DISSECTING NON-PERFORMING ASSETS: AN ANALYSIS OF INDIA'S BANKING INDUSTRY

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Abstract

Loans and advances play a pivotal role in fostering economic growth by providing financial resources to individuals and businesses. These funds facilitate the expansion and diversification of economic activities, contributing to overall prosperity. However, this lending process carries inherent risks, most notably credit risk, which arises from the potential default of borrowers. Non-performing Assets (NPAs) represent a significant challenge in the banking sector, as they indicate loans at risk of default.

When a borrower fails to make interest or principal payments for 90 days or more, the loan is classified as a Non-performing Asset. These NPAs pose a substantial risk to financial institutions, which rely on interest payments for revenue. Banks are required to categorize NPAs into three distinct groups based on the duration of non-performing status and the likelihood of recovering the outstanding dues:

Sub-standard Assets: These are assets that have been NPAs for up to 12 months.

Doubtful Assets: Assets classified as doubtful have remained NPAs for over 12 months, indicating higher uncertainty regarding recovery.

Loss Assets: These assets are considered irrecoverable, signifying a complete loss.

Effectively managing and reducing NPAs is crucial for the stability and sustainability of financial institutions. This paper explores the various aspects of NPAs, their classification, and the strategies employed by banks to mitigate credit risk, ultimately contributing to a sound and resilient banking sector.

Keywords: Non-performing Assets, credit risk, banking sector, economic growth, asset classification.

Introduction

Loans and advances granted by commercial banks are highly beneficial to individuals, firms, companies and industrial concerns. The growth and diversification of business activities are effected to a large extent through bank financing. Loans and advances granted by banks help in meeting short-term and long term financial needs of business enterprises. Granting loans and advances for economic growth is the prime duty of banks. Lending by the banking sector is generally encouraged because it has the more effect of funds being transferred from the system to productive purposes, thereby the economy grows. However the process of lending also carries a risk called credit risk, which arises from the failure of borrower. Non-performing Asset refers to loans that are in risk of default. Once the borrower has failed to make interest or principal payments for 90 days, then the loan amount is considered to be a Non-

performing Asset. Non-performing Assets (NPAs) are problematic and risk for financial institutions since they depend on interest payments for income. Banks are required to classify non-performing assets further into the following three categories based on the period for which the asset has remained non-performing and the realisability of the dues: 1. Sub-standard Assets (A sub-standard asset is one which has remained NPA for a period less than or equal to 12 months), 2. Doubtful Assets (With effect from March 31, 2005, an asset is required to be classified as doubtful, if it has remained NPA for more than 12 months), 3. Loss Assets are those assets which are considered un-collectible.

Statement of the Problem

Broadly speaking, Non-Performing Asset (NPA) is defined as an advance, where payment of interest or repayment of installment of principal (in case of term loans disbursed by the commercial banks) or both remains unpaid for a certain period. In India, the definition of NPAs has changed over time. According to the Narasimhan Committee Report (1991), those assets (advances, bills discounted, overdrafts, cash credit etc.,) for which interest remains due for a period of 180 days should be considered as NPAs.

Subsequently, this period was reduced, and from March 1995 onwards the assets for which the interest has remained unpaid for 90 days are considered as NPAs. Non-performing Assets (NPA) has emerged since over a long period as an alarming threat to the Indian banking industry.

Banking reforms by the Government of India and Reserve Bank of India (RBI) in terms of the two Narasimhan Committee Reports have been neutralized by the ill effects of this surging threat.

Despite various correctional steps administered to solve and end this problem, concrete results are eluding The severity of the problem is however acutely suffered by almost all the branches of commercial banks. Hence, the present study has focused on the trends in various components of non-performing assets of Indian commercial banks.

Review of Literature

A considerable amount of research has been done in the area of Nonperforming Assets (NPAs) of commercial banks in India, by academicians and researchers. The literature obtained by investigators, in the form of reports of various committees, commissions and working groups established by the Union Government, Reserve Bank of India, the research studies, articles of researchers, the comments of economic analysts and news, is briefly reviewed in this part.

Kaveri (2001) studied the non-performing assets of various banks and suggested various strategies to reduce the extent of NPAs.

Prashanth k Reddy (2002) in his study focuses on comparative study on NonPerforming Assets in India in the Global context.

Ramu, N (2009) has made an attempt to analyze the asset quality in selected UCBs in Tamil Nadu. The researcher also pointed out that, with the tightening of prudential norms, the banking sector has been consistently conforming to and adopting international prudential norms and accounting practices.

Meenakshi Rajeev and Mahesh, H.P. (2010) in their study concluded that accounting norms have been modified substantially and mechanisms are in place for reduction of bad debts.

Bhavani Prasad and Veera D (2011) studied NPAs in Indian Banking sector and concluded that PSBs accounted for 78% of total NPAs and this is due to falling revenues from traditional sources.

Jaynal Ud-din Ahmed (2011) in his study concluded that the earning capacity and profi- tability of banks has been adversely affected by the high level of NPAs and the reduction of NPAs in banks is posing the biggest challenges in the Indian economy.

Veerakumar,K. (2012) in his research study concluded that the bank management may speed up recovery of good loans and bad loans through various modes to decelerated growth of NPAs from the present level and also to prevent reemergence of NPAs over the minimum level.

Siraj.K.K and Prof.P.Sundarsanan Pillai (2012) in their research study concluded that NPA still remains a major threat and the incremental component explained through additions to NPA poses a great question mark on efficiency of credit risk management of banks in India.

Sandeep and Parul Mital (2012) analysed the comparative position of nonperforming assets of selected public and private sector banks in India to find their efficiency through comparative study.

Zahoor Ahmed and Prof. Jagadeeshwaran.M. (2013) in their research study concluded that NPA is a major problem and hurdle faced by banking industry. And also assessed the various causes for accounts for becoming NPAs are wilful defaults, improper processing of loan proposals, poor monitoring and so on.

Prof. Ganesan. D. and Santhanakrishnan. R. (2013) have made an attempt to analyse the sector-wise NPAs, category-wise priority sector NPAs and impact of spread on Gross and Net NPAs. They also analysed the reasons for an assets becoming NPA and remedial measures to be taken and concluded that due to various steps taken by the Government of India, NPAs were reduced to considerable level.

Scope of the Study

As far as the scope of the study is concerned, the study covers the composition of non-performing assets of public sector banks, private sector banks and foreign banks which are operating in the country. The period of the study is six years spanning from 2007 to 2012.

As observed from the review of literature, no study has been carried out regarding the recent trends in the components of loan assets of the Non-Performing Assets (NPA) of Indian Commercial Banks. So, it becomes imperative to know the recent past working performance of the components of various non-performing assets of the commercial banks.

Objectives of the Study

The study aims to gain insights into the concept of Loss Assets of Nonperforming Assets (NPAs) of Indian Scheduled Commercial Banks. The following broad objectives are laid down for the purpose of the study.

(a)   to assess the loan assets of the Scheduled Commercial Banks in India;

(b)   to analyze the various composition of the non-performing assets of public, private and foreign banks in India and

(c)   to review the trend of Gross NPAs of public, private and foreign banks of Scheduled Commercial Banks in India.

(d)   To suggest measures to control the menace of NPAs.

Concepts Used in the Study

Substandard Assets

A substandard asset would be one, which has remained as NPA for a period less than or equal to 12 months. Such an assets will have defined credit weaknesses that jeopardize the liquidation of the debt and are characterized by the distinct possibility that the banks will sustain some loss, if deficiencies are not corrected.

Doubtful Assets

An asset would be classified as doubtful if it has remained in the substandard category for a period of 12 months. A loan classified as doubtful has all the weaknesses inherent in assets that were classified as substandard, with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently known facts, conditions and values-highly questionable and improbable.

Loss Assets

A loss asset is one where loss has been identified by the bank or internal or external auditors or the Reserve Bank of India (RBI) inspection but the amount has not been written off wholly. In other words, such an asset is considered uncollectible and of such little value that its continuance as a bankable asset is not warranted although there may be some salvage or recovery value.

Non-Performing Assets (NPA)

NPA is defined as a credit facility in respect of which the interest and/or installment of principal has remained 'past due' for a specified period of time.

Gross NPA

Gross NPAs are the sum total of all loan assets that are classified as NPAs as per the Reserve Banks of India (RBI) guidelines as on Balance Sheet date.

Gross NPA reflects the quality of the loan loans made by the banks. It consists of all the non-standard assets like sub-standard, doubtful and loss assets.

Research Methodology

Methodology describes the research route to be followed, the instruments to be used, universe and sample of the study for the data to be collected, the tools of analysis used and pattern of deducing conclusions.

Data Collection and Sample

For the purpose of the study, categories of loan assets of public, private and foreign banks which are listed in the Second Schedule of the Reserve Bank of India Act, 1939 have been considered. The study is based on secondary data. The RBI publications like, "Report on Trend and Progress of Banking in India", "Annual Reports of RBI", and "Reports on Currency and Finance" are the major sources for this study. To supplement the data, the researcher elicits other relevant data available from the annual reports of the various public, private and foreign commercial banks, journal, websites and text books.

Data Analysis

The analysis of the data is the core part of the research. Scientific methods have been used nowadays to get the output or study made authentic and can also sufficed the purpose what the study meant for. The collected data have been processed on computer. To reach certain relevant results, the data collected

from all resources have been tabulated, analyzed and interpreted with the help of appropriate statistical techniques. In order to analyze the data and draw conclusions in this study, various statistical tools like Descriptive Statistics. Linear Regression and ANOVASingle Factor have been done using through EXCEL and SPSS Software. The study is confined a period of six years i.e., from 2007 to 2012.

Results and Discussion

1. Loan Assets of Public Sector Banks

The amounts of composition of loan assets for the period 2007 to 2012 are shown in following Table No.1.

Table-1: Classification of Loan Assets of Public Sector Banks.
(Amount in 'Billion')

Years	Sub-standard Assets	Doubtful Assets	Loss Assets
2007	139.45	199.70	45.10
2008	168.70	190.68	36.68
2009	195.21	207.08	38.03
2010	276.85	246.79	49.28
2011	336.12	319.55	55.14
2012	603.76	470.75	50.37
Mean	286.68	272.42	45.76
S.D.	171.48	108.12	7.26
C.V. (%)	59.81	39.68	15.86

Source: Department of Banking Supervision, Reserve Bank of India, 2012.

It is exhibited from the table 1 that the amounts of sub-standard assets have been constantly increased over the period of study. In the case of doubtful assets, it has been decreased from 199.70 billion in 2007 to 190.68 billion in 2008. But it has again gone up to 470.75 billion in 2012.

As far as the loss assets are concerned, it has been increased from 45.10 billion in 2007 to 55.14 billion in 2011. In 2012, it has gone down to 50.37 billion.

By comparing the performance on the basis of the mean value for the period, it has been noted that the sub-standard assets is high in case of the public sector banks, as the mean value is 286.68. Next is the place of doubtful assets whose mean value is 272.42 and it is the lowest in the case of loss assets as it is 45.76.The degree of variation is very low in loss assets as the CV is 15.86 and the variation is very high in case of sub-standard assets as the per cent of CV is 59.81. It is found to be more consistent as the CV of the loss assets is less than that of the other two categories of assets in the NPA.

2. Loan Assets of Private Sector Banks

The amount of components of loan assets of the private sector banks for the period 2007 to 2012 are shown in following Table No.2.

Table-2: Classification of Loan Assets of Private Sector Banks.
(Amount in 'Billion')

Years	Sub-standard Assets	Doubtful Assets	Loss Assets
2007	43.68	39.30	9.41
2008	72.80	44.52	12.44
2009	105.26	50.17	13.45
2010	86.76	65.42	21.66
2011	43.98	107.35	28.39
2012	51.28	103.14	28.72
Mean	67.29	68.31	19.01
S.D.	25.33	29.94	8.43
C.V. (%)	37.64	43.82	44.34

Source: Department of Banking Supervision, Reserve Bank of India, 2012.

It is observed from the above table that the amount of sub-standard assets have been steadily increased from 43.68 billion in 2007 to 105.26 billion in 2009. It is very encouraging sign that this amount of sub-standard assets has decreased to 43.98 billion in the year 2011. But, it has recorded 51.28 billion in 2012. In the case of doubtful assets, it has been increased from 39.30 billion in 2007 to 107.35 billion in 2011. But it has gone down to 103.14 billion in 2012. The increase over the period of the study was 2.62 times.

As far as the loss assets are concerned, it has been increased from 9.41 billion in 2007 to 28.72 billion in 2102. The increase over the period of the study was 3.05 times.

By comparing the performance on the basis of the mean value for the period, it has been noted that the doubtful assets is high, as the mean value is 68.31. Next is the place of sub-standard whose mean value is 67.29 and it is lowest in the case of loss assets as it is 19.01.The degree of variation is very low in doubtful assets as the CV is 43.82 and the variation is very high in case of both loss and sub-standard assets as the per cent of CV are 44.34 and 37.64 respectively. It is found to be more consistent as the CV of the doubtful assets is less than that of other two categories of assets in the composition of the non-performing assets of the scheduled commercial banks in India.

3. Loan Assets of Foreign Banks

The amounts of components of loan assets of the foreign banks for the period 2007 to 2012 are shown in following Table No.3.

Table-3: Classification of Loan Assets of Foreign Banks. (Amount in 'Billion')

Years	Sub-standard Assets	Doubtful Assets	Loss Assets
2007	13.67	6.31	4.54
2008	19.63	7.68	3.87
2009	58.74	10.04	4.16
2010	49.30	14.41	7.57

2011	18.65	21.13	10.87
2012	20.79	22.30	19.82
Mean	30.13	13.64	8.47
S.D.	18.90	6.83	6.17
C.V. (%)	62.72	50.07	72.84

Source: Department of Banking Supervision, Reserve Bank of India, 2012.

It is exhibited from the table 3 that the amount of sub-standard assets have been constantly increased over the period of study, but the amount has been recorded high in the year 2009 i.e. 58.74 billion. In the case of doubtful assets, it has been increased from 6.31 billion in 2007 to 22.30 billion in 2012.

The increase over the period of the study was 3.53 times. As far as the loss assets are concerned, it has also been increased from 4.54 billion in 2007 to 19.82 billion in 2012.

Comparing the performance on the basis of the mean value for the period, it has been noted that the sub-standard assets is high, as the mean value is 30.13. Next is the place of doubtful assets whose value is 13.64 and it is lowest in the case of loss assets as it is 8.47.The degree of variation is very low in doubtful assets as the CV is

50.07 and the variation is very high in case of loss assets as the per cent of CV is 72.84. It is found to be more consistent as the CV of the doubtful assets is less than that of other two categories of assets i.e., sub-standard and loss assets.

4. Loan Assets of All Scheduled Commercial Banks

The amounts of components of loan assets of all the scheduled commercial banks for the period 2007 to 2012 are shown in following Table No.4.

Table-4: Classification of Loan Assets of All Scheduled Commercial Banks (Amount in 'Billion')

Years	Sub-standard Assets	Doubtful Assets	Loss Assets
2007	196.80	245.31	59.05
2008	261.13	242.87	52.99
2009	359.21	267.29	55.64
2010	412.92	326.63	78.50
2011	398.75	448.02	94.40
2012	675.84	596.20	98.92
Mean	384.10	354.38	73.25
S.D.	165.51	141.37	20.27
C.V. (%)	43.09	39.89	27.67

Source: Department of Banking Supervision, Reserve Bank of India, 2012.

It is exhibited from the table 4 that the amounts of sub-standard assets have been increased from 196.80 billion in 2007 to 675.84 billion in 2012. In the case of doubtful assets, it has steadily been increased from 245.31 billion in 2007 to 596.20 billion in 2012. The increase over the period was 2.43 times. As

far as the loss assets are concerned, it has been increased from 59.05 billion in 2007 to 98.92 billion in 2012.

By comparing the performance on the basis of the mean value for the period, it has been noted that the sub-standard assets is high, as the mean value is 384.10. Next is the place of doubtful assets whose value is 354.38 and it is lowest in the case of loss assets as it is 73.25. The degree of variation is very low in loss assets as the CV is 27.67 and it is high in sub-standard assets as the per cent of CV is 43.09. It is found to be more consistent as the CV of the loss assets is less than that of other two categories of assets in the composition of the non-performing assets of the scheduled commercial banks in India.

Ho: There is no significant impact of Public Sector Banks' Loss Assets on All Scheduled Commercial Banks' Loss Assets.

To test the significant impact of Public Sector Banks' Loss Assets on All Scheduled Commercial Banks' Loss Assets, the researcher used Linear Regression Analysis. The test results are given in the following Tables.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.902ᵃ	.813	.766	9.802

a. Predictors: (Constant), Pub.Sec

Anovaᵇ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1671.745	1	1671.745	17.400	.014ᵃ
	Residual	384.308	4	96.077		
	Total	2056.054	5			

a.   Predictors: (Constant), Pub.Sec
b.   Dependent Variable: All.Sch.CB

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-41.861	27.884		-1.501	.208
	Pub.Sec	2.515	.603	.902	4.171	.014

a. Dependent Variable: All.Sch.CB

Beta co-efficient of Public Sector Banks' Loss Assets is 2.515. It shows that Public Sector Banks' Loss Assets has impact on All Scheduled Commercial Banks' Loss Assets. At 95% confidence interval, the t value at 5% level of significance is 1.96. Since, calculated value t =4.171 > 1.96, H0 is rejected. Hence, there is significant impact of public sector banks' loss assets on all scheduled commercial banks 'loss assets.

5. Gross NPAs of All Scheduled Commercial Banks

-wise amount of Gross NPAs of All Scheduled Commercial Banks are seen in following Table No.5.

Table-5: Gross NPAs of Scheduled Commercial Banks (Amount in 'Billion')

Years	Public Sector Banks	Private Sector Banks	Foreign Banks	All Scheduled Commercial Banks
2007	384.25	92.39	24.52	501.16
2008	396.06	129.76	31.18	556.99
2009	440.32	168.88	72.94	682.13
2010	572.93	173.84	71.28	818.05
2011	710.80	179.72	50.65	941.17
2012	1124.89	183.15	62.92	1370.96
Mean	604.87	154.62	52.24	811.74
S.D.	283.55	36.07	20.58	318.64
C.V. (%)	46.87	23.32	39.39	39.25

Source: Department of Banking Supervision, Reserve Bank of India, 2012.

It is exhibited from the table 5 that the amounts Gross NPAs of Public Sector Bank have been increased from 384.25 billion in 2007 to 1124.89 billion in 2012. The increase over the period was 2.92 times. In the case of Private Sector Banks, it has steadily been increased from 92.39 billion in 2007 to 183.15 billion in 2012. The increase over the period was 1.98 times.

As far as the Foreign Banks are concerned, it has been increased from 24.52 billion in 2007 to 62.92 billion in 2012. It is observed that all Indian Scheduled Commercial Banks' Gross NPAs have been increasing year after year.

By comparing the performance on the basis of the mean value for the period, it has been noted that the Gross NPAs of Public Sector banks is high, as the mean value is 604.87. Next is the place of Private Sector Banks whose value is 154.62 and it is lowest in the case of Foreign Banks as it is 52.24. The degree of variation is very low in Private Sector Banks as the CV is 23.32 and it is high in the Public Sector Banks as the per cent of CV is 46.87. It is found to be more consistent as the CV of the Gross NPAs of the Private Sector Banks is less than that of other two sectors of banks in the gross NPAs of the scheduled commercial banks in India.

Ho: There is no significant impact of Loss Assets of All Scheduled Commercial Banks on Gross NPAs of All Scheduled Commercial Banks.

To test the significant impact of Loss Assets of All Scheduled Commercial Banks on Gross NPAs of All Scheduled Commercial Banks, the researcher used Linear Regression Analysis. The test results are given in the following Tables.

Model Summary

Model			R	R Square
1	.897ª	.805	.756	157.49044

a. Predictors: (Constant), All.SCB.Loss Assets

Anovaᵇ

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	408462.240	1	408462.240	16.468	.015ª
Residual					
Total	99212.960	4	24803.240		
	507675.200	5			

Model			R	R Square
1	.897ª	.805	.756	157.49044

a.   Predictors: (Constant), All.SCB.Loss Assets

Model Summary

b.   Dependent Variable: All.SCB.NPAs

Coefficientsª

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	-220.700	262.415		-.841	.448
All.SCB.Loss Assets	14.095	3.473	.897	4.058	.015

a. Dependent Variable: All.SCB.NPAs

Beta co-efficient of Public Sector Banks' Loss Assets is 14.095. It shows that Loss Assets of All Scheduled Commercial Banks has impact on Gross NPAs All Scheduled Commercial Banks. At 95% confidence interval, the t value at 5% level of significance is 1.96. Since, calculated value t =4.058 > 1.96, H0 is rejected. Hence, there is significant impact of Loss Assets of All Scheduled Commercial Banks on Gross NPAs of All Scheduled Commercial Banks.

To test the significant difference in the Gross NPAs of the public sector banks, private sector banks and foreign banks, 'Single Factor ANOVA' has been performed. The Hypothesis framed is as follows:

Ho: There is no significant difference in the Gross NPAs among the three sectors of the Scheduled Commercial Banks in India.

The test results are given in the following Table.

Anova

Gross NPAs

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1037206.873	2	518603.437	18.944	.000
Within Groups	410640.475	15	27376.032		
Total	1447847.348	17			

Table above shows that an F-ratio and significance value suggests that there is significant difference in the loss assets among the three sectors of banks. Hence, Ho is rejected.

Summary of Findings, Suggestions and Conclusion Findings

•   Analysis of components of loan assets shows that the sub-standard assets are high in case of the public sector banks. The degree of variation is very low in loss assets and the variation is very high in case of sub-standard assets. It is found to be more consistent as the CV of the loss assets is less than that of other two categories of loan assets.

•   Analysis of components of loan assets shows that the doubtful assets are high in case of the private sector banks. The degree of variation is very low in loss assets and the variation is very high in case of both sub-standard assets and doubtful assets. It is found to be more consistent as the CV of the doubtful assets is less than that of the other two categories of loan assets.

•   Analysis of components of loan assets in Foreign Banks shows that the substandard assets are high. The degree of variation is very low in loss assets and the variation is very high in case of sub-standard assets.

It is found to be more consistent as the CV of the loss assets is less than that of other two categories of loan assets.

•   Analysis of components of loan assets in All Scheduled Commercial Banks proves that the amount of sub-standard assets is high. The degree of variation is very low in loss assets and it is high in sub-standard assets. It is found to be more consistent as the CV of the loss assets is less than that of other two categories of loan assets.

•   It is found there is significant impact of public sector banks' loss assets on all scheduled commercial banks 'loss assets.

•   It is found that there is significant impact of Loss Assets of All Scheduled Commercial Banks on Gross NPAs of All Scheduled Commercial Banks.

•   It is found that that there is significant difference in the loss assets among the three sectors of banks.

• It is observed that all Indian Scheduled Commercial Banks' Gross NPAs have been increasing year after year.

• It is found to be more consistent as the CV of the Gross NPAs of the Private Sector Banks is less than that of other two sectors of banks.

Suggestions

• The management of banks may impart training to the officials in the art of lending to the different categories and they may continue to encourage upgrading their knowledge and skills in recovering the loans and advances.

• Bank management may possess specialized credit rating agencies to finalize the borrowing capacity of the potential borrowers before offering credit to the needy people.

• Steps need to be taken to recover the loan in time by adopting well equipped recovery mechanism.

• There is a wrong opinion in the minds of the farmers that agricultural credit may be waived one day or other. Hence, the agriculturalist who can repay the agricultural credit may not come forward to repay the loans in time. Therefore the farmers in our country requires a lot of counselling and the bank officers engaged in this activity should provide necessary advice and counselling.

Conclusion

The problem of Non-Performing Assets (NPAs) is a serious issue and danger to the Indian Scheduled Commercial Banks, because it destroys the sound financial positions of them. The customers and the public would not keep trust on the banks any more if the banks have higher rate of NPAs. So, the problem of NPAs must be handled in such a manner that would not ruin the financial positions and affect the image of the banks. The RBI and the Government of India have taken innumerable steps to reduce the volume of NPAs of the Scheduled Commercial Banks. The remedial measures taken by Government of India, Reserve Bank of India and the Bank management in recent years, helped to reduce NPAs considerably as recommended by Shri M. Narasimham. To improve the efficiency and profitability, the NPA has to be reduced further.

Limitations of the Study

The following are the main limitations of the study:

i. In the present study, the components of various NPAs of commercial banks in a threefold type's namely public, private and foreign sectors of banks. No such classification as old and new private sector banks have been considered for this purpose.

ii. The study is based on secondary data as published in various publications of RBI and other reports. These data are based on historical accounting concept, which ignores the impact of inflation.

iii. The study, as limitations, is confined only to the selected and restricted indicators and the study is confined only for the period of six years.

Scope of Further Research

The Indian commercial banks have been facing serious problems of raising Non- performing Assets (NPAs). NPAs have been eating the banking industries from within, since nationalisation of banks in 1969. It also affected profitability, liquidity and solvency position of the Indian banking sector. The earning capacity and profitability of banks have been adversely affected by the high level of NPAs. The reduction of NPAs in banks is posing the biggest challenges in the Indian economy.

This research paper and its findings may be of considerable use to banking institutions, policy makers and the academic researchers in the area of banking performance evaluation with special reference to components of various nonperforming assets/loan assets.

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