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A STUDY ON INCOME RECOGNITION & ASSET CLASSIFICATION OF OLD PRIVATE SECTOR BANKS FOR THE YEAR 2014

ABSTRACT

Credit Risk is the potential that a bank borrower/counter party fails to meet the obligations on agreed terms. These losses could take the form of outright default or alternatively, losses from changes in portfolio value arising from actual or perceived deterioration in credit quality that is short of default. An asset is classified as non-performing asset if dues in the form of principal & interest are not paid by the borrower for a period of 180 days. However with effect from March 2004, default status would be given to a borrower if dues are not paid for 90 days. The importance of Non Performing Assets is increasing day by day from the formation of Shri M. Narsimham Committee. It is the second land mark in banking sector in India after nationalization of banks. Reserve Bank of India had advised all commercial banks on 7th November, 1987 to introduce the health classification indicating the quality of individual advances in the following eight categories with Health Code assigned to each borrower account namely Satisfactory, Irregular, Sick – viable, Sick – non – viable / sticky, Advances – recalled, Suit – file – accounts and Decreed debts. The high level of NPAs in banks and financial institutions has been a matter of grave concern to the public as bank credit is the catalyst to economic growth of the country. NPAs are not therefore the concern of only lenders. The purpose of this study is to understand the performing assets and non – performing assets of Old Private sector banks in India and also study about the rating of banks on NPA management. Impact of NPAs on performance of a Bank may be either Interest income reduction due to non – performance of assets and/or Desirable yield not achieved etc. This paper also attempts to study the impact of NPA's on Banks. Statistical techniques used are Mean (x), Standard deviation (б), K-S Test, T-Test and Correlation.

Key Words: Credit Risk, NPAs

1. INTRODUCTION

1.1   History of banking in India

Reserve Bank of India introduced a critical analysis for a comprehensive and uniform credit and monitoring by way of the Health Code System, in banks, which provided information regarding health of individual advances in 1985 – 86. It was considered that such information would be of immense use to banks" management for control purpose.

Reserve Bank of India advises all commercial banks on 7th November, 1987 to introduce the health classification indicating the quality of individual advances in the following eight categories with Health Code assigned to each borrower account.

- **Satisfactory**: the account in which all terms and conditions are complying with and safety of advances are not in doubt.

- **Irregular:** the account where safety of advances is not suspected, though there may be occasional irregularities.

- **Sick – viable:** advances to units which are sick but viable under nursing or revival programs are under taken.

- **Sick – non – viable / sticky:** advances where irregularities continue to persist and there are no immediate prospects of regularization.

- **Advances – recalled:** advances where the recalled repayment is highly doubtful and nursing is not considered worthwhile, includes accounts where decision has been taken to recall the advances.

- **Suit – file – accounts:** accounts where legal action or recovery proceedings have been initiated.

- **Decreed debts:** accounts for which decrees have been obtained.

- **Bad and doubtful accounts:** the accounts in which the recoverability is in doubtful due to shortfall in the value of the securities and inability / unwillingness of the borrower to repay the bank's dues partly or wholly.

1.2   New Private Sector Banks

The banks, which came in operation after 1991, with the introduction of economic reforms and financial sector reforms are called "new private-sector banks". Banking Regulation Act was then amended in 1993, which permitted the entry of new private-sector banks in the Indian banking

sector. However, there were certain criteria set for the establishment of the new private-sector banks, some of those criteria being: The bank should have a minimum net worth of Rs. 200 crores.

1. The promoters holding should be a minimum of 25% of the paid-up capital.
2. Within 3 years of the starting of the operations, the bank should offer shares to public and their net worth must increased to 300 crores

1.3 Meaning of NPA

An asset is classified as non-performing asset if dues in the form of principal & interest are not paid by the borrower for a period of 180 days. However with effect from March 2004, default status would be given to a borrower if dues are not paid for 90 days. If any advance or credit facilities granted by bank to a borrower become non-performing, then the bank will have to treat all the advance/credit facilities granted to that borrower as non-performing without having any regard to the fact that there may still exist certain advance/credit facilities having performing status.

Fig 1.1 Classifications of Banking Assets
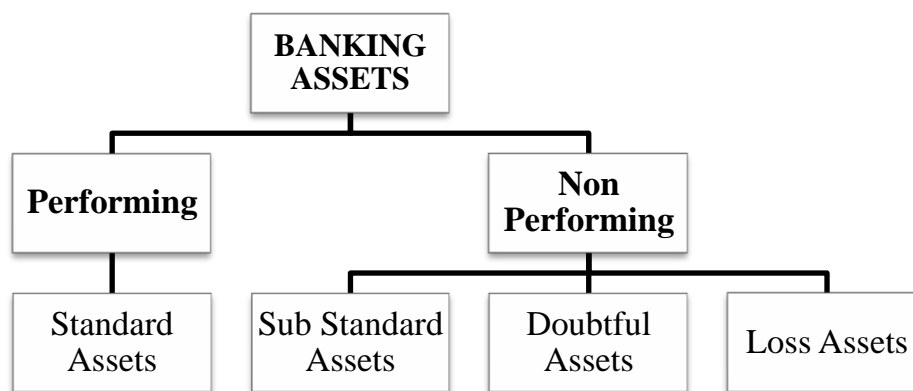
Source: www.rbi.org.in/

1.4 Fundamental Causes for NPAs

The reasons a customer does not pay are many: they vary in the level of seriousness and the collector needs to determine as quickly as possible the reason for payment not having been made. The collection devices employed and the assertiveness of the overall collection effort will vary depending upon the reason payment was not made.

- Failure of a business unit
- Lack of adequate risk assessment and monitoring system within the bank.
- Failure, non-payment / over dues in other countries.
- Small Amount Involved and Customer Ignores
- Poor Financial Management
- Temporarily Out of Funds but Good Customer
- Willful Default
    - Deliberate non-payment of the dues despite adequate cash flow and good net worth.
    - Assets financed have either not being purchased or have been sold and the proceeds have been mis -utilized.
    - Misrepresentation/falsification of records.
    - Disposal/removal of securities without the banks knowledge.
    - Fraudulent transaction by the borrower.

1.5   Managing Non – Performing Assets

NPAs have multifold effects on the performance of banks. It shows the weakness of management of bank. It is necessary to manage non – performing assets for following reasons:
- To protect the interest of share holders
- To protect the interest of depositors
- For profitability
- High provision
- Creditworthiness of the Banks
- Expansion plan
- Welfare of employees
- In the interest of sustained economic growth

1.6   Purpose of introducing Prudential Norms
- Bringing out the true position of a bank's loan profitability
- Help arrest its deterioration

Table 1.1: Private Sector Banks (Old & New) Group Wise Classification of Loan Assets 2009-13 (Rs. Billion)

Yr	Standard Advances	% Share	Sub-Standard Advances	% Share	Doubtful Advance	% Share	Loss Advances	% Share	Gross NPA	% Share	Total Gross Advances
09	5,031.87	97.0	105.27	2.0	50.18	0.96	13.45	0.3	168.9	**3.25**	5,200.77
10	5,677.23	97.0	86.78	1.5	65.43	1.12	21.66	0.4	173.8	**2.97**	5,851.10
11	7,149.78	97.5	44.00	0.6	107.36	1.46	28.39	0.4	179.7	**2.45**	7,329.53
12	8,628.96	97.9	51.33	0.6	103.16	1.17	28.72	0.3	183.2	**2.08**	8,812.16
13	10,266.7	98.1	58.54	0.6	110.69	1.06	30.69	0.3	199.9	**1.91**	10,466.7

Fig1.2: Bank Credit Growth with Select economic and Banking Aggregates & Growth in Gross Advances across Bank Groups
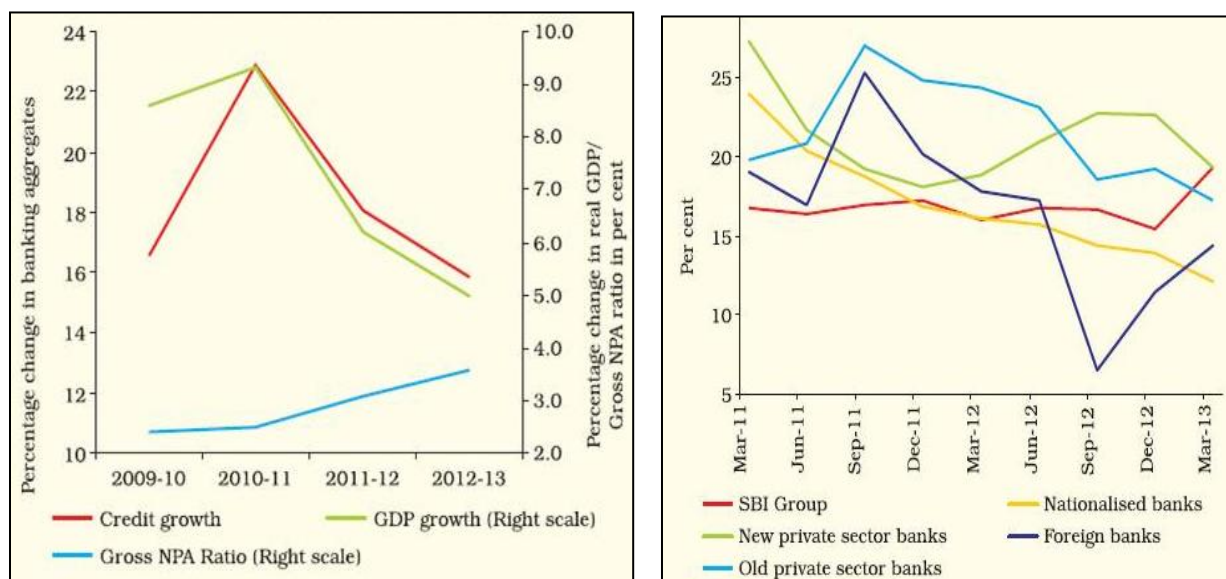
Source: Handbook of Statistics on Indian Economy, Annual Accounts of Banks and off-site returns

2. METHODOLOGY

2.1 Statement of the problem

The study is conducted to understand the Performing Assets and Non – Performing Assets of New Private Sector Banks in India. From a safety point of view it is very necessary to study NPA of any bank. So it is very important for success of any bank to maintain PA and having less or zero NPA. Thus, the rating of banks of NPA management helps analyze which bank is more efficient in the management of its assets.

2.2   Scope of the study

* The study covers the 7 New Private Sector Banks of India.
* This study also enables the banks to know its actual position on NPA management from the years 2009-2013.
* This study enables researcher to improve knowledge about the banking sector, specifically on account of NPAs.

2.3   Objectives of the Problem

* To study the causes that lead to creation of nonperforming assets and their management.
* To analyze the NPAs of the selected banks during the given time frame through the various statistical tests.
* To analyze whether the individual level of NPAs of the banks are consistent with that of the national level.

2.4.   Hypothesis

Ho: Gross NPA Ratio of the New Private Sector Banks is not different from the National Gross NPA level.

H1: Gross NPA Ratio of the New Private Sector Banks is different from the National Gross NPA level.

2.5   Literature

2.5.1   Ghuliani

He in his scope of research talks about asset liability management (ALM), which has now assumed a priority area for banks. The book contains various aspects of balance sheet

management, RBI guidelines on ALM, asset classification, provisioning, and the disclosures. The underlying concepts have been explained in simple language keeping the practical aspects in focus. The latest developments in the relevant fields have been incorporated to enable the readers to acquire the cutting edge knowledge.

2.5.2   Reddy (2002) highlighted that financial sector reform in India has progressed rapidly on aspects like interest rate deregulation, reduction in reserve requirements, barriers to entry, prudential norms and risk-based supervision. But progress on the structural-institutional aspects has been much slower and is a cause for concern. In his study, he focuses on comparative study of nonperforming assets in India in the global context - similarities and dissimilarities, remedial measures and concluded the importance of a sound understanding of the macroeconomic variables and systemic issues pertaining to banks and the economy for solving the NPA problem along with the criticality of a strong legal framework and legislative framework.

2.6 Type of Research:

The study is a statistical research as it is carried out with specific objectives and hence it results in definite conclusions.

2.7 Source of data:

Indian Banking Association (IBA) Bulletin is referred to collect net NPA and advances, RBI's guidelines, Trends & Progress reports of RBI, journals and from the web sites available on net, websites of the new private banks, annual reports (balance sheets, profit & loss accounts) of the selected new private sector banks, management reports & sources from the internet.

2.8 Tools used for analysis:

Statistical techniques used are Mean (x), Standard deviation (б), T-Test and Correlation. Diagrammatic and graphic presentation of data exhibiting the data is presented in simple, comprehensible and intelligible form.

3. ANALYSIS

Gross NPA ratio

Gross NPA is advance which is considered irrecoverable, for bank has made provisions, and which is still held in banks' books of account. The Reserve Bank of India states that, compared to other Asian countries and the US, the gross non-performing asset figures in India seem more alarming than the net NPA figure.

Gross NPA Ratio = Gross NPA/Gross Advances x 100

Table – 3.1 Gross NPA Ratio of All the New Private Sector Banks Taken Together

Year	Gross NPA(in Rs. Cr)	Gross Advances (in Rs. Cr)	Gross NPA Ratio (%)
2009	1389992	45471321	3.06
2010	1377220	42818433	3.22
2011	1427672	54501393	2.62
2012	141147	6475275	2.18
2013	155525	8860233	1.76

Source: Department of Banking Supervision, RBI.

Figure 3.1 Gross NPA Ratios (In %)
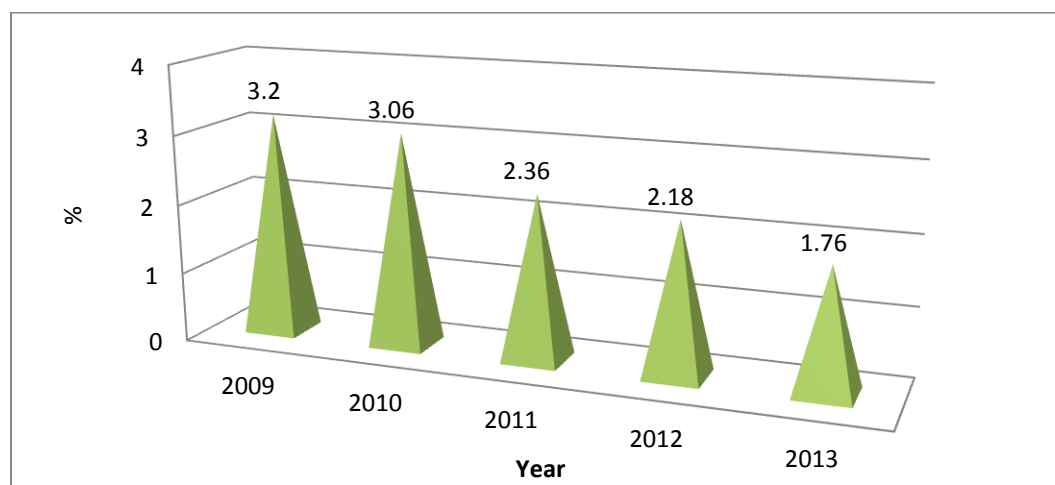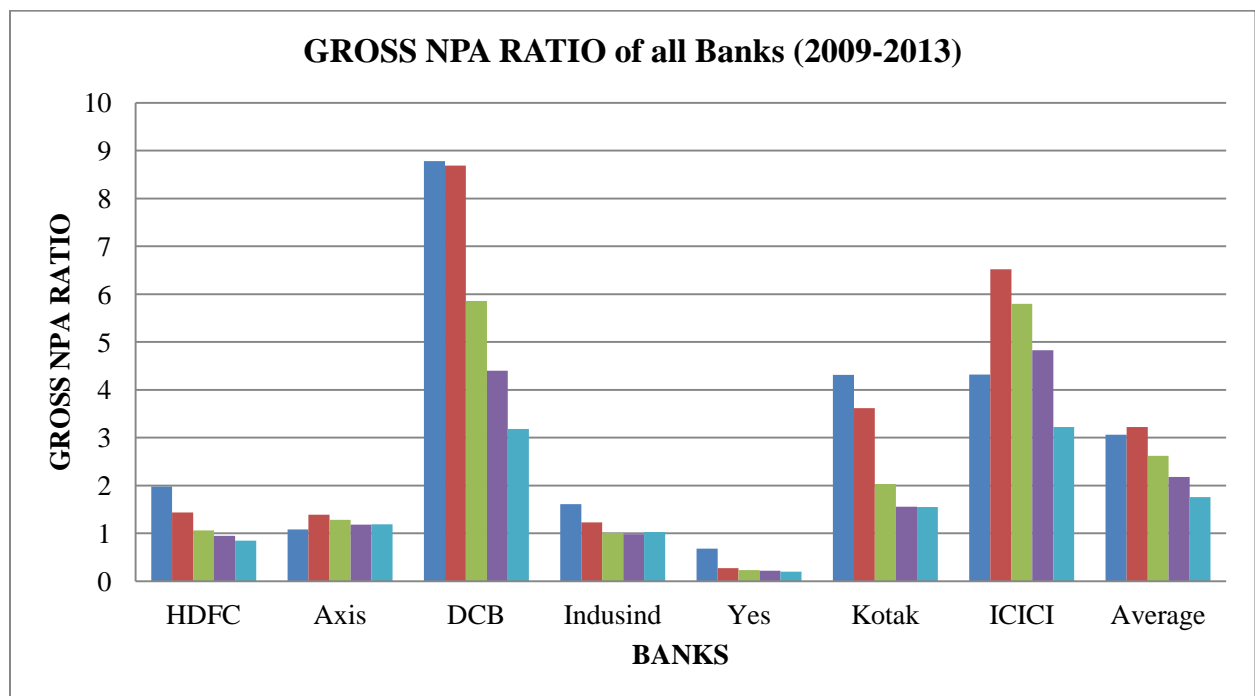

Source: Table 3.1

Table 3.2   Statistical analysis of tests conducted with Gross NPA Ratio of New Private Sector banks (2009-13):

Year	HDFC	Axis	DCB	Indusind	Yes	Kotak	ICICI	Average
2009	1.98	1.08	8.78	1.61	0.68	4.31	4.32	**3.06**
2010	1.44	1.39	8.69	1.23	0.27	3.62	6.52	**3.22**
2011	1.06	1.28	5.86	1.01	0.23	2.03	5.80	**2.62**
2012	0.95	1.18	4.4	0.98	0.22	1.56	4.83	**2.18**
2013	0.85	1.19	3.18	1.03	0.2	1.55	3.22	**1.76**

Source: Department of Banking Supervision, RBI.

Fig 3.2   Gross NPA Ratio of all Banks (2009-2013)

Source: Table 3.2

One-Sample Kolmogorov-Smirnov Test:

In statistics, the Kolmogorov–Smirnov test (K–S test) is a nonparametric test for the equality of continuous, one-dimensional probability distributions that can be used to compare a sample with a reference probability distribution (one-sample K–S test), or to compare two samples (two-sample K–S test).

Hypothesis:

Ho: Gross NPA Ratio of the New Private Sector Banks is not different from the individual banks.

H1: Gross NPA Ratio of the New Private Sector Banks is different from the individual banks.

Table 3.3 One-Sample Kolmogorov-Smirnov Test

BANKS	HDFC	AXIS	DCB	INDUSIND	YES	Kotak	ICICI	NPSB
Kolmogorov-Smirnov Z	.591	.480	.538	.681	.888	.619	.333	.428
Asymp. Sig. (2-tailed)	.876	.975	.935	.742	.409	.838	1.000	.993

a. Test distribution is Normal.

b. Calculated from data.

Interpretation:

From the above calculations based on One-Sample Kolmogorov-Smirnov Test, none of the banks are significant under 5% level of significance. This implies that the Gross NPA Ratio of the New Private Sector Banks is different from the individual banks.

T-Test

A statistical examination of two population means. A two-sample t-test examines whether two samples are different and is commonly used when the variances of two normal distributions are unknown and when an experiment uses a small sample size.

Hypothesis:

Ho: Gross NPA Ratio of the New Private Sector Banks is not different from the National Gross NPA level.

H1: Gross NPA Ratio of the New Private Sector Banks is different from the National Gross NPA level.

Table 3.4   Comparison of One Sample T-Test of Individual Banks with Industry Average

Bank	t	df	Sig. (2-tailed)
HDFC	-6.346	4	.003
AXIS	-25.742	4	.000
DCB	3.211	4	.033
INDUSIND	-11.831	4	.000
YES	-24.780	4	.000
Kotak	.081	4	.939
ICICI	4.128	4	.015

*Significance 5%*   *Test Value: NPSB- 2.5680*

Interpretation:

From the above calculations, by conducting T-Test, we can find out that except for Kotak Mahindra Bank, all other banks are tested significant at 5% level of significance. The ratios of these banks are influenced by the industry average of 2.5120%. However the Ratio of Kotak Mahindra Bank has not been influenced by the industry average.

Table 3.5 Descriptive Statistics

BANKS	N	Minimum	Maximum	Mean	Std. Deviation
HDFC	5	.85	1.98	1.2560	.46231
AXIS	5	1.08	1.39	1.2240	.11675
Development Credit Bank	5	3.18	8.78	6.1820	2.51649
INDUSIND	5	.98	1.61	1.1720	.26386
YES	5	.20	.68	.3200	.20285
Kotak	5	1.55	4.31	2.6140	1.27206
ICICI	5	3.22	6.52	4.9380	1.28364

Fig 3.3 Minimum and Maximum of all the New Private Sector Banks
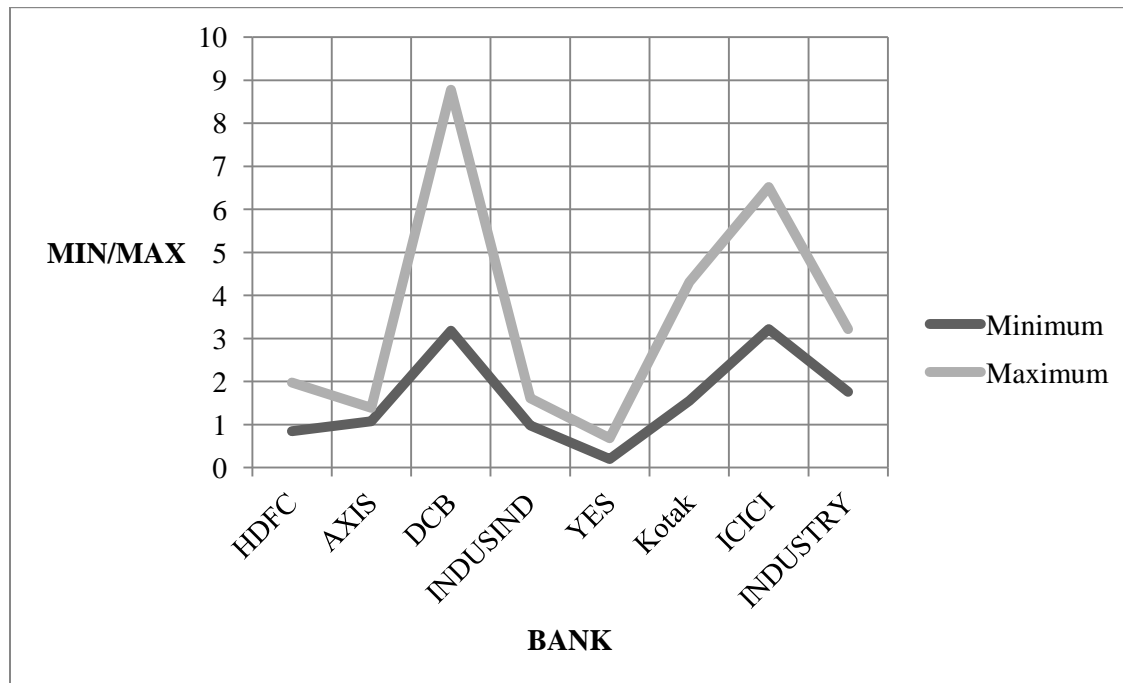
Source: Table 3.5

Fig 3.4 Mean and Standard Deviation of all the New Private Sector Banks
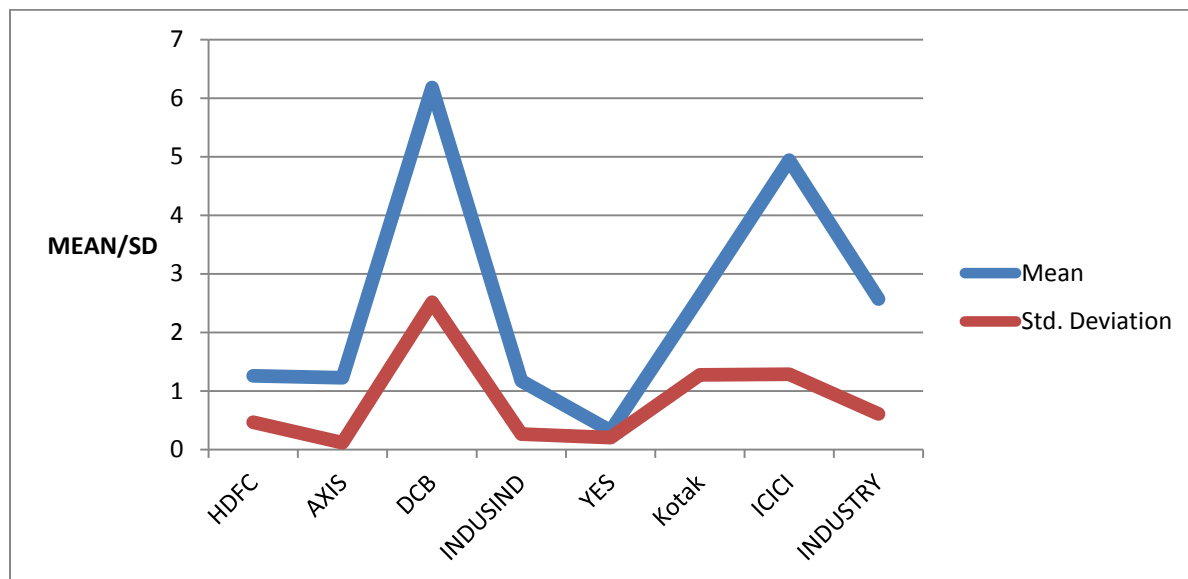
Source: Table 3.5

Correlation between NPA & Advances

Correlation is computed into what is known as the correlation coefficient, which ranges between -1 and +1. Perfect positive correlation (a correlation co-efficient of +1) implies that as one security moves, either up or down, the other security will move in lockstep, in the same direction. Alternatively, perfect negative correlation means that if one security moves in either direction the security that is perfectly negatively correlated will move in the opposite direction. If the correlation is 0, the movements of the securities are said to have no correlation.

Table 3.6 Correlation between NPAs & Advances at 1% significance

		GROSS NPA	GROSS ADVANCES
GROSSNPA	Pearson Correlation	1	.985[**]
	Sig. (2-tailed)		.002
	N	5	5
GROSS ADVANCES	Pearson Correlation	.985[**]	1
	Sig. (2-tailed)	.002	
	N	5	5

**. Correlation is significant at the 0.01 level (2-tailed).

Interpretation:

The table above represents correlation between Gross NPAs and Advances during the period of year ending 2009-2013 of the New Private Sector Banks under study. At 1% significance level, our calculations show that correlation is significant and that when advances grow, NPAs grow also.

4. FINDINGS, CONCLUSIONS & SUGGESTIONS

4.1 Findings

4.1.1. From 2009- 2013, although the share of Substandard assets have been decreasing, the share of Doubtful Advances and Loss Advances kept increasing from Rs. 50.18 to Rs. 110.69 bn and Rs. 13.45 to Rs. 30.69 bn respectively for the overall private sector.

4.1.2. The Gross NPA ratios of New Private Sector Banks kept falling but started rising and is much higher than New Private Sector Banks and Foreign Banks in the year 2013.

4.1.3. The average gross NPA of all the banks under study have been fluctuating. It is seen that the gross NPA which was 3.06% in 2008-09 first increased to 3.22 the following year and then kept decreasing until 2013 to 1.76%.

4.1.4. The highest mean for the period accounts to Development Credit Bank with 6.18% and the lowest is of Yes Bank Ltd of 0.32. The highest standard deviation is also of Development Credit Bank which is 2.52 and Axis Bank accounts to the lowest of 0.116.

4.1.5. By conducting T-Test, we can find out that except for Kotak Mahindra Bank, all other banks are tested significant at 5% level of significance. The ratios of these banks are influenced by the industry average of 2.5120%. However the Ratio of Kotak Mahindra Bank has not been influenced by the industry average.

4.1.6. In the maximum level of Gross NPA ratio, that the highest level is of Development Credit Bank at 8.78 and lowest is Yes Bank with 0.68.

4.1.7. The highest in the minimum level attributes to ICICI Bank at 3.22 and the lowest is Yes 0.22.

4.1.8. Correlation between Gross NPAs and Advances during the period of year ending 2007-2011 of the Old Private Sector Banks at 1% significance level show that correlation is significant and that when advances grow, NPAs grow & vice versa.

4.2   SUGGESTIONS

India is in its recovery or Prosperity stage where the citizens would think of more trade, housing and investment. This would involve more credit which may also result in default in repaying the loans. This can turn out to be a crisis if it is not managed well. The following suggestions are Precautionary Measures that the Private sector Banks of the nations can take to control adverse effects of economic cycles leading to a lot of credit risk.

4.2.1.   Rephasement of loans:

Repayment of a term loan depends on income generating capacity of the borrowing concern. It may be difficult to get repayment of the term loans if the borrowing unit does

not generate profit. A unit, which does not earn profit, may repay a few installments by borrowing from other sources or diverting short term fund for repayment. But ultimately a unit not earning profit will not be able to repay the term loan. Therefore, it is necessary to fix repayment schedule for a term loan according to income generating capacity of the unit.

4.2.2. Rehabilitation of the potentially viable units:

If a sick unit is potentially viable, necessary efforts should be made to finalize the rehabilitation package without the loss of time. Provision need not be made for a period of additional facilities sanctioned under rehabilitation packages approved by BIFRJ term lending institution. If the rehabilitation program, runs smoothly, it may be necessary to make provisions even after one year for additional facilities provided statutory auditors are also satisfied about the progress of rehabilitation program. If the unit becomes viable, the entire outstanding (including existing facilities) will become standard assets. Although rehabilitation of sick unit is a long drawn procedure, it may be encouraged where units are potentially viable and the management is reliable.

4.2.3. Acquisitions of sick units by healthy units:

If healthy unit acquires a sick unit, the outstanding loan amount of sick unit may be transferred to the healthy unit the entire NPA may be even wiped off. Therefore, banks should encourage merger/acquisition of sick units wherever they feel it may reduce the NPAs. Banks may even help the sick units to get stable buyers, if a part of the consideration is to be received by the sick unit is likely to be used for liquidating the NPA. Banks should make a comparative study of gains of merger/acquisition and sacrifice to be made by them to clinch the deal.

4.2.4. Compromise the borrowers:

A compromise may be called a negotiated settlement in which the borrower agrees to pay a certain amount to the banker after getting certain concession. A large number of compromise proposal are being approved by banks with a view to reducing the NPAs and recycling the funds instead of resorting to expensive recovery proceedings spread over a long period. However a compromise proposal should not be approved without proper scrutiny.locked up as NPAs, which reduce the profitability and liquidity, indirectly affect

the solvency position of the banks. These banks could monitor NPAs to strengthen their operational efficiency.

4.2.5. Banks should make such efforts to recover advances from the default, even by making some compromise, that the proportion of gross NPA gets reduced. Considering the position of the seven banks under study, it can be concluded that the situation is not pessimistic. The increasing doubtful assets suggest that there is a very good scope of recovery, as more scope is there for compromising and reducing NPAs.

4.2.6. Approaching debt recovery tribunal:

An act has been passed by parliament for setting up Debt Recovery Tribunal for expeditious adjudication and recovery of debts due to banks and financial institutions.

4.2.7. The provisions of this act titles as *"the recovery of debts due to banks and financial institutions act, 1993"*, are applicable where the amount of debt due to any bank of financial institutions of to a consortium of banks or financial institutions is not less than Rs. 10 lakhs. The Central Government have, however, been empowered to reduce the lower limit of Rs. 10 lakhs but not below Rs. 1 lakh by issuing notification.

4.2.8. The managements must try to recover as much doubtful advances as possible so that the Gross NPAs are reduced. The problem of NPAs can be solved by disposal and write off of NPAs and Increased regulation.

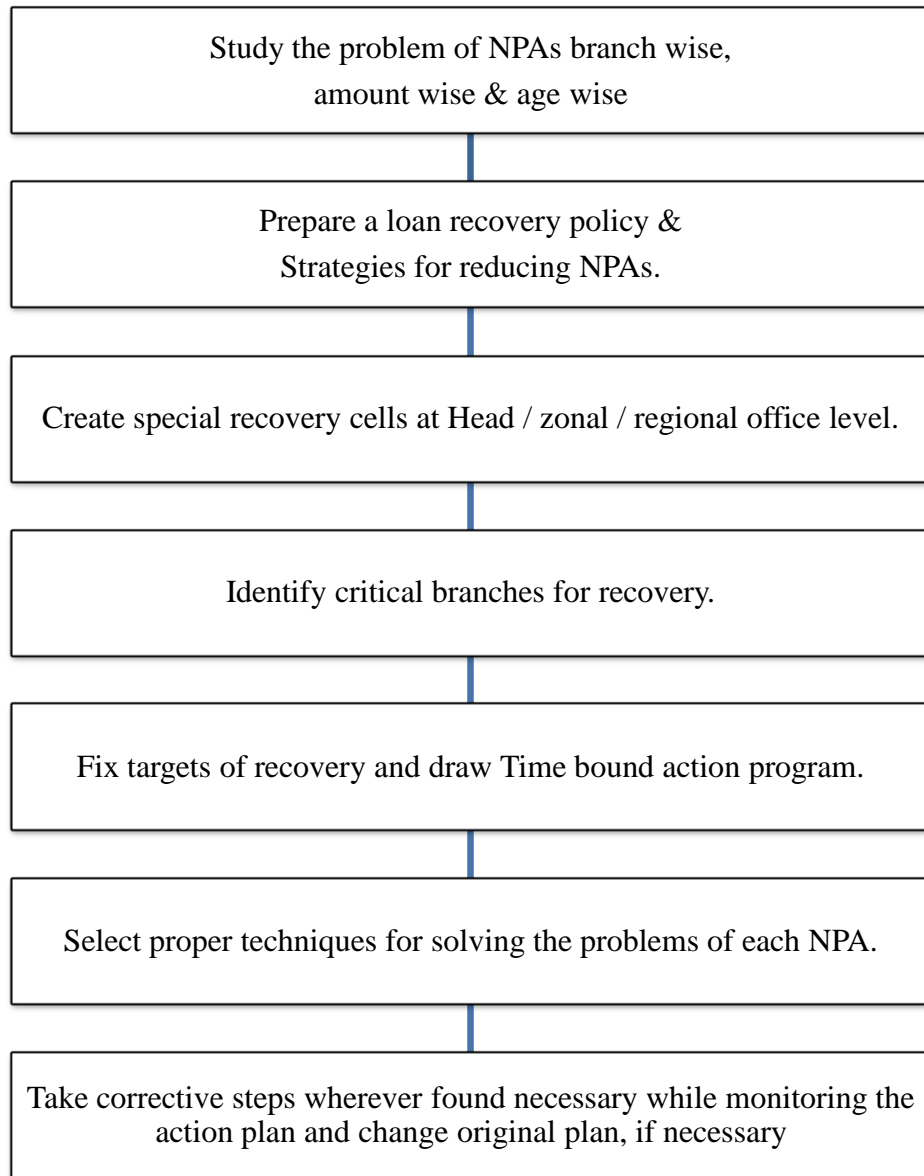**4.2.9. Settlement of claims with DICGC / ECGC:**

4.2.10. If DICGC / ECGC claims are available, banks should submit their proposal for the same with necessary details. Proper follow – up with DICGC / ECGC is necessary for settlement of claims and reducing the NPAs to certain extent.

4.2.11. Establishment of Asset Recovery Branches:

Some banks have opened Asset Recovery Branches at critical centers for undertaking recovery. Bad and doubtful debts of various existing branches have been transferred to the recovery branch, which may have expert trained staff with necessary background for recovery. The specialized recovery branches may give undivided attentions to recovery of dues.

Steps for reducing NPAs

Study the problem of NPAs branch wise, amount wise & age wise

Prepare a loan recovery policy & Strategies for reducing NPAs.

Create special recovery cells at Head / zonal / regional office level.

Identify critical branches for recovery.

Fix targets of recovery and draw Time bound action program.

Select proper techniques for solving the problems of each NPA.

Take corrective steps wherever found necessary while monitoring the action plan and change original plan, if necessary

Source: www.banknetindia.com

4.3 Conclusion:

The NPAs do not generate interest incomes for banks but at the same time banks are required to provide provisions for NPAs from their current profits. By studying and analyzing the NPAs of Old Private Sector Banks, it can be concluded by rigorous introduction and stabilization of Prudential Norms, the rate of NPAs of the New Private Sector Banks can be bought to nil. There was overall increase in the gross NPAs position initially which eventually decreased in the last year of study.

REFERENCES

- **Journal**

C.S. Balasubramanianm 'Non Performing Assets And Profitability of Commercial Banks in India; Assessment And Emerging Issues ', National Monthly Referred Journal of Research in Commerce and Management Volume No.1, Issue-No.7 G.V Bhavani Prasad D.Veena 'NPA Table B6: Bank-wise Non-Performing Assets (NPAs) of Scheduled Commercial Banks-RBI Annual Report 2007.

- **Websites**

http://www.rbi.org.in/SCRIPTs/BS_SpeechesView.aspx?Id=857

http://www.rbi.org.in/

http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/FHB160913FLS.pdf

http://en.wikipedia.org/wiki/Non-performing_asset

http://en.wikipedia.org/wiki/Private-sector_banks_in_India#New_private-sector_banks

Table B6: Bank-wise Non-Performing Assets (NPAs) of Scheduled Commercial Banks-RBI Annual Report 2008.

Table B7: Bank-wise Gross Non-Performing Assets, Gross Advances and Gross NPA Ratio of Scheduled Commercial Banks-2009.

Table B7: Bank-wise Gross Non-Performing Assets, Gross Advances and Gross NPA Ratio of Scheduled Commercial Banks-2010.

Table B7: Bank-wise Gross Non Performing Assets, Gross Advances and Gross NPA Ratio of Scheduled Commercial Banks-2011.