INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT

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INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT

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INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESIS (ES)

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

LIMITATIONS

SCOPE FOR FURTHER RESEARCH

REFERENCES

APPENDIX/ANNEXURE

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- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.

- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

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- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

UNPUBLISHED DISSERTATIONS

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

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WEBSITES

- Garg, Bhavet (2011): Towards a New Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

NON-PERFORMING ASSETS MANAGEMENT IN INDIAN BANKING SECTOR - A CASE STUDY OF PUBLIC SECTOR BANKS

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ABSTRACT
Interest on Loans and advances has been one of the important sources of earning in Indian banking industry. Secondly, in one way, public sector banks have promised to the government of India to provide financial support for the economic growth. For this reason public sector banks have been adopting a less strict credit policy to increase their earning. This less strict credit policy brings a lot of pain in the form of NPA or unconscious Assets. It is not only for banks but also for the economy and nation as a whole. In the other side Banks are arguing that, they are giving their level best to reduce these unconscious assets to the minimum possible extend. This study has given an effort to find out the result of the unconscious assets management effort of banks and which among the public sector banks ranks better as compare to other in the race. The study placed Central bank of India in first position in unconscious assets management. State Bank of Bikaner and Jaipur, Dena Bank, Union Bank of India, State Bank of Travancore, Punjab and Sind Bank are also playing well. Other banks, which come under top ten ranking, are Indian Bank, State Bank of India, Bank of Maharashtra and Bank of Baroda. The study also found that there is a significance differences in the addition and reduction of unconscious assets in different public sector banks working in India.

KEYWORDS
GDP, NPA, unconscious assets.

JEL CODE
M1

BACKGROUND OF THE STUDY
The survival and growth of any commercial bank depends on the operational result or earning. Before reforming, Indian public sector banks had restricted their activities by following a conservative credit policy. But, after reform with the thrust of profit, global competition and government pressure, Indian public sector Banks have adopted a liberal credit policy by enhancing the credit range and easy loan. These liberal policies of banks create problems in Indian public sector. Because, a considerable amount of bank assets (loans and advances) are in non performing form. The analysis of performance of different commercial banks, so far as the management of NPAs is concern, and competition among them in reducing NPAs seems to be very important to know the movement of NPAs in Indian banking sector which is a major objective of this study.

REVIEW OF LITERATURE
Laveena, Guleria (2016)in their study titled "A Study of Non Performing Assets of Public Sector Banks in India" concluded that The NPA level of the banking system in India is still at a high compare to the international standards. Joseph, Prakash(2014) concluded that Compared to private sector banks, public sector bank is more in the NPA level. Arora(2009) found that bank credit has served as the source of growth and has assisted in increasing total output. Rajput N. & Gupta M., (2011) Mishra N., (2011) indicate about the negative relationship of profitability and NPAs of banks. Pacha Malyadri, S. Sirisha (2011) observed that the public sector banks have achieved a greater penetration compared to the private sector. Satpal (2014) concluded that the problem of NPAs is not only affecting the banks but also the whole economy. Laveena, Kulbir Singh Guleria (2016) found that the level of NPA are increasing in India. Priyanka Mohnani, Monal Deshmukh (2013) has stated that Private and public Sector banks are highly affected by this NPA.

OBJECTIVES OF THE STUDY
1. To study the movement of NPAs of different public sector banks working in India.
2. To rank different public sector bank working in India on the basis of their NPAs.
3. To examine whether there is a significant difference in NPAs of different banks.

LIMITATION OF THE STUDY
The study has concentrated only on public sector banks and given an effort to rank different public sector banks according to their performance in reduction of NPAs from the existing level, addition of NPAs to the existing level, movement of Gross NPAs and movement of Net NPAs.

SCOPE OF THE STUDY
The study provide scope for analysis of financial statement and action plan of the said top performing banks to find out the clue of their management to reduce NPAs which will be beneficial for other banks and different stake holder of banks.

RESEARCH METHODOLOGY
The study focuses on public sector banks working in India. There are 27 public sector banks working in India having branches all over in India. Out of 27 banks, 24 banks have been taken under the study. Secondary data has been collected from financial statement of different bank and RBI data base. The period of study is 13 years starting from the year 1999 to 2013. To fulfil the second objective, average reduction of NPAs per year, the average addition of NPAs per year, average gross NPAs per year and average net NPAs per year of the selected bank is calculated. Rank is allotted on the basis of the following conditions.
1. Average percentage reduction of NPAs per year from the existing balance should be maximised.
2. Average percentage of addition of NPAs per year to the existing balance should be minimised.
3. Average percentage of gross NPA should be minimised.
4. Average percentage of net NPA should be minimised.
The statistical techniques, Average and ANOVA is used to find out the movement of NPAs in public sector banks.

HYPOTHESIS

To fulfil the third objective, following Null Hypothesis (H_0) and Alternative Hypothesis (H_1) have taken.

1. H_0 = There is no significant difference in reduction of NPAs between different banks.
2. H_0 = There is no significant difference in addition of NPAs between different banks.
3. H_0 = There is no significant difference in Gross NPAs between different banks.
4. H_0 = There is no significant difference in Net NPAs between different banks.

ANALYSIS AND INTERPRETATION OF DATA

The following table shows the data on average amount of reduction in NPAs per annum and average percentage of reduction of NPAs per annum of different public sector banks in India from the year 1999 to 2013.

TABLE 1: RANK OF PUBLIC SECTOR BANKS IS ACCORDING TO REDUCTION OF NPAs

Name of the bank	Amount	Mean%	Rank	Name of the bank	Amount	Mean%	Rank
Punjab and Sind Bank	19833	20	**1**	Syndicate Bank	53838	12	**12**
State Bank of B & Jai.	19592	16	**2**	State Bank of India	456631	11	**14**
Indian Overseas Bank	63204	16	**2**	State Bank Patiala	28234	11	**14**
Union Bank of India	56894	16	**2**	Canara Bank	128849	11	**14**
Andhra Bank	18486	15	**5**	Indian Bank	51489	10	**17**
Central Bank of India	70685	15	**5**	UCO Bank	53042	7	**18**
Punjab National Bank	119454	15	**5**	Bank of Baroda	91743	5	**19**
Allahabad Bank	50700	14	**8**	Bank of Maharashtra	25246	5	**19**
Ori. Bank of Com.	52932	14	**8**	Dena Bank	45189	4	**21**
United Bank of India	30751	13	**10**	State Bank Hyderabad	27025	2	**22**
Vijaya Bank	32394	13	**10**	Bank of India	115171	1	**23**
Corporation Bank	20217	12	**12**	S B of Travancore	29032	0	**24**

Source: RBI Database, Researcher, (Amount in Rs. Lakh)

FIGURE 1: AVERAGE REDUCTION OF NPAs BY PUBLIC SECTOR BANKS
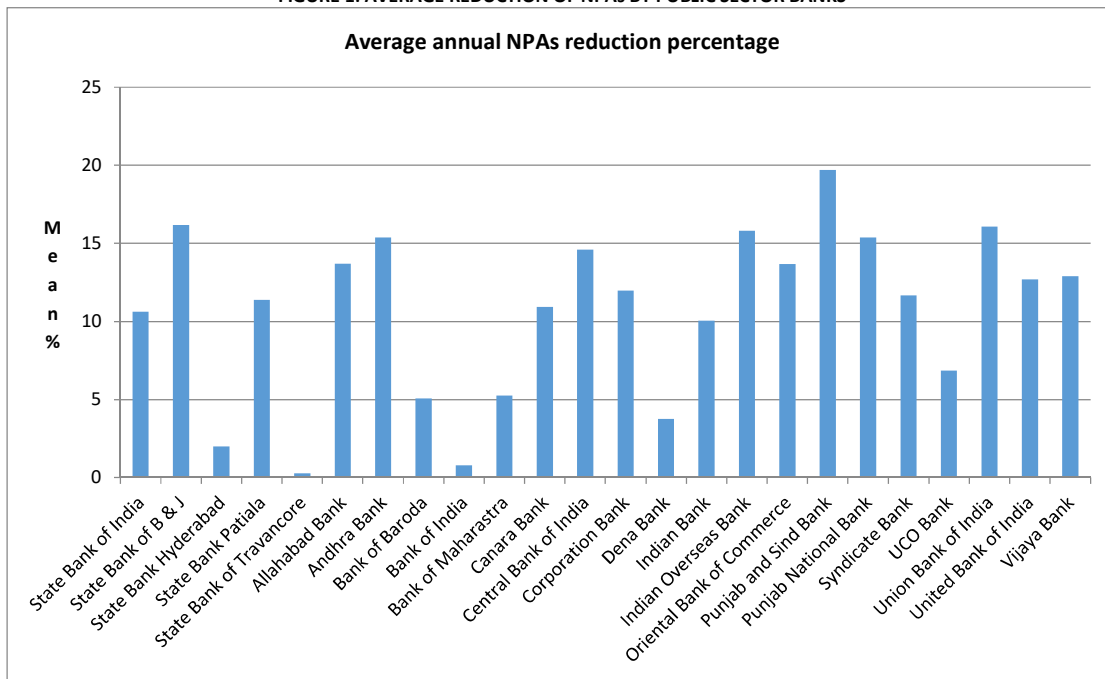
Source: Researcher.

The above data clearly shows that Punjab and Sind bank rank first in reduction of NPAs followed by State Bank of Bikaner and Jaipur, Indian Overseas Bank, Union Bank of India, Andhra Bank, Central Bank, Punjab National Bank. Other bank that comes under top ten in reduction of NPAs is Allahabad Bank, Oriental Bank of Commerce, United Bank of India and Vijay Bank. The bank that shows negligible response to reduction of NPAs is State Bank of Travancore, Bank of India, and State Bank of Hyderabad.

ANOVA FOR REDUCTION IN NPAs OF DIFFERENT BANK

TABLE 2: ANALYSIS OF VARIANCE FOR REDUCTION OF NPAs IN DIFFERENT BANKS

Source of Variation	SS	Df	MS	P Value	Significance level
Between Years	7944.07	23	345.42	0.99	.05
Between Banks	255007.6	11	23182.51	5.4	.05
Residual	327616.3	253	1294.93		
Total	590567.97	287			

The ANOVA table above contain the sum of square (SS), degree of freedom (df), mean square (MS). The P value between years is 0.99 and the level of significance is .05. This is representing that it is less than P value. So it can be concluded that there is no significance difference between the reductions of NPAs in different Years. The calculated P value of ANOVA between Banks is 5.4. So it is also concluded that there is no significance difference in reduction of NPAs in different banks.

TABLE 3: RANKING OF PUBLIC SECTOR BANK ACCORDING TO ADDITION OF NPAs

Name of the Bank	Amount	%	Rank	Name of the Bank	Amount	%	Rank
Central Bank of India	77187	-1	**1**	Syndicate Bank	60511	15	**12**
Dena Bank	45003	0	**2**	Vijaya Bank	37297	15	**12**
State Bank of B. & Jaipur	21995	7	**3**	Indian Bank	30838	17	**15**
State Bank of Travancore	27697	7	**3**	Punjab and Sind Bank	16749	19	**16**
Union Bank of India	74936	7	**3**	Allahabad Bank	54647	20	**17**
State Bank of India	557791	8	**6**	Andhra Bank	20777	22	**18**
State Bank Hyderabad	27229	8	**6**	UCO Bank	59202	22	**18**
Corporation Bank	23084	10	**8**	State Bank Patiala	32590	23	**20**
Bank of Baroda	86628	12	**9**	United Bank of India	32246	24	**21**
Bank of India	134444	13	**10**	Indian Overseas Bank	87930	30	**22**
Bank of Maharastra	29358	13	**10**	Oriental Bank of Com	62198	30	**22**
Punjab National Bank	134966	15	**12**	Canara Bank	111569	111	**24**

Source: RBI Database, Author, (Amount in Rs. Lakh)

FIGURE 2: AVERAGE ADDITION OF NPAs BY PUBLIC SECTOR BANKS
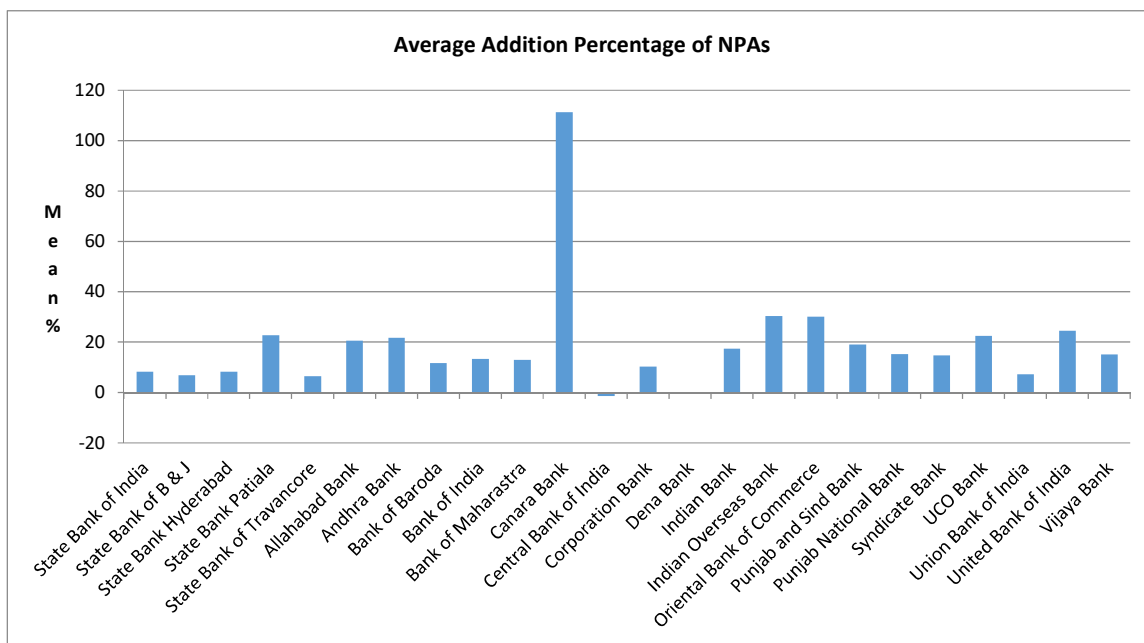
Source: Author.

Central Bank of India, Dena bank, State Bank of Bikaner and Jaipur, State Bank of Travancore, Union Bank of India are the Banks which are performing well as compare to other bank by adding minimum possible amount of NPAs to the existing level of NPAs of their own. Canara Bank is the bank which record highest percentage of NPAs addition.

TABLE 4: ANOVA FOR ADDITION OF NPAs OF DIFFERENT BANKS

Source of Variation	SS	Df	MS	F	Significance level
Between Years	115825.4	23	5035.89	0.88	.05
Between Banks	478837.5	10	47883.75	2.1	.05
Residual	1770843	230	7699.32		
Total	2365506	263			

The calculated P value of the ANOVA between years is 0.88 and between Banks comes to 2.1. So it can be concluded that there is no significance difference between the additions of NPAs in different Years and Banks also.

TABLE 5: RANKING OF PUBLIC SECTOR BANK ACCORDING TO AVERAGE GROSS NPAs

Name of the Bank	Amount	%	Rank	Name of the Bank	Amount	%	Rank
Indian Bank	112331	-11	**1**	Punjab and Sind Bank	60868	-1	**12**
Dena Bank	98818	-8	**2**	Syndicate Bank	127259	-1	**12**
State Bank of Travancore	56793	-7	**3**	Punjab National Bank	312474	0	**15**
Central Bank of India	244083	-6	**4**	Canara Bank	180869	1	**16**
State Bank of B & Jaipur	48768	-5	**5**	UCO Bank	131005	1	**16**
United Bank of India	92173	-4	**6**	Corporation Bank	51553	2	**18**
Bank of Baroda	266783	-3	**7**	State Bank Patiala	55094	4	**19**
Bank of Maharastra	76680	-3	**7**	Allahabad Bank	124589	4	**19**
State Bank Hyderabad	58107	-2	**9**	Bank of India	274703	4	**19**
Union Bank of India	185014	-2	**9**	Andhra Bank	42386	5	**22**
Vijaya Bank	52803	-2	**9**	Indian Overseas Bank	152414	11	**23**
State Bank of India	1249919	-1	**12**	Oriental Bank of Commerce	115478	11	**23**

Source: RBI Database, Researcher, (Amount in Rs. Lakh)

FIGURE 3: AVERAGE GROSS NPAs OF PUBLIC SECTOR BANKS
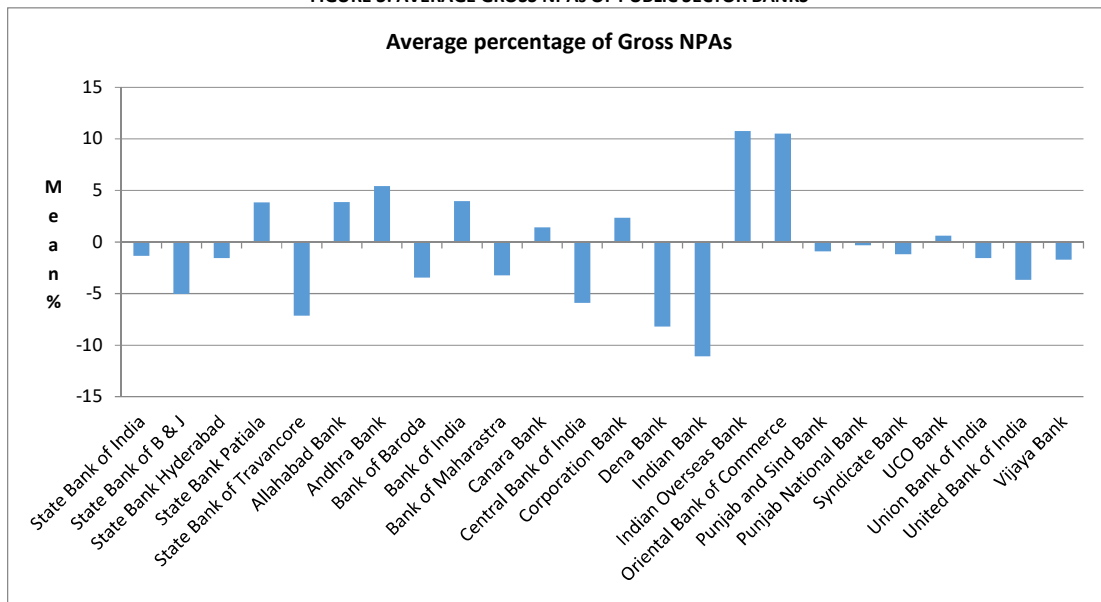
In Gross NPAs reduction race Indian bank comes in first rank followed by Dena Bank, State Bank of India, and Central Bank of India.

TABLE 6: ANOVA FOR GROSS NPAs OF DIFFERENT BANKS

Source of Variation	SS	Df	MS	F	Significance level
Between Years	7159.352	23	311.2762	0.93	.05
Between Banks	241164.2	10	24116.42	2.98	.05
Residual	121105.1	230	526.5437		
Total	369428.6	263			

The P value between years is 0.93 and between Banks is 2.98 which indicate to conclude that there is no significance difference between the gross NPAs in different Years and Banks also.

TABLE 7: RANKING OF PUBLIC SECTOR BANK ACCORDING TO AVERAGE NET NPAs

Name of the Bank	Amount	%	Rank	Name of the Bank	Amount	%	Rank
Central Bank of India	109288	-7	1	Syndicate Bank	52835	5	12
State Bank of Bikaner and Jaipur	25409	-6	2	United Bank of India	41378	6	14
Dena Bank	60099	-5	3	State Bank Patiala	23851	7	15
Indian Bank	42968	-5	3	Vijaya Bank	23856	7	15
State Bank of Travancore	28806	-4	5	State Bank Hyderabad	22674	9	17
Punjab and Sind Bank	30053	0	6	Bank of India	138186	12	18
State Bank of India	610589	2	7	Oriental Bank of Commerce	36331	14	19
Bank of Maharastra	33123	2	7	Union Bank of India	79246	14	19
Bank of Baroda	95805	3	9	Allahabad Bank	57462	18	21
Canara Bank	111132	3	9	Andhra Bank	12916	19	22
UCO Bank	74332	4	11	Indian Overseas Bank	70207	24	23
Corporation Bank	16374	5	12	Punjab National Bank	94572	39	24

Source: RBI Database, Researcher, (Amount in Rs. Lakh)

FIGURE 4: AVERAGE NET NPAs OF PUBLIC SECTOR BANKS
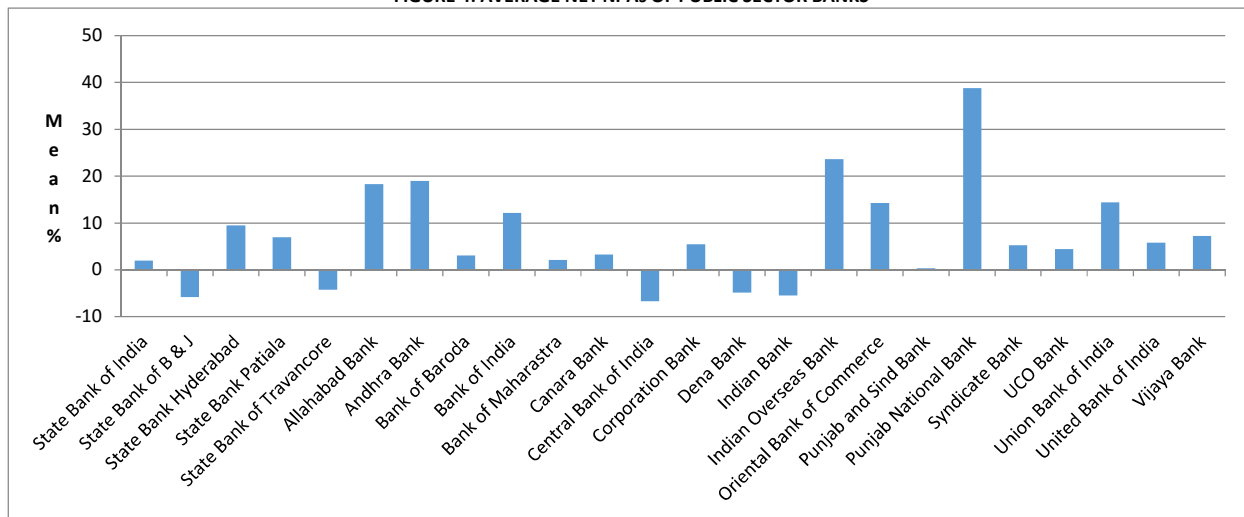
Sources: Researcher.

In Net NPAs reduction race Central Bank of India comes in the first rank. State Bank of Bikaner & Jaipur comes in the second place and Dena Bank comes in the third place.

TABLE 8: ANOVA FOR NET NPAs OF DIFFERENT BANKS

Source of Variation	SS	Df	MS	F	Significance level
Between Years	28713.55	23	1248.41	0.95	.05
Between Banks	399903.2	10	39990.32	2.1	.05
Residual	528854.5	230	2299.37		
Total	957471.3	263			

The calculated P value of the ANOVA between years is 0.95 whereas between Banks comes to 2.1. So it can be concluded that there is no significance difference between the net NPAs in different Years and banks.

TABLE 13: OVERALL RANKING OF DIFFERENT BANK

Name of the Bank	Rank in Reduction	Rank in Addition	Rank in Gross NPA	Rank in Net NPA	Average	**Overall Rank**
Central Bank of India	5	1	4	1	2.75	**1**
State Bank of B & J	2	3	5	2	3	**2**
Dena Bank	21	2	2	3	7	**3**
Union Bank of India	2	3	9	19	8.25	**4**
State Bank of Travancore	24	3	3	5	8.75	**5**
Punjab and Sind Bank	1	16	12	6	8.75	**5**
Indian Bank	17	15	1	3	9	**7**
State Bank of India	14	6	12	7	9.75	**8**
Bank of Maharastra	19	10	7	7	10.75	**9**
Bank of Baroda	19	9	7	9	11	**10**
Vijaya Bank	10	12	9	15	11.5	**11**
Syndicate Bank	12	12	12	12	12	**12**
Corporation Bank	12	8	18	12	12.5	**13**
United Bank of India	10	21	6	14	12.75	**14**
State Bank Hyderabad	22	6	9	17	13.5	**15**
Punjab National Bank	5	12	15	24	14	**16**
Canara Bank	14	24	16	9	15.75	**17**
UCO Bank	18	18	16	11	15.75	**17**
Allahabad Bank	8	17	19	21	16.25	**19**
Andhra Bank	5	18	22	22	16.75	**20**
State Bank Patiala	14	20	19	15	17	**21**
Bank of India	23	10	19	18	17.5	**22**
Indian Overseas Bank	2	22	23	23	17.5	**22**
Oriental Bank of Commerce	8	22	23	19	18	**24**

CONCLUSION

The study concluded that there is significant difference in reduction of NPAs, Addition of NPAs, Goss NPAs and net NPAs in different public sector Bank working in India. So far as reduction of NPAs is concern Punjab and Sind Bank is in first position by reducing larger percentage of NPAs from the existing NPAs. So far as addition of NPAs is concern Central bank of India comes in first position by adding lesser amount of NPAs to the existing quantum of NPAs of the bank. In gross NPAs race Indian Bank comes in first position by having lower amount of NPAs and in net NPAs race Central Bank of India is in the first position by having lesser amount of NPAs as compare to other banks. Central Bank of India comes in first the position in overall ranking of NPAs management.

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