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A COMPARATIVE STUDY OF NON-PERFORMING ASSETS IN THE INDIAN PUBLIC-SECTOR BANKS

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ABSTRACT

The Indian financial area has been confronting significant issues of raising Non-Performing Assets (NPAs). The NPAs development directly affects productivity of banks. Non-performing resources are one of the significant worries for public area banks in India. Banks assume a significant job in the financial advancement of a nation by going about as substance in business and mechanical exercises. One can't envision the discontinuance of banking exercises in any event, for a day. A financial emergency may arise in the nation if the boycott quit working for certain days. The study takes a sample of 6 Indian Public Sector Banks with 5 years of their financial data to analyse the trend in NPA, the various relations between the Net-Profit, Borrowings, Total Assets, Loans and Advances, Gross NPA, Return on Assets, Interest Income, Doubtful Debts, Capital Adequacy Ratio and Cost of Capital. The study also suggests methods of decreasing the NPA and how the banks can effectively manage their assets which are non-performing. With the various analyses, an attempt is made to justify and prove which hypothesis stands good and accepted to reach the final conclusion. The study is based on secondary data readily available in the respective company websites. 5 years' financial data have been considered and analysed for the study. It involves purely quantitative study.

KEYWORDS
Reserve Bank of India, non-performing assets, lending policy, public-sector banks.

JEL CODES
G30, G33.

1. INTRODUCTION

NPA grows to non-performing assets (NPA). Reserve Bank of India characterizes NPA as any development or advance that is late for over 90 days. "A resource becomes non-performing when it stops to produce pay for the bank," said RBI in a round structure 2007. To be more sensitive to global practices, RBI actualized the 90 days' late standard for distinguishing NPAs has been made pertinent from the year finished March 31, 2004.

Resource implies whatever is claimed. For banks, an advance is a resource in light of the fact that the premium we pay on these advances is quite possibly the main types of revenue for the bank. At the point when clients, retail or corporate, can't pay the premium, the resource becomes 'non-performing' for the bank since it isn't procuring anything for the bank. Thusly RBI has characterized NPAs as resources that quit producing pay for them. In India, the RBI screens the whole financial framework and, as characterized by the nation's national bank, if for a time of over 90 days, the premium or portion sum is late then that advance record can be named a Non-Performing Asset. From 2000-2008, the Indian economy was in a blast stage and banks, particularly open area banks, begun loaning widely to organizations.

2. REVIEW OF LITERATURE

Gurumoorthy and Sudha (2012) talks about how in the changed economy, Banking and Financial area get high need. The banks in India are confronting the issue of Non-Performing Assets (NPAs). The acquiring limit and benefit of the banks are exceptionally influenced in light of the fact that of the presence of NPAs. Also the non-execution or non-receipt of revenue and chief obstructed banks cash in the type of assets and isn't accessible for additional utilization of banking business and in this manner the overall revenue of the banks goes down. In this association bank must mindful of the issues and recuperation enactments of NPAs. Contrasted with Private Sector Banks furthermore, Foreign banks, Public Sector Banks (PSBs) are exceptionally influenced by this three letter infection NPA, since whose goals have been more social than financial.

Ajay and Girbal (2016) clearly explains the NPA specific to Pune district of Maharashtra. The Indian financial area has been confronting significant issues of raising Non-Performing Assets (NPAs). The NPAs development directly affects productivity of banks. Non-performing resources are one of the significant worries for public area banks in Pune region. There is by all accounts no unanimity in the appropriate approaches to be continued in settling this issue. A significant level of NPAs proposes high likelihood of countless credit defaults that influence the productivity and total assets of banks and furthermore dissolves the estimation of the resource.

Nitin (2016) in his study depicts the impact of NPA and EPS on the share prices. There are two kinds of NPA – Gross NPA and Net NPA. For present investigation Net NPA are thought of. This paper is an endeavour to associate the NPA and offer costs of Indian business Banks. Despite the fact that the example size is little yet all significant 11 banks (6 Public area banks and 5 Private area banks) where picked for the examination. 2010-11 to 2014-15 is the investigation time frame for this examination.

Neha et. al (2016) explains the effect of priority sector lending on NPAs. Reserve Bank of India has fixed a few targets and sub focuses for all business banks for PSL (Priority Sector Lending). Need area loaning alludes to that area of economy which isn't getting sufficient monetary help from various monetary establishments. Because of Priority area Lending, Non-performing resources of the banks are expanding step by step. This examination paper is an endeavor to gauge the two route impact of each area of PSL on NPA for public and private banks. Impact among PSL and NPA is found with the assistance of E Views Software.

Suvitha and Vikram (2018) in their research article talks about how Indian banking sector has been facing so many serious issues regarding the increasing level of Non- Performing Assets (NPAs). The objective of their study is to find out the sector which has higher NPAs (Public/Private sector banks), causes and control measures for rising NPAs. The articles from 2010 to 2017 are used for the study of NPAs in banking sector of India. Majority of the articles deals with level and controlling measures of NPAs in Indian banking sector. The best indicator for the soundness of the banking sector of a country is its level of Non-performing resources (NPAs). It was discovered that the degree of NPAs is higher in Public Sector Banks contrasting and Public Sector Banks.

Chaitra and Vasu (2018) talks about how banking industry assumes a critical part in the advancement of any economy as it takes into account the requirements for all the areas of the society. The current economies of the world have grown basically by making best utilization of the credit accessibility in their frameworks.

India is on the walk; extensive financial changes are occurring and Indian banks should approach to assume this part all the while. The part of banks has been significant; however, it will be much more significant later on. In this setting giving due significance furthermore, thought for the development of banking area is viewed as the need of great importance. Subsequently this paper is an endeavour to consider the significance of both public area and private area banks in the advancement of Indian economy.

3. STATEMENT OF PROBLEM
One of the important functions of banks is to maintain the quality of assets, which requires proper selection of borrower, appraisal of his/ her project, enough credit, close monitoring, supervision. There is always risk of accounts becoming non-performing. There should be need to suitable strategy for accounts, which have gone bad and classified as non-performing assets. In a fast-changing banking environment of today is the very survival of a banking organization depends on level of the income generated through optimum use of assets after paying the cost of funds for acquiring them. Once the assets cease to contribute the income, they are states as Non-Performing Assets, which are not only have cost of funds involved but also require to be operated as per RBI norms.
One of the major problems being faced by Banks and financial institutions in India is that of bad debts termed as "Non-Performing Assets" (NPA). There are many reasons –
1. Political interference
2. Poor enforcement
3. Laws and Procedures
4. Corruptions at various levels and competition in various banking institutions
5. Flow of Funds

4. OBJECTIVES OF THE STUDY
1. To study the NPAs of select banks using Net NPA to Net Profit ratio, Net NPA to Advances ratio, Net NPA to Gross NPA ratio, Net NPA Borrowings ratio and Net NPA to Total Assets ratio and make a comparative analysis among the select banks.
2. To analyse the impact of Non-Performing Assets (NPA) on Return on Assets (ROA), Capital Adequacy Ratio (CAR), Interest Income, Doubtful Debts and Cost of Capital.

5. HYPOTHESIS OF THE STUDY
H1- There is no significant difference in the Net NPA to Net Profit ratio among the select banks.
H2- There is no significant difference in the Net NPA to Net Profit ratio during the select five years.
H3- The interaction between the respective bank and the respective year has no significant influence on the Net NPA to Net Profit ratio.
H4- All the bank's Net NPA to Net Profit ratio are independent (i.e. no association).
H5- There is no significant difference in the Net NPA to Net Advances ratio among the select banks.
H6- There is no significant difference in the Net NPA to Net Advances ratio during the select five years.
H7- The interaction between the respective bank and the respective year has no significant influence on the Net NPA to Net Advances ratio.
H8- All the bank's Net NPA to Net Advances ratio are independent (i.e. no association).
H9- There is no significant difference in the Net NPA to Gross NPA ratio among the select banks.
H10- There is no significant difference in the Net NPA to Gross NPA ratio during the select five years.
H11- The interaction between the respective bank and the respective year has no significant influence on the Net NPA to Gross NPA ratio.
H12- All the bank's Net NPA to Gross NPA ratio are independent (i.e. no association).
H13- There is no significant difference in the Net NPA to Borrowings ratio among the select banks.
H14- There is no significant difference in the Net NPA to Borrowings ratio during the select five years.
H15- The interaction between the respective bank and the respective year has no significant influence on the Net NPA to Borrowings ratio.
H16- All the bank's Net NPA to Borrowings ratio are independent (i.e. no association).
H17- There is no significant difference in the Net NPA to Total Assets ratio among the select banks.
H18- There is no significant difference in the Net NPA to Total Assets ratio during the select five years.
H19- The interaction between the respective bank and the respective year has no significant influence on the Net NPA to Total Assets ratio.
H20- All the bank's Net NPA to Total Assets ratio are independent (i.e. no association).

6. RESEARCH METHODOLOGY
The study undertakes 6 Indian Public Sector Banks namely Bank of Baroda, Indian Bank, State Bank of India, Union Bank of India, Punjab National Banks and UCO Bank.
5 years' financial data has been taken into consideration for the study.
List of 20 hypotheses are identified based on the objectives of the study. Financial data are analysed using SPSS, MS Excel, Descriptive Statistics, Correlation, Regression, Charts and Figures to prove the acceptance of Null/Alternate Hypothesis. The study is based on secondary data readily available in the respective company websites. 5 years' financial data have been considered and analysed for the study. It involves purely quantitative study.

7. LIMITATIONS OF THE STUDY
1. No matter how good a research study is, there are always certain drawbacks to it. Listed are few of the drawbacks to the study.
2. The study considers only 6 Indian Public Sector Banks.
3. Only 5 years' data has been considered.
4. Due to the ongoing Covid-19 Pandemic and Government imposed restrictions, primary data collection was a challenge.
5. The study is purely quantitative and factors like mishap, Government intervention, political pressures, and loss due to natural disasters, corruption and robbery have not been considered.

8. DATA ANALYSIS
NPAs of select banks using Net NPA to Net Profit ratio, Net NPA to Advances ratio, Net NPA to Gross NPA ratio, Net NPA Borrowings ratio and Net NPA to Total Assets ratio.

F-Test (Using SPSS)

TABLE 1: F-TEST (USING SPSS)

Significance Level	YEAR	BNAME	YEAR*BNAME
Net NPA to Net Profit Ratio	0.000	0.000	0.000
Net NPA to Advances Ratio	0.000	0.000	0.000
Net NPA to Gross NPA Ratio	0.000	0.000	0.000
Net NPA to Borrowings Ratio	0.000	0.000	0.000
Net NPA to Total Assets Ratio	0.000	0.000	0.000

Table 1 shows the F-test results derived from SPSS, where the various ratios are the dependant variable. As we can see that the significance level at all the ratios are 0, hence, we can conclude on the below hypothesis and finding:

Hypothesis Number	Null Hypothesis (Ho)	Alternative Hypothesis (H1)	P Value	Accept/Reject Hypothesis	Implication
1	There is no significant difference in the Net NPA to Net Profit ratio among the select banks	There is significant difference in the Net NPA to Net Profit ratio among the select banks	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	There is significant difference in the Net NPA to Net Profit ratio among the select banks
2	There is no significant difference in the Net NPA to Net Profit ratio during the select five years	There is significant difference in the Net NPA to Net Profit ratio during the select five years	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	There is significant difference in the Net NPA to Net Profit ratio during the select five years
3	The interaction between the respective bank and the respective year have no significant influence on the Net NPA to Net Profit ratio	The interaction between the respective bank and the respective year have significant influence on the Net NPA to Net Profit ratio	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	The interaction between the respective bank and the respective year have significant influence on the Net NPA to Net Profit ratio
5	There is no significant difference in the Net NPA to Net Advances ratio among the select banks	There is significant difference in the Net NPA to Net Advances ratio among the select banks	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	There is significant difference in the Net NPA to Net Advances ratio among the select banks
6	There is no significant difference in the Net NPA to Net Advances ratio during the select five years	There is significant difference in the Net NPA to Net Advances ratio during the select five years	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	There is significant difference in the Net NPA to Net Advances ratio during the select five years
7	The interaction between the respective bank and the respective year have no significant influence on the Net NPA to Net Advances ratio	The interaction between the respective bank and the respective year have significant influence on the Net NPA to Net Advances ratio	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	The interaction between the respective bank and the respective year have significant influence on the Net NPA to Net Advances ratio
9	There is no significant difference in the Net NPA to Gross NPA ratio among the select banks	There is significant difference in the Net NPA to Gross NPA ratio among the select banks	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	There is significant difference in the Net NPA to Gross NPA ratio among the select banks.
10	There is no significant difference in the Net NPA to Gross NPA ratio during the select five years	There is significant difference in the Net NPA to Gross NPA ratio during the select five years	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	There is significant difference in the Net NPA to Gross NPA ratio during the select five years
11	The interaction between the respective bank and the respective year have no significant influence on the Net NPA to Gross NPA ratio	The interaction between the respective bank and the respective year have significant influence on the Net NPA to Gross NPA ratio	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	The interaction between the respective bank and the respective year have significant influence on the Net NPA to Gross NPA ratio
13	There is no significant difference in the Net NPA to Borrowings ratio among the select banks	There is significant difference in the Net NPA to Borrowings ratio among the select banks	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	there is significant difference in the Net NPA to Borrowings ratio among the select banks
14	There is no significant difference in the Net NPA to Borrowings ratio during the select five years	There is significant difference in the Net NPA to Borrowings ratio during the select five years	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	There is significant difference in the Net NPA to Borrowings ratio during the select five years
15	The interaction between the respective bank and the respective year have no significant influence on the Net NPA to Borrowings ratio	The interaction between the respective bank and the respective year have significant influence on the Net NPA to Borrowings ratio	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	The interaction between the respective bank and the respective year have significant influence on the Net NPA to Borrowings ratio
17	There is no significant difference in the Net NPA to Total Assets ratio among the select banks	There is significant difference in the Net NPA to Total Assets ratio among the select banks	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	There is significant difference in the Net NPA to Total Assets ratio among the select banks
18	There is no significant difference in the Net NPA to Total Assets ratio during the select five years	There is significant difference in the Net NPA to Total Assets ratio during the select five years	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	There is significant difference in the Net NPA to Total Assets ratio during the select five years
19	The interaction between the respective bank and the respective year have no significant influence on the Net NPA to Total Assets ratio	The interaction between the respective bank and the respective year have significant influence on the Net NPA to Total Assets ratio	0	Since P Value is lesser than 0.05, Null Hypothesis is rejected	The interaction between the respective bank and the respective year have significant influence on the Net NPA to Total Assets ratio

Chi-Square Test (Test for Independence using SPSS)

TABLE 2: CHI SQUARE-TEST (USING SPSS)

Significance Level	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Total
Net NPA to Net Profit Ratio	0.224	0.224	0.224	0.224	0.224	0.371
Net NPA to Advances Ratio	0.224	0.224	0.224	0.224	0.263	0.378
Net NPA to Gross NPA Ratio	0.224	0.224	0.224	0.224	0.224	0.391
Net NPA to Borrowings Ratio	0.224	0.224	0.224	0.224	0.224	0.371
Net NPA to Total Assets Ratio	0.224	0.224	0.242	0.224	0.224	0.141

Table 2 shows the Chi Square-test results derived from SPSS, where the various ratios are the dependant variable. As we can see that the significance level at all the ratios are greater than 0.05, hence, we can conclude on the below hypothesis and finding:

Hypothesis Number	Null Hypothesis (Ho)	Alternative Hypothesis (H1)	P Value	Accept/Reject Hypothesis	Implication
4	All the bank's Net NPA to Net Profit ratio are independent (i.e. no association)	None of the bank's Net NPA to Net Profit ratio are independent (i.e. association exists)	0.371	Since the P value is greater than 0.05, null hypothesis is accepted	All the bank's Net NPA to Net Profit ratio are independent (i.e. no association)
8	All the bank's Net NPA to Net Advances ratio are independent (i.e. no association)	None of the bank's Net NPA to Net Advances ratio are independent (i.e. association exists)	0.378	Since the P value is greater than 0.05, null hypothesis is accepted	All the bank's Net NPA to Net Advances ratio are independent (i.e. no association)
12	All the bank's Net NPA to Gross NPA ratio are independent (i.e. no association)	None of the bank's Net NPA to Gross NPA ratio are independent (i.e. association exists)	0.391	Since the P value is greater than 0.05, null hypothesis is accepted	All the bank's Net NPA to Gross NPA ratio are independent (i.e. no association)
16	All the bank's Net NPA to Borrowings ratio are independent (i.e. no association)	None of the bank's Net NPA to Borrowings ratio are independent (i.e. association exists)	0.371	Since the P value is greater than 0.05, null hypothesis is accepted	All the bank's Net NPA to Borrowings ratio are independent (i.e. no association)
20	All the bank's Net NPA to Total Assets ratio are independent (i.e. no association)	None of the bank's Net NPA to Total Assets ratio are independent (i.e. association exists)	0.141	Since the P value is greater than 0.05, null hypothesis is accepted	All the bank's Net NPA to Total Assets ratio are independent (i.e. no association)

Impact of Non-Performing Assets (NPA) on Return on Assets (ROA), Capital Adequacy Ratio (CAR), Interest Income, Doubtful Debts and Cost of Capital Analysis using correlation and regression tool.

TABLE 3: CORRELATION ANALYSIS

Correlation	Bank of Baroda	Indian Bank	State Bank of India	Union Bank of India	Punjab National Bank	UCO Bank
Net NPA to Interest Income	-0.220	-0.637	-0.054	-0.495	-0.864	-0.217
Net NPA to Doubtful Debts	0.287	0.181	0.410	0.166	0.378	0.475
Net NPA to Cost of Capital	0.374	0.199	0.435	0.037	0.565	0.867
Net NPA to Return on Assets	-0.326	-0.726	-0.723	-0.835	-0.665	-0.490
Net NPA to Capital Adequacy Ratio	-0.706	-0.137	0.998	-0.305	-0.550	-0.593

Table 3 shows the correlation analysis for 6 selected banks over a period of 5 years. Net NPA to Interest Income has a negative correlation, which suggests that with increase in NPA, Interest Income decreases. Net NPA to Doubtful Debts have a positive correlation, indicating that with increase in NPA, doubtful debts increases. Net NPA to Cost of Capital have a positive correlation, indicating that with increase in NPA, cost of capital increases. Net NPA to ROA and Net NPA to Capital Adequacy Ratio have negative correlation, which suggests that with increase in NPA, ROA and Capital Adequacy Ratio decreases respectively.

TABLE 4: REGRESSION ANALYSIS- R SQUARED

R-Squared	Bank of Baroda	Indian Bank	State Bank of India	Union Bank of India	Punjab National Bank	UCO Bank
Net NPA to Interest Income	0.048	0.405	0.0028	0.24	0.747	0.047
Net NPA to Doubtful Debts	0.082	0.032	0.167	0.027	0.143	0.225
Net NPA to Cost of Capital	0.139	0.039	0.189	0.001	0.319	0.751
Net NPA to Return on Assets	0.106	0.527	0.522	0.697	0.442	0.239
Net NPA to Capital Adequacy Ratio	0.497	0.018	1	0.092	0.302	0.351

Table 4 shows the regression analysis between the various ratios where Net NPA is taken as the independent variable. R-squared value shows how much changes in dependent variable are because of the changes in independent variable. The percentage change which is not responsible for the change in dependent variable are due to other variables not considered in the study.

TABLE 5: REGRESSION ANALYSIS- BETA VALUES

Beta Values	Bank of Baroda	Indian Bank	State Bank of India	Union Bank of India	Punjab National Bank	UCO Bank
Net NPA to Interest Income	0.793	2.247	-0.06	-0.118	-0.167	0.132
Net NPA to Doubtful Debts	28.436	15.527	7.998	2.18	5.097	-4.775
Net NPA to Cost of Capital	0.023	0.021	0.001	-0.011	-0.027	-1.021
Net NPA to Return on Assets	-4.233	-0.002	-7.687	-0.001	-6.031	-8.634
Net NPA to Capital Adequacy Ratio	-0.001	-0.001	0	5.671	-0.001	-0.001

Table 5 shows the beta values derived from the regression analysis where Net NPA is taken as the independent variable. Beta value shows that for every 1 unit change in independent variable, how many units are impacted in the dependent variable.

9. FINDINGS OF THE STUDY

1. F-test results reveal that there is significant difference in the Net NPA to Net Profit ratio among the select banks.
2. F-test results reveal that there is significant difference in the Net NPA to Net Profit ratio during the select five years.
3. F-test results reveal that the interaction between the respective bank and the respective year have significant influence on the Net NPA to Net Profit ratio.
4. Chi-square test result reveals that all the bank's Net NPA to Net Profit ratio are independent (i.e. no association).
5. F-test results reveal that there is significant difference in the Net NPA to Net Advances ratio among the select banks.
6. F-test results reveal that there is significant difference in the Net NPA to Net Advances ratio during the select five years.
7. F-test results reveal that the interaction between the respective bank and the respective year have significant influence on the Net NPA to Net Advances ratio.
8. Chi-square test result reveals that all the bank's Net NPA to Net Advances ratio are independent (i.e. no association).

9. F-test results reveal that there is significant difference in the Net NPA to Gross NPA ratio among the select banks.
10. F-test results reveal that there is significant difference in the Net NPA to Gross NPA ratio during the select five years.
11. F-test results reveal that the interaction between the respective bank and the respective year have significant influence on the Net NPA to Gross NPA ratio.
12. Chi-square test result reveals that all the bank's Net NPA to Gross NPA ratio are independent (i.e. no association).
13. F-test results reveal that there is significant difference in the Net NPA to Borrowings ratio among the select banks.
14. F-test results reveal that there is significant difference in the Net NPA to Borrowings ratio during the select five years.
15. F-test results reveal that the interaction between the respective bank and the respective year have significant influence on the Net NPA to Borrowings ratio.
16. Chi-square test result reveals that all the bank's Net NPA to Borrowings ratio are independent (i.e. no association).
17. F-test results reveal that there is significant difference in the Net NPA to Total Assets ratio among the select banks.
18. F-test results reveal that there is significant difference in the Net NPA to Total Assets ratio during the select five years.
19. F-test results reveal that the interaction between the respective bank and the respective year have significant influence on the Net NPA to Total Assets ratio.
20. Chi-square test result reveals that all the bank's Net NPA to Total Assets ratio are independent (i.e. no association).
21. Regression Analysis reveals that Bank of Baroda has the highest beta value in Net NPA to Doubtful Debts. The bank has a positive beta relation in Net NPA to Interest Income and Net NPA to Cost of Capital. Bank of Baroda has a negative beta relation in Net NPA to Return on Assets and Net NPA to Capital Adequacy Ratio.
22. Regression Analysis reveals that Indian Bank has a very high beta value in Net NPA to Doubtful Debts. The bank has a positive beta relation in Net NPA to Interest Income and Net NPA to Cost of Capital. Indian Bank has a negative beta relation in Net NPA to Return on Assets and Net NPA to Capital Adequacy Ratio.
23. Regression Analysis reveals that State Bank of India has a high beta value in Net NPA to Doubtful Debts. The bank has a positive beta relation in Net NPA to Cost of Capital. State Bank of India has a negative beta relation in Net NPA to Return on Assets and Net NPA to Interest Income. The beta value of Net NPA to Capital Adequacy Ratio is 0.
24. Regression Analysis reveals that Union Bank of India has a low beta value in Net NPA to Doubtful Debts. The bank has a positive beta relation in Net NPA to Capital Adequacy Ratio. Union Bank of India has a negative beta relation in Net NPA to Interest Income, Net NPA to Cost of Capital and Net NPA to Return on Assets.
25. Regression Analysis reveals that Punjab National Bank has a low beta value in Net NPA to Doubtful Debts. The bank has a negative beta relation in Net NPA to Capital Adequacy Ratio, Net NPA to Interest Income, Net NPA to Cost of Capital and Net NPA to Return on Assets.
26. Regression Analysis reveals that UCO Bank has a negative beta value in Net NPA to Doubtful Debts. The bank shows a positive beta relation in Net NPA to Interest Income, whereas, a negative relation in Net NPA to Cost of Capital, Net NPA to Return on Assets and Net NPA to Capital Adequacy Ratio. UCO Bank has the lowest beta value in Net NPA to Return on Assets among the select banks.
27. It was found that Net NPA to Interest Income had a negative correlation, which suggests that with increase in Net NPA, Interest Income decreases among the select banks.
28. It was found that Net NPA to Doubtful Debts had a positive correlation, indicating that with increase in Net NPA, doubtful debts increase among the select banks.
29. It was found that Net NPA to Cost of Capital had a positive correlation, indicating that with increase in Net NPA, cost of capital increases among the select banks.
30. It was found that Net NPA to Return on Assets had a negative correlation, which suggests that with increase in Net NPA, ROA decreases among the select banks.
31. It was found that Net NPA to Capital Adequacy Ratio had a negative correlation, which suggests that with increase in Net NPA, Capital Adequacy Ratio decreases among the select banks.

10. CONCLUSION
Banks assume a significant job in the financial advancement of a nation by going about as substance in business and mechanical exercises. One can't envision the discontinuance of banking exercises in any event, for a day. A financial emergency may arise in the nation if the boycott quit working for certain days. The banks in India are confronting the issue of Non-Performing Assets (NPAs). The acquiring limit and benefit of the banks are exceptionally influenced in light of the fact that of the presence of NPAs. Also the non-execution or non-receipt of revenue and chief obstructed banks cash in the type of assets and isn't accessible for additional utilization of banking business and in this manner the overall revenue of the banks goes down. In this association bank must mindful of the issues and recuperation enactments of NPAs. Contrasted with Private Sector Banks furthermore, foreign banks, Public Sector Banks (PSBs) are exceptionally influenced by this three letter infection NPA, since whose goals have been more social than financial. This paper examines the characterization of advance resources in PSBs, arrangement of NPAs in various areas and NPAs position in PSBs. In this investigation, it is seen that PSBs practiced rigid control measures to lessen the degree of NPAs.

11. SCOPE FOR FURTHER RESEARCH
1. Impact of bank mergers on the NPA of the erstwhile banks.
2. Research on forecasting NPA
3. A comparative analysis of NPA between public-sector banks and private-sector banks in India

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