard deviation, and Coefficient of Variation. In the results, the non performing assets of public sector banks have been found in an increasing trend during the study period. Further, it has been depicted that on an average, the Indian overseas bank has major NPAs from 2008 to 2018.*

**Keywords:** Non-Performing Assets, Public Sector Banks, Indian Banking Sector

### **INTRODUCTION**

Banking Sector is the lifeblood of the economy. Just as circulation of blood is essential in human body for living, in the same way Banking Sector is crucial for the Economic growth and Development. It plays a very important role in movement of money by accepting deposits and providing loans and advances or by investing in securities etc. Nowadays, industrialists, individuals etc get loans easily from the bank for different purposes such as home loan, education loan, and business start up loan etc. which leads to economic growth.

There is still something left which pulls us behind and hinders our progress. The individuals or industrialists, to whom the loans are granted, if for any reason, fail to repay the money borrowed then it will be a loss to the economy which has major impact on growth. Just because of some reasons it has become difficult to overcome the gap between economy and success.

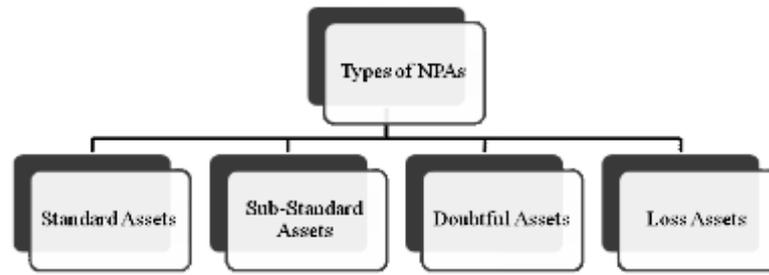
The loans which are left unrecovered due to any reason for 90 days are known as NPAs (Non-Performing assets). NPAs question the performance of the Banks.

### **Types of NPAs**

These are classified into the following:

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1. Standard Assets:

These assets are the ones which get regular interest as well as Principal amount of loans within specified time.

2. Sub-Standard Assets:

The loans on which the Principal amount and Interest are not received within 90 Days after due date are considered as Sub-Standard Assets.

3. Doubtful Assets:

The loans on which the Principal amount and Interest are not received after 90 Days are considered as Doubtful Assets.

4. Loss Assets:

The loss which is identifiable and which cannot be recovered but the amount has not been written off known as Loss Assets.

### CAUSES

- Poor Banking Management System
- No severe punishments for default
- Rate of interest is high
- Defraud by borrowers etc.

### EFFECTS

- It reduces the profitability of the banks.
- It leads to inflation.
- The loss is charged from customers by increasing rate of interest.
- Reduce economic growth

### NEED OF THE STUDY

The study is conducted only to see the trend of NPAs in each Public Sector Banks that whether there is increasing trend or decreasing. As it is one of the factor which affects profitability of banks and economic growth so it is necessary to know about NPAs. Profitable investments can be made after analysing the NPAs of the banks. Lower the NPA, higher is the profitable investment.

**REVIEW OF LITERATURE**

The following discussion shows the main studies conducted related to the topic:

**ML (2013)** conducted a study to know the quantum of NPAs in selected Public and Private sector banks in Bangalore. This study used both primary data as well as Secondary data. Questionnaire technique was used. They concluded that corporate borrower's didn't afraid to default so many times as no action was taken to recover their dues by the bank which increased NPAs and ownership dummy are significant, not the bank specific factors. It was suggested to raise private equity and control for improving efficiency. **Samir and Kamra (2013)** analysed the NPA position of State Bank of India, Punjab National Bank and Central Bank of India. It covered the period starting from 1996-97 to 2009-10. It analysed the trends of NPAs in terms of values, gross and net NPAs. It was concluded that non-priority sector and public sector suffered more from the problem of NPAs and suggested the multi faceted and diversified strategies for speedy recovery of NPAs. **Singh et.al. (2013)** analysed the recovery management process in Bank of Maharashtra. Secondary data was used for the study. It was concluded that for banks it was needed to set low NPV as it affects the profitability of the banks. So a good recovery system is must to operate effectively. **Das and Dutta (2014)** tried to find out the differences in NPA occurrence of State Bank of India and its Associates and other Nationalised banks of india, covering period from 2008-2013. Secondary data was analysed with SPSS software and by using statistical tool 'analysis of variance' or ANOVA. It was concluded that there was no significant difference in NPAs of different banks at 5% level of significance. **Joseph and Prakash (2014)** attempted to find out the trends of NPA in Banking industry, factors responsible for increasing NPAs. The study was based on secondary data and covered the period of 6 years (2008-2013). It was concluded that NPAs are weakening the financial strength of the Banks and suggested specially for public sector banks to take preventive measures to avoid the NPAs. **Bajirao Borse (2015)** evaluated the effect of NPA on Return on Assets of Major Indian Commercial banks. The study took four years i.e. 2010-2015. The researcher used the secondary data. Simple statistical techniques are applied for the research i.e. average, correlation. The study was on 6 major banks from public sector and 5 private sector banks. From this research, the conclusion made was that NPA increase rate was high of public sector in respect of private sector banks. It affected ROA. More is the NPA, More intense is ROA.

**Vanam (2015)** conducted a study of which the main aim was to evaluate the impact of NPA on overall performance and efficiency in managing NPA between ICICI and Axis considering the study of 2011-15. The study used the secondary data and applied ratio analysis, excel, and mean, standard deviation, T-test. The research concluded that level of NPAs both gross and net was on an average in upward trend in axis bank, but a roller-coaster trend for ICICI bank. **Ahamed and Panwar (2016)** made an attempt to compare the NPAs in public sector banks and private sector banks. Three public sector banks namely IDBI Bank, Canara Bank and Central Bank and three private sector banks namely Axis bank, ICICI bank and Kotak Mahindra bank consisted of the sample and period of study was from 2012-2016. It was concluded that major problem of recovery was not with the small loans but with the big borrowers. It was suggested that strict policies should be followed by bankers and government. **Miyan (2016)** analysed the overall efficiency and financial performance of PSU and private sector banks for the period of five years i.e. 2011-16. Secondary data was used for the research. Mean, coefficient of variation, coefficient of correlation, CAGR and t-test of significance were the techniques applied to the collected data. After detailed study the conclusion was drawn that NPAs were having a downward trend over the study period, but NPA of public sector banks were higher than private sector banks. **Naveenan (2016)** studied the effectiveness of warning signals for controlling

NPA. The study was based on primary data. The opinions of 103 bank managers were collected through structured telephonic interviews and were analysed using The Friedman Test. It was concluded by the Friedman test that there was significant difference between mean ranks of financial, operational, managerial and banking warning signals. **Bhasin (2017)** evaluated the NPAs in Scheduled Commercial Banks. It included 26 public sector banks, 5 private sector banks and 10 scheduled foreign banks. Secondary data was used covering the period from 2010-2011 to 2015-2016. Various statistical tools were used for analysing the data. It was concluded that NPA was very high in public sector banks as compared to private sector and foreign banks. **Dhara K (2017)** examined the impact of NPA over the profitability of leading private sector banks. The study was for the period of four years i.e. 2013-17. The main objective was to analyse the impact of NPA over the profitability. It used secondary data. Variance, Standard Deviation, T-test was applied to analyse the data. Conclusion of the study was that proper management and timely follow up of loan payment from customers required. **Memdani et. al. (2017)** conducted a study to evaluate the determinants of NPAs in public sector banks. For this factors were divided into bank specific factors and macroeconomic factors. Banks were divided into public sector and private sector and a dummy for ownership. Secondary data from RBI website was used covering period from 2005 to 2015. The Hausman Taylor model was used for analyses. It was concluded that macroeconomic factors and ownership dummy are significant, not the bank specific factors. It was suggested to raise private equity and control for improving efficiency. **Ojha and Jha (2017)**: comparatively analysed the impact of NPA on the SBI Corporate and SBI Patna Circle and to analyse profitability of SBI Patna Circle. The data was collected mainly from the websites of RBI, SBI and other public sector banks. It was concluded that lack of industrial infrastructure, high priority sector lending, inferior management qualities were the main reasons for rising NPA in branches. **Raj, Jain, Bansal, Verma (2017)** examined and compared the NPA trends of SBI and ICICI for past four years and established the relationship between Net profit and NPA. Secondary data was used and analyzed it by using correlation using SPSS. It was concluded that SBI has higher NPA as compared to ICICI bank because of its public nature.

#### **OBJECTIVE OF THE STUDY**

The following are the main objectives of the present study:

- To analyse the trend of NPAs in different Public Sector Banks of India.
- To find out the Public Sector Bank with the highest and lowest NPA during the period of 2008-2018.

#### **RESEARCH METHODOLOGY**

The present study is descriptive in nature and it is undertaken to analyse the trend of non-performing assets in different Public Sector banks of India. For this purpose secondary data has been collected from the RBI website [www.rbi.org.in](http://www.rbi.org.in). The study covers the period of eleven years from 2008 to 2018. Mean, Standard Deviation (SD) and Coefficient of Variation are used as statistical tools for analysing the NPAs trend. Line Graphs are used to present the data. NPA trend has been analysed in two ways: Year wise and Bank wise. The coefficient of variation is also calculated in percentage.

#### **FINDINGS AND INTERPRETATION**

The trend of NPA of Public Sector Banks has been analysed in two ways- year wise analysis and bank wise analysis. In year wise analysis, the trend of Non-performing Assets of all Public Sector Banks in every year has been studied and analysed. On the other hand in case of bank wise analysis, the NPA

trend of each bank is studied and analysed individually over the period of 2008-2018.

### YEAR WISE ANALYSIS

The following table shows the NPAs of different Public Sector Banks of India over the period from 2008 to 2018. The data shows Net Non-Performing Assets to Net Advances Ratio in percentage.

**TABLE 1: Non Performing Assets of Public Sector Banks for the period 2008-2018**

NAME OF BANKS	Net Non-Performing Assets to Net Advances Ratio (%)											MEAN	SD	CV (%)
	YEAR													
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018			
STATE BANK OF INDIA	1.73	1.79	1.72	1.55	1.52	2.10	2.77	2.12	3.81	3.71	3.73	2.62	1.29	19.25
ALLAHABAD BANK	0.91	0.72	1.86	0.79	0.93	3.19	4.5	3.69	6.76	8.92	8.02	3.57	3.13	88.37
ANDHRA BANK	0.15	0.18	0.17	0.18	0.21	2.45	3.71	2.97	4.61	7.77	8.48	2.81	2.98	173.82
BANK OF BARODA	0.37	0.31	0.31	0.35	0.31	1.28	1.22	1.89	1.86	1.72	3.19	2.67	2.36	113.25
BANK OF INDIA	0.52	0.22	1.31	0.91	1.47	2.08	2.18	3.06	1.79	8.53	8.25	3.17	3.18	151.14
BANK OF MAHARASHTRA	0.37	0.79	1.64	1.12	0.81	3.32	2.73	4.79	5.33	11.78	11.24	3.78	4.28	111.22
CANARA BANK	0.52	1.09	1.06	1.11	1.28	2.18	1.98	2.68	6.21	6.74	7.48	2.98	1.58	81.46
CENTRAL BANK OF INDIA	1.71	1.21	1.89	1.59	3.09	2.91	3.5	3.61	1.86	16.29	11.11	1.19	3.12	388.81
CORPORATION BANK	0.71	0.29	1.21	0.48	0.97	1.18	2.72	3.05	5.59	8.75	11.74	3.22	3.91	121.47
DENA BANK	0.71	1.69	1.21	1.22	1.11	1.36	2.53	3.82	5.35	16.66	11.97	3.82	1.18	116.27
IDBI BANK LIMITED	1.71	0.92	1.02	1.19	1.81	1.58	2.48	2.88	6.78	13.11	18.68	4.58	5.48	111.69
INDIAN BANK	0.74	0.18	1.21	0.55	1.17	2.26	2.76	2.95	4.26	4.79	3.81	1.59	1.89	81.47
INDIAN OVERSEAS BANK	0.51	1.23	2.52	1.19	1.31	2.51	3.29	5.68	11.89	13.99	15.33	3.42	3.27	112.77
ORIENTAL BANK OF COMMERCE	0.71	0.61	0.87	0.58	0.71	2.77	2.89	3.32	6.76	8.68	13.48	3.66	3.48	62.56
PUNJAB AND SIND BANK	0.1	0.12	0.36	0.16	0.19	2.16	3.39	3.21	1.61	1.11	0.93	2.81	1.91	93.1
PUNJAB NATIONAL BANK	0.64	0.17	0.53	0.55	0.57	2.35	2.85	4.66	1.67	7.81	11.24	3.69	3.81	173.19
SYNDICATE BANK	0.91	0.1	1.11	1.19	0.95	2.6	1.29	1.89	1.48	3.22	6.28	2.1	1.58	39.69
UCO BANK	1.98	1.15	1.17	1.84	1.95	7.17	7.78	4.95	3.99	8.52	15.15	4.48	4.14	19.41
UNION BANK OF INDIA	0.17	0.34	0.81	1.19	1.73	1.61	2.33	2.71	3.25	6.27	8.42	2.82	3.73	26.32
UNITED BANK OF INDIA	1.11	1.45	1.84	1.42	1.71	2.87	7.18	6.22	9.84	16.02	16.49	5.47	4.54	81.48
VIJAYA BANK	0.77	0.88	1.48	1.55	1.73	1.47	1.55	4.67	2.88	4.78	2.37	3.77	1.59	68.87

Source: www.rbi.org.in

The above table, Table: 1 is related with the data on Non-performing Assets of Indian Public Sector Banks for the period in the year 2008 to 2018. As per the results of the table, UCO bank recorded the highest NPA of 1.98 percent followed by State Bank of India; the lowest NPA was recorded by Andhra Bank i.e. 0.15 percent. In 2009, the highest NPA was shown by State Bank of India i.e. 1.76 percent and the lowest NPA was shown by Punjab National Bank i.e. 0.17 percent. In 2010, 2.52 percent was the highest NPA depicted by Indian Overseas Bank and 0.17 percent was the lowest NPA by Andhra Bank. In 2011, the highest NPA was shown by UCO bank i.e. 1.84 percent and the lowest NPA were shown by Bank of Baroda i.e. 0.35 percent. In 2012, it is found that Central Bank of India has the highest NPA of 3.09 percent and Bank of Baroda has the lowest NPA of 0.54 percent. In 2013, Allahabad Bank depicted the highest NPA of 3.91 percent and Bank of Maharashtra depicted the lowest NPA of 0.52 percent. In 2014, the highest NPA of 7.18 percent was recorded by United Bank of India and the lowest NPA was recorded by Bank of Baroda i.e. 1.52 percent. In 2015, United Bank of India has the highest NPA of 6.22 percent and Bank of Baroda of 1.89 percent as the lowest NPA. In 2016, Indian Overseas Bank showed the highest NPA of 11.89 percent and State Bank of India showed the lowest NPA of 3.81 percent. In 2017, 13.99 percent was the highest NPA recorded by Indian Overseas Bank and SBI recorded the lowest NPA of 3.71 percent. In 2018, it is found that IDBI bank has the highest NPA of 16.69 percent and the lowest NPA was recorded by Indian bank i.e. 3.81 percent.

**BANK WISE ANALYSIS**

In this NPA trend of each Public Sector Bank is studied and analysed individually. The trend of NPA in different Public Sector Banks from the period 2008 to 2018, have been analyzed with the help of following figures. These figures show how NPA has moved over a period for each bank. NPA (percentage) is taken on y-axis, years are taken on x-axis and the blue line indicates the trend of NPA.

**STATE BANK OF INDIA**

The below Figure 1 shows the NPA trend of State Bank of India over period of 2008-2018:

**Figure 1: NPA Trend of State Bank of India**



Figure 1

It is clear from the figure 1 that from 2008 the NPA are more or less consistent till 2013. In 2014 NPA has risen as compared to 2013, and has fallen in 2015. After 2015 it shows the increasing trend. It is clear that the highest NPA is in the year 2018.

**ALLAHABAD BANK**

The following figure 2 depicts the NPA trend in Allahabad Bank:

**Figure 2: NPA Trend of Allahabad Bank**



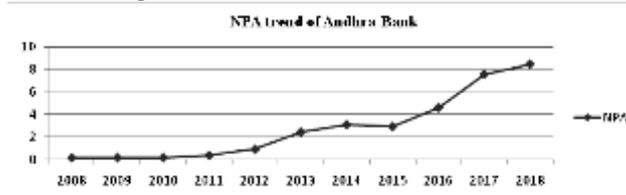
Figure 2

The above figure 2 shows that from 2008 to 2012 NPA is below 1 percent but afterwards it increases to 4 percent in 2015. After 2015 there is steep increase to approximately 9 percent in 2017 and in 2018 it falls to nearly 8 percent. It is clear that in 2017 the NPAs are highest.

**ANDHRABANK**

The following figure 3 shows the trend of NPA over period of 2008-2018 in Andhra Bank:

**Figure 3: NPA Trend of Andhra Bank**



(Figure 3)

From 2008 to 2010 the figure 3 shows consistency in NPA. It shows the increasing trend of NPA over the period from 2011 to 2018 except 2015 as there is a fall in the NPA. In 2018, there are highest NPAs.

**BANK OF BARODA**

The following figure 4 represents the NPA trend of period 2008-18 of Bank of Baroda:

**Figure 4: NPA Trend of Bank of Baroda**



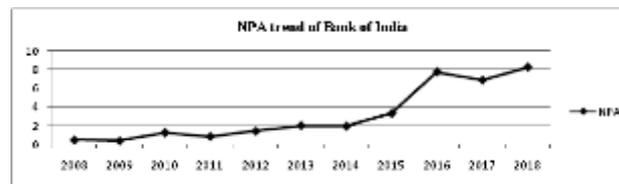
(Figure 4)

The figure 4 indicates that there is consistency in NPA from 2008 to 2012. After that NPA starts increasing and in 2016 it has shown a steep increase from 2 percent to 5 percent and in 2017 it falls and again rise in 2018. This indicates highest NPA in 2018.

**BANK OF INDIA**

NPA trend of Bank of India is presented in following figure 5:

**Figure 5: NPA Trend of Bank of India**



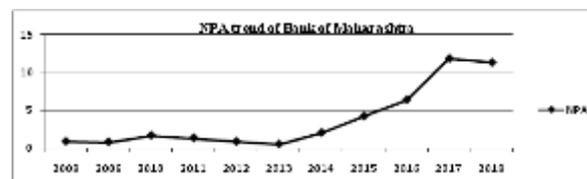
(Figure 5)

This figure 5 represents fluctuating but increasing trend of NPA. Highest NPA is recorded in 2018 with more than 8 percent. There is a steep increase from 2015 to 2016. It rises from 0.52 percent to 8.28 percent from 2008 to 2018.

**BANK OF MAHARASHTRA**

The following figure 6 explains about the NPAs of Bank of Maharashtra:

**Figure 6: NPA Trend of Bank of Maharashtra**



(Figure 6)

Figure 6 indicates that the NPA in first two years is low but increases in 2010 and there is downfall in NPA from 2010 to 2013 and it gradually increase from 2013 onwards, reaching to the highest point in year 2017 i.e. 11.76 percent.

**CANARABANK**

Canara Bank's NPAs over the period of 2008-2018 are explained in the figure 7:

**Figure 7: NPA Trend of Canara Bank**



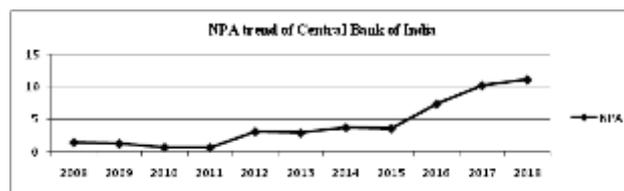
(Figure 7)

It indicates that till 2012 the NPA remained below 2 percent then there is minor increase in year 2013 and again in 2014 it fall a little. Afterwards it shows the rising trend reaching to the highest level to approximately 7.5 percent (in 2018).

**CENTRAL BANK OF INDIA**

The following figure 8 tells about the NPAs trend of Central Bank of India:

**Figure 8: NPA Trend of Central Bank of India**



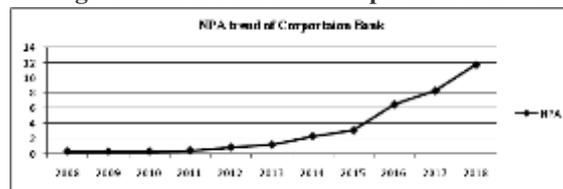
(Figure 8)

The figure 8 shows that NPA has fallen from 2008 to 2011 and then it increases in 2012 and again falls in 2013. Afterwards it shows the increasing trend. It can be clearly seen that the highest NPA is in 2018 and lowest NPA is in 2011.

**CORPORATION BANK**

The following figure 9 depicts the trend of NPA of Corporation Bank:

**Figure 9: NPA Trend of Corporation Bank**



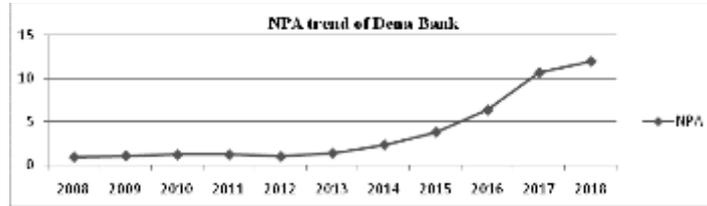
(Figure 9)

Figure 9 shows that the NPAs of Corporation Bank are rising continuously. There is no downfall in any of the last eleven years. NPA is highest in 2018 and lowest in 2008.

**DENABANK**

The following figure 10 depicts the NPA trend of Dena Bank:

**Figure 10: NPA Trend of Dena Bank**

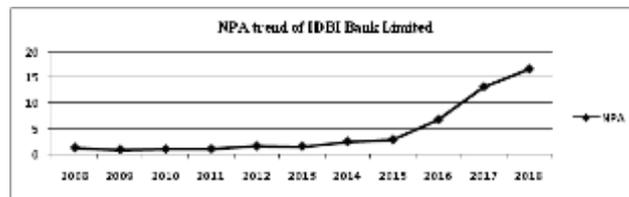


(Figure 10)The figure 10 shows the increasing trend of NPAs in Dena Bank. It has risen year by year. Till 2013 it is below 2 percent. Year 2018 has recorded the highest NPA and lowest in 2012.

**IDBI BANK LIMITED**

Figure 11 depicts about the NPA of IDBI Bank Limited which is as follows:

**Figure 11: NPA Trend of IDBI Bank Limited**



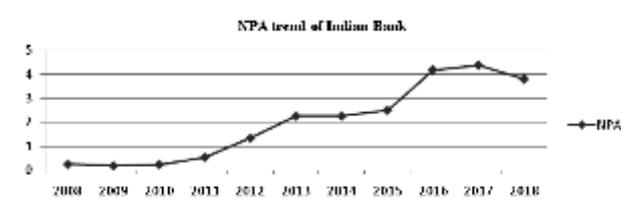
(Figure 11)

The figure 11 indicates the trend of NPAs. Till the 2013 the NPAs are below 2 percent afterwards it started rising with great pace. The year 2018 recorded the highest NPAs i.e. 16.69 percent and the year 2009 has shown the lowest NPAs i.e.0.92 percent.

**INDIAN BANK**

The following figure 12 shows the NPA trend of Indian Bank:

**Figure 12: NPA Trend of Indian Bank**



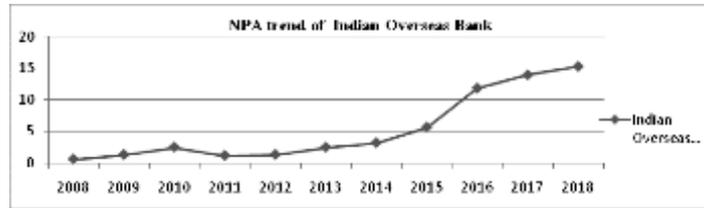
(Figure 12)

The figure 12 shows that NPAs is almost consistent till 2010 and then rise till year 2013 and remained consistent in 2014 and then again started rising till 2017 and then falls in 2018. The highest NPA is recorded in year 2017 and lowest in 2009.

**INDIAN OVERSEAS BANK**

The NPAs of the bank are shown in the following figure 13:

**Figure 13: NPA Trend of Indian Overseas Bank**



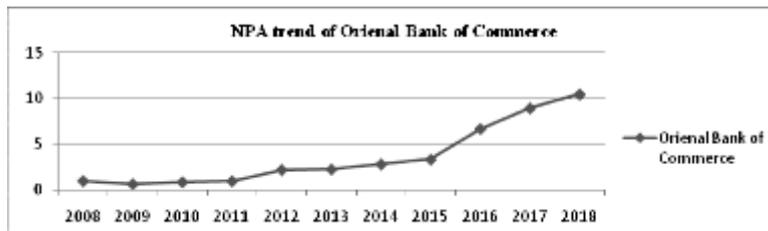
(Figure 13)

Figure 13 shows that NPA has risen till 2010 and afterwards declines and from 2012 it started rising again reaching the highest point in 2018. Year 2008 recorded the lowest NPA.

**ORIENTAL BANK OF COMMERCE**

The following figure 14 depicts the trend of NPA in Oriental Bank of Commerce:

**Figure 14: NPA Trend of Oriental Bank of Commerce**



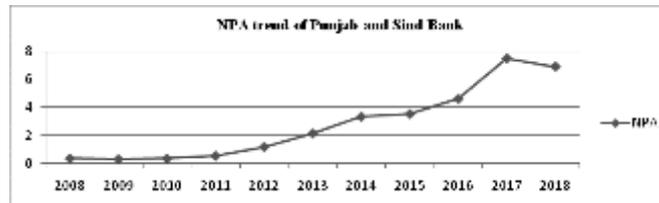
(Figure 14)

The figure 14 shows that NPA has fallen from 2008 to 2009 but afterwards it has only risen showing the increasing trend and reached to highest level in 2018 around 10 percent.

**PUNJAB AND SIND BANK**

The following figure 15 explains the trend of NPA in Punjab and Sind Bank:

**Figure 15: NPA Trend of Punjab and Sind Bank**



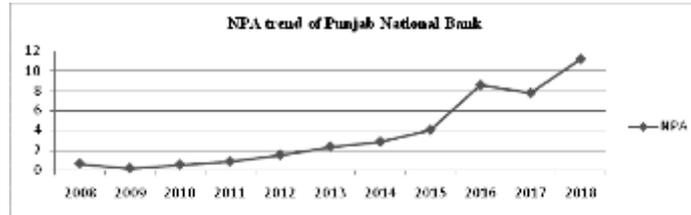
(Figure 15)

Figure 15 shows that NPA in initial years has remained almost same but after 2011 NPAs shows the increasing trend till 2017 and then falls in 2018. This bank recorded the highest NPA in 2017 and lowest in year 2009.

**PUNJAB NATIONAL BANK**

The following figure 16 shows the trend of NPA of Punjab National bank:

**Figure 16: NPA Trend of Punjab National Bank**



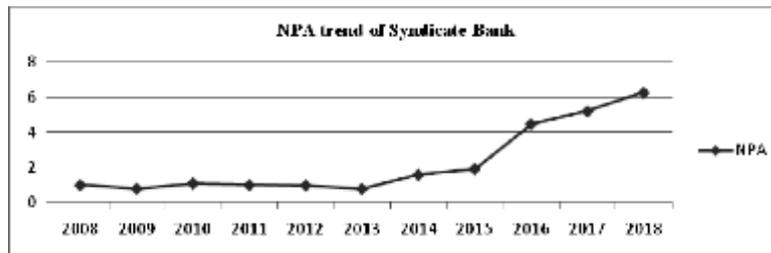
(Figure 16)

The figure 16 shows that NPA has fallen from 2008 to 2009. From 2010 onwards it has risen till the year 2016 and then falls in year 2017 and again rises in year 2018. Year 2018 recorded the highest NPA of the Punjab National Bank.

**SYNDICATE BANK**

The following figure depicts the trend of NPA of Syndicate Bank:

**Figure 17: NPA Trend of Syndicate Bank**



(Figure 17)

It shows that NPA has fallen from year 2008 to year 2009 and then increase in 2010 and then fall till 2013. From there onwards NPAs have started rising till year 2018.

**UCO BANK**

The following figure 18 shows the NPA trend of UCO Bank:

**Figure 18: NPA Trend of UCO Bank**



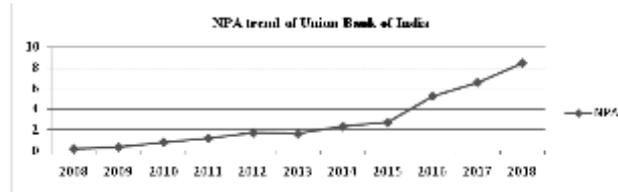
(Figure 18)

It indicates the fluctuating nature of NPAs. There is a minor decline from year 2008 to year 2010. Then it rises and again in year 2014 it falls. After year 2014 it has risen till the year 2016 and then again falls in year 2017. The highest NPA is depicted in the year 2018.

**UNION BANK OF INDIA**

The following figure 19 depicts the NPA trend of Union Bank of India:

**Figure 19: NPA Trend of Union Bank of India**



(Figure 19)

NPAs in Union bank have risen from the year 2008 to year 2012. Then there is a minor decline in 2013 and afterwards the NPAs show the increasing trend. Year 2018 has recorded the highest NPA and 2008 recorded the lowest NPA.

**UNITED BANK OF INDIA**

The following figure 20 shows the NPA trend of United Bank of India:

**Figure 20: NPA Trend of United Bank of India**



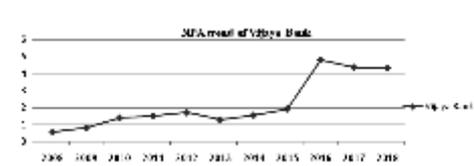
(Figure 20)

Figure 20 indicates that NPA has risen from year 2008 to year 2010. In year 2011 there is a minor decline and afterwards NPA has risen till year 2014. Again in 2015 there is a fall in NPA. From 2016 onwards the NPAs are rising. In the year 2018 highest NPA is recorded and in year 2008, lowest NPA is recorded.

**VIJAYABANK**

The following figure 21 depicts the NPA trend of Vijaya Bank:

**Figure 21: NPA Trend of Vijaya Bank**



(Figure 21)

Figure 21 shows that the NPA has risen from year 2008 to year 2012. In year 2013 there is a decline in NPA and afterwards the NPA has risen till the year 2016. After 2016 the NPA declines. Year 2016 recorded the highest NPA and year 2008 recorded the lowest NPA.

**OVERALL BANK ANALYSIS**

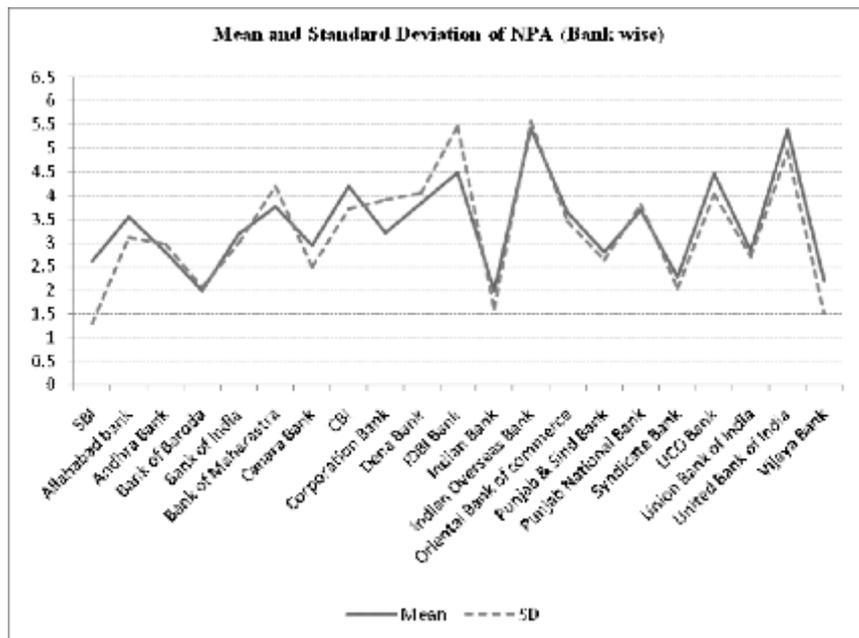
**MEAN**

As per the results of the present study, the Indian Overseas Bank has the highest mean i.e. 5.42, which indicates that on an average Indian Overseas Bank has the highest amount of Non-performing assets as compared to other Public Sector Banks over the period 2008-2018. The Indian Bank has the mean of 1.99, which is the lowest among the Public Sector Banks which indicates the efficiency of Indian Bank in collecting the loans sanctioned by it. On the basis of the above discussion, it can be concluded that the efficiency of Indian Bank is the best among the group and the efficiency is lowest in case of Indian Overseas Banks among the group of Indian Public Sector banks.

**STANDARD DEVIATION**

It is the statistical tool to find out the spread of the mean. Higher standard deviation indicates higher spread out and lower standard deviation indicates lower spread out i.e. most of data are close to mean. It is found that standard deviation of Indian Overseas Bank is highest i.e.5.57 and mean is 5.42 which shows that there is very less variation in NPA over the period and that of State Bank of India is lowest i.e. 1.29 and its mean is 2.62 means NPA are not so close to its average NPA indicating.

**Figure 22: Mean and Standard Deviation of NPA (Bank wise)**



(Figure 22)

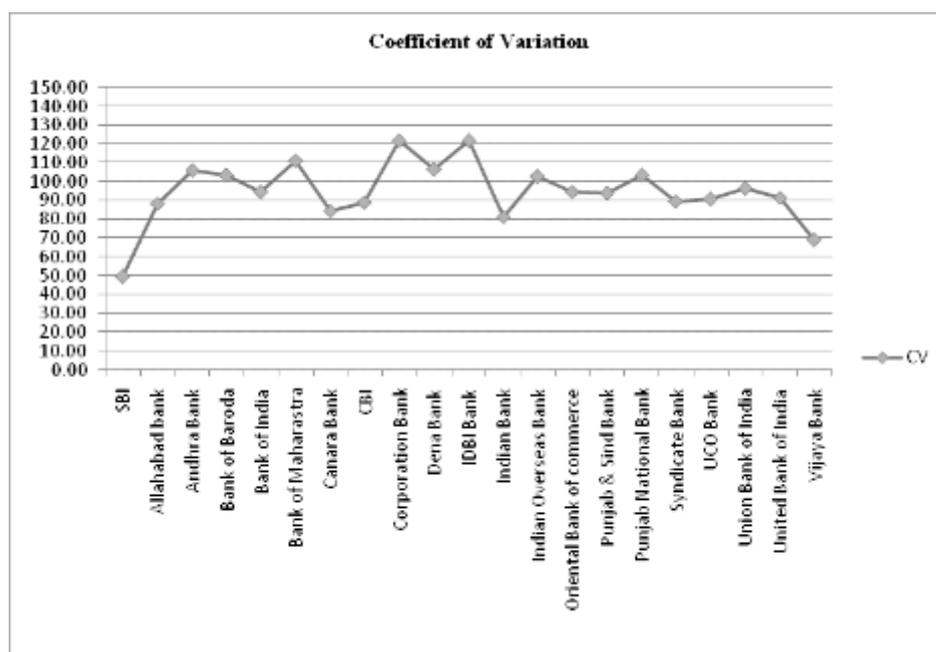
The figure 22 shows the mean and standard deviation of NPA of various Public Sector Banks over a period of study. As clear from the fig.22 Indian Overseas Bank has higher standard deviation which is

almost close to its mean, therefore no or very less variation in the NPA. IDBI Bank has greater standard deviation from its mean indicating higher variation in NPA over period of time.

**COEFFICIENT OF VARIATION**

It is another statistical tool used to find out the variation in the data in relation to mean. Higher the coefficient of variation, higher will be variation in data. IDBI bank has highest coefficient of variation as compared to other public sector banks i.e.121.69 percent that depicts higher variation in NPA in relation to its average NPA over the period of study.

**Figure 23: Coefficient of Variation**



(Figure 23)

Figure 23 indicates the coefficient of variation of different Public Sector Banks. It is found that IDBI bank has higher CV followed by Corporation bank indicating higher variation in NPA. State Bank of India has lowest CV which means low variation in the NPA i.e.

**CONCLUSION**

There is increasing trend of NPAs in Public Sector Banks as NPAs of banks are increasing year by year. Higher NPA reflects the poor financial health of the banks. From the study it is concluded that on an average Indian Overseas Bank has higher NPA and the lowest NPA is ranked by Indian Bank. Increasing NPA shows the inefficiency and lack of proper asset management by the Banks. Large NPAs have direct impact on the Banking Sector and indicates large assets under stress. It is suggested that banks should follow proper procedure for granting loans especially loans of higher amount because non payment of such loans possess higher risk of NPAs. There should be no political interference in granting loans and ensure proper recovery of loans for increasing profitability of Bank.

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