

Non Performing Assets: A Study of Public, Private & Foreign Sector Banks in India

Dr. Poonam Mahajan

Assistant Professor
Department of Commerce
Guru Nanak Dev University College,
Narot Jaimal Singh, Pathankot

Introduction

The banking industry in India has been witnessing a series of revolutionary changes and noteworthy transformation since 1991 after introduction of LPG policy and new economic and financial sector reforms. The process of Liberalization aimed to free banks from too much of regulations. The focus was on self-regulation. Self-regulation requires prudential norms to be laid down. On the eve of economic reforms in 1991, it was recognized that the banks were burdened with huge amount of Non-Performing assets (NPA's), which were not revealed in the balance sheets. The banks had gone very weak. Balance sheets were hiding more than what they revealed. After the first nationalization of Banks in 1969, certain tendencies emerged in the banks that lead to the emergence of NPAs.

The concept of NPAs emerged as a contemporary issue when Reserve Bank of India (RBI) introduced the prudential norms on the recommendations of the Narsimham committee in the year 1992-93. The prudential norms as laid down by RBI states that "An asset is considered as Non Performing if interest or installment of principal due remains unpaid for more than 90 days". In simple words as long as the expected income is realized from the assets, it is treated as performing asset but when it fails to generate income or deliver value on due date, it is treated as non performing asset". With a view to moving towards International best practices and to ensure greater transparency, the "90 Days overdue" norm for identification NPAs had been adopted from the year ending 31st march, 2004.

According to the provisions laid down by RBI as on 31st march, 2004, NPA shall be a loan or an advance where; Interest and /or installment of principle remain overdue for a period of more than 90 days in respect of term loan; the account remains out of order i.e. outstanding balance remains continuously in excess of sanctioned limit for a period of more than 90 days; the bill remains overdue for a period of more than 90 days in the case of Bill Purchased and discounted; Interest and/ or installment of principal remains overdue for two harvest season but for a period not exceeding two half years in the case of advance granted for agricultural purposes and any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.

The NPAs are considered as an important parameter to judge the performance and financial health of banks. The growing NPAs have been a cause of concern for the entire banking industry. As a result of the inappropriate credit appraisal and inefficient recovery mechanism, several banks have been reeling under high level of bad debts. The ever increasing NPAs of Indian Banking industry arises due to faulty lending policy and making compulsion lending to priority sector by banks. Faulty credit management like defective credit in recovery mechanism, lack of professionalism in workforce, improper selection of Borrowers/activities, unscientific repayment schedule and misutilisation of loans by the users cause the emergence of the NPAs. Untimely communication to the borrowers regarding their due date and lack of sponge legal mechanism, weak credit appraisal system, industrial problems and recession in market etc also causes NPAs to rise in the banking industry.

If NPAs not controlled timely will reduce the earning capacity of assets and badly affect the ROI. The cost of capital will go up, the assets liability mismatch will widen, higher provisioning requirement on mounting NPAs adversely affect capital adequacy ratio and banks profitability. EVA by banks will get upset because EVA is equal to the net operating profit minus cost of capital. NPAs cause to decrease the value of share sometimes even below the book value in the capital market and affect the risk facing ability of banks.

Ever mounting Non Performing Assets, Risk management and Basel II norms, Consolidation, mergers and acquisitions, overseas expansion, technology changes, government reforms, skilled manpower and consumer protection etc. are the major challenges and problems being faced by the Indian banking Industry during last decades due to competitive environment and adoption to the international best practices The private and public sector banks are now facing acute competition from the foreign banks who are trying to tap the Indian domestic market after adoption of economic reforms.

In spite of the overall growth in business of public and private sector banks, particularly in advancing loan in much liberal manner, the number of defaulters is also increasing from time to time. So it seems highly important to have a study on the management of NPAs in banking sector. Thus, a need arise to study the concept of NPA and its trend over a period of years for Public, private and foreign sector banks in India.

Objective of The Study

The objective of the study is as follows:

1. To study and find out the trends of NPAs of Public, Private (Old and New) and foreign sector banks of India;
2. To make a comparative analysis of NPAs of various banks in India.

Review of The Literature

Susheela Subrahmanya (Ed.) (1998) gave her views on recommendations given by Narsimham committee report part two and found that the committee had left the question of tackling the huge backlog of existing NPA's unanswered to a great extent.

Baiju S. and Thattil (2000) analyzed NPA's in commercial banks from year 1993 to 1998 and found that foreign and new private banks have lower NPA's as compared to public sector banks and suggested way to recover NPA's.

Joshi (2000) pointed out the reasons behind the emergence of NPA's and steps taken by Govt. for their recovery. He was of the view that interest earned on advances should always be more than interest paid on deposits as a matter of sound banking policy.

Sharma (2001) examined the hypothesis that the problem of NPA's of Indian banks remained unsolved because of improper sequencing of reforms. She suggested the proactive approach towards the legislative, infrastructural and regulatory reforms to prevent build up of NPA's in future.

Parekh (2002) found that the gross NPA's of public, private and foreign banks are rising at a fast rate. So, he suggested the Indian banking industry to embrace the sophisticated risk management practices.

Goswami (2003) has taken NPA as one of the factor while deciding to put money in the bank. The declining NPA's of Indian banks has

prompted S&P to revise its outlook on the Indian banking system to 'stable' from 'negative'.

Ranjan and Dhal (2003) explored an empirical approach to the analysis of commercial banks' on performing loans (NPLs) in the Indian context. They evaluated as to how banks' non-performing loans are influenced by three major sets of economic and financial factors, *i.e.*, terms of credit, bank size induced risk preferences and macroeconomic shocks. The empirical results from panel regression models suggest that terms of credit variables have significant effect on the banks' non-performing loans in the presence of bank size induced risk preferences and macroeconomic shocks. Moreover, alternative measures of bank size could give rise to differential impact on bank's non-performing loans. In regard to terms of credit variables, changes in the cost of credit in terms of expectation of higher interest rate induce rise in NPAs. On the other hand, factors like horizon of maturity of credit, better credit culture, favorable macroeconomic and business conditions lead to lowering of NPAs. Business cycle may have differential implications adducing to differential response of borrowers and lenders.

Subarao (2003) has critically evaluated the existing NPA realization system. He found that the problem of NPA's should be handled with strict enforcement of prudential norms & requirements of transparency.

Amitabh Joshi (2003) conducted a survey on "Analysis of NPAs of IFCI Ltd". The study found that profitability and viability of development of Financial Institutions are directly affected by quality and performance of advances.

Aggarwal (2004) has given legal measures to recover NPA's in definite form and while giving sectoral analysis on the priority, non-priority & agricultural sector has proved that Govt. to a large extent had met the gap that had arisen in public sector banks in respect of Provisioning of Capital.

Jain Vibha (2007) examined the status of NPAs in scheduled commercial Banks in India. The study found that there is more acute problem of gross and net NPA is found in Indian Public sector Banks. The new private sector banks and foreign banks have also shown an increasing trend of gross and net NPAs during 1997-2003. It conclude that new private sector and foreign banks failed to prevent this problem but public sector and old private sector banks succeed in reducing it over a period of time.

Singla (2008) studied the financial performance of banks in India in view of increasing globalization and increased competition in Indian banking industry for a period of six years 2001-2006. He concluded that NPAs have shown declining trend over a period of time under study.

Usha Arora, Bhavna Vashisht and Monica Bansal (2009) analyzed and compared the performance (in terms of loan disbursement and NPAs) of credit schemes of selected banks for the five years period. They found a positive relationship between total loan disbursement and total NPA outstanding of the selected banks.

Jatna, Ramu (2009) states the main cause of mounting NPAs in Public Sector Banks is malfunctioning of banks, Narsimhan committee identified the NPAs as one of the possible effects of malfunctioning of Public Sector banks.

Goyal, K. (2010) examined the state of affairs of NPAs of Indian public sector banks for the period of 2002-03 to 2008-09

respectively. The study examined the trends of NPAs, health of several loan assets, quality of assets, sector wise NPAs etc. The descriptive analysis, correlation analysis, regression Analysis, one way ANOVA etc. have been used for the analysis. The study observed increase in gross and net NPAs in absolute terms in public sector banks under study and also improvement was shown in the quality of assets. They managed NPAs but a look to the agricultural sector loans need a dire attention.

Bhavani, G.V., and Veena D. (2011) examined that the reason behind the falling revenues from traditional sources is 78% of total NPAs accounted in Public sector banks.

Hosmani, P., and Hudagi J. (2011) found that a slight improvement in asset quality reflected by downsize in NPA%. NPA is an improvement scale for assessing financial performance of Indian Banks. The mounting value of Non Performing Assets will adversely affect to financial position in terms of liquidity, profitability and economies of scale in operation. Bank has to take timely necessary steps against degradation of good performing assets.

Gurumoorthy (2012) analyzed that in the liberalized economy, banking and financial sector get higher priority. The banks in India are facing the problems of NPAs. The earning capacity and profitability of banks are highly affected because of the existence of NPAs. Moreover, the non performance of non receipt of interest and principal blocked banks money in the form of funds and is not available for further use of banking business and thus the profit margin of the banks goes down. In this connection banks must aware of the problems and recovery of legislation of NPAs.

Kaur, A. (2012) studied the income and expenditure pattern, profitability performance and NPAs position of public sector commercial banks in India for a period of 2000-01 to 2009-10 respectively. Growth rate, compound growth rate, coefficient correlation, ratio analysis and median test have been used for the analysis. The author concluded that the PSCBs have shown downward trends of NPAs for the period under study. They succeed in recovery of loans.

Rajamohan (2012) described that Indian banking industry plays a pivotal role in the socio economic development of a country. During the past few years the banks gain sufficient strength to pose good performance which is reflected in the high growth of low cost deposits, a well diversified credit portfolio. The corporate, retail and small and medium enterprises improved margins and spread good other income and better quantity of asset through a consistent reduction in NPAs.

Shalini (2013) suggest that Credit management includes planning, organizing, controlling, directing and coordinating the credit sanctioning policies in order to decrease the NPAs.

Mohnail and Deshmukh (2013) have suggested that past reform era changed the whole structure of banking industry in India. The emerging competition has resulted in new challenges for the Indian banks. Hence, parameters for evaluating the performance of banks have also changed. This paper provides an empirical approach to the analysis of profitability indicators with a focal point on NPAs of public and private sector banks.

Research Methodology

Sample of the study

The Indian banking Industry has been studied with special

reference to all public sector, private sector (old and new) and foreign banks in India.

Data Source

The present study is based on secondary data. The relevant data have been collected from the RBI publications like "Annual Report on Trends and Progress of Banking in India", 'Annual Report of RBI', various publications of RBI like RBI bulletin, IBA bulletin, websites and magazines.

Time Period

The study is based on time-series data for all banks in India for a period of 15 years from the year March ended 1999 to March ended 2013.

Statistical Tools and Techniques

Ratio analysis has been used for analyzing the trend of NPAs of all banks in India. Pie diagram has been used to make comparative analysis of NPAs of all sectors banks. Four ratios used are; Gross NPAs to Gross Advances (%), Gross NPAs to Total Assets (%), Net NPAs to Net Advances (%), Net NPAs to Total Assets (%). The terms used in the study have been computed as; Gross NPAs = Sub-standard assets+ Doubtful Assets+ Loss Assets; Net NPAs = Gross NPAs – Provision for NPAs; Gross Advances= All loans and advances made by Banks; Net Advances = Gross Advances – Provisions for NPAs.

Analysis and Discussion

The analysis and discussions of NPAs of all banks in India has been studied for all public, old and new private and foreign sector banks in India for 15 years period from year ended 1998-99 to 2012-13 with the help of ratios.

Trends of NPAs of All Banks in India

1. Gross Non-Performing Assets to Total Assets Ratio (Percentage): - This ratio depicts the proportion of assets that are not performing well (i.e. are doubtful, sub-standard and loss loans) to total assets. The less the ratio, better it is. The Gross Non Performing Assets to Total Assets ratio for the year 1998-99 to 2012-13 has been presented in the Table 2.

Table 2 reveals that over a period of time, the magnitude of this ratio has a declining trend in case of public sector banks. Overall ratio of Public sector banks has been decreased from 6.7% in 1999 to 1.9% in 2012 and further increased to 2.2% in 2013.

This ratio for old and new private sector banks is varying. In case of old private sector banks, it has a declining trend but in case of new private sector banks, it has varying trend. It was 2.3% in 1999, increased to 3.9% in 2002, reduced in next five years, again risen to 1.7% in 2009 and afterwards has declining trend. Variation in this ratio is more in case of new private sector banks as compared to old private sector banks, due to which no definite trend could be traced out in this ratio in case of private sector banks.

In case of foreign sector banks, this ratio has fluctuating trend. The ratio has been increasing in early two years from 3.1% to 3.2% and then decrease in next year's till 2008 and afterwards increased in next two years till 2010 and then reduced to 1.0% in 2011 and again rose to 1.3% in 2013.

Table 2

GROSS NON PERFORMING ASSETS TO TOTAL ASSETS (Percentage)

Year	Public Sector Banks	Old Private sector banks	New Private sector banks	Foreign sector Banks
1998-1999	6.7	5.8	2.3	3.1
1999-2000	6.0	5.2	1.6	3.2
2000-2001	5.3	5.1	2.1	3.0
2001-2002	4.9	5.2	3.9	2.4
2002-2003	4.2	4.3	3.8	2.4
2003-2004	3.5	3.6	2.4	2.1
2004-2005	2.7	3.1	1.6	1.4
2005-2006	2.1	2.5	1.0	1.0
2006-2007	1.6	1.8	1.1	0.8
2007-2008	1.3	1.3	1.4	0.8
2008-2009	1.2	1.3	1.7	1.5
2009-2010	1.3	1.3	1.6	1.6
2010-2011	1.4	1.2	1.3	1.0
2011-2012	1.9	1.1	1.1	1.1
2012-2013	2.2	1.2	1.0	1.3

Source: Trends and progress of Banking in India (www.rbi.org.in)

So, overall trend of this ratio stated that it is reducing in case of public sector banks, no definite trend in case of private sector banks and less variability in case of foreign sector banks. The Public sector banks in case of NPAs to total assets seem to be better than private and foreign sector banks, but magnitude of ratio is still higher in case of public sector banks from the year 1999-2001 and 2011-2013 as compared to other sector banks. So it requires still more efforts to manage its NPAs properly and more efficiently.

2. Gross Non-Performing Assets to Gross Advances Ratio (Percentage): -- This ratio depicts the proportion of gross non performing advances whose recovery is doubtful and generating no return/Income to total advances. The less the ratio, better it is. The Gross Non Performing Assets to Gross Advances ratio for the year 1998-99 to 2012-13 have been presented in the Table 3.

Table 3 reveals that this ratio has been decreasing over a period of time in case of public sector banks from 15.9% in 1999 to 3.8% in

2013. It has continuous declining trend over a period of 15 years.

There is a large variation in this ratio in case of old and new private sector banks. This ratio has been decreased from 13.1% in 1999 to 10.9% in 2001, again increased to 11% in 2002 and afterwards has decreasing trend. This ratio is 1.9% in 2013. In case of new private sector banks this ratio has fluctuating trend. It was 6.2% in 1999 decreased till 2001 and again rose to 8.9% in 2002. It fell down till the year ended 2007 to 1.9% and again increased in 2009 to 3.1%. Afterwards, it has falling trend and recorded at 1.9% in the year 2013. Due to these huge variations in this ratio in case of new private sector banks, no definite trend could be traced out in this ratio in case of private sector banks.

In case of foreign sector bank, this ratio has fluctuating trends. This ratio has continuous declining trend from 7.6% in 1999 to 1.8% in 2008 and afterwards increased to 3.8% in 2009 and 4.3% in 2010 and thereafter decreased till 2012 and again rose in 2013.

Table 3

Gross Non-Performing Assets to Gross Advances (Percentage)

Year	Public Sector Banks	Old Private sector banks	New Private sector banks	Foreign sector Banks
1998-1999	15.9	13.1	6.2	7.6
1999-2000	14.0	10.8	4.1	7.0
2000-2001	12.4	10.9	5.1	6.8
2001-2002	11.1	11.0	8.9	5.4
2002-2003	9.4	8.9	7.6	5.3
2003-2004	7.8	7.6	5.0	4.6
2004-2005	5.5	6.0	3.6	2.8
2005-2006	3.6	4.4	1.7	1.9
2006-2007	2.7	3.1	1.9	1.8
2007-2008	2.2	2.3	2.5	1.8
2008-2009	2.0	2.4	3.1	3.8
2009-2010	2.2	2.3	2.9	4.3
2010-2011	2.4	1.9	2.7	2.5
2011-2012	3.3	1.8	2.2	2.6
2012-2013	3.8	1.9	1.9	3.0

Source: Trends and progress of Banking in India (www.rbi.org.in)

So, overall trend of this ratio reveal that it is reducing in case of public sector banks, no definite trend in case of private sector banks and little variations in case of foreign sector banks. So, the performance of public sector banks in recovery of advances, which has become non-performing, is far better than private and foreign sector banks. But figures revealed that magnitude of this ratio is still higher in case of public sector banks than other sector banks in the years 1999-2001 and 2011-13. So steps should be taken to manage its NPAs more efficiently.

3. Net Non Performing Assets to Total Assets Ratio (Percentage):--- This ratio depicts the proportion of non-performing assets, net of all provisions made by banks for their non recovery as a percentage of total assets. The less the ratio, better it is. The Net Non Performing Assets to Total Assets ratio for the year 1998-99 to 2012-13 have been presented in the Table 4.

Table 4 reveals that there is a declining trend in this ratio in case of public sector banks that has been decreased from 3.1% in 1998-99 to 0.7% in 2010-11. It again rose to 1.0% in 2012 and then to 1.2% in 2013.

In case of old and new private sector banks, this ratio has fluctuating trend. In case of old private sector banks it has continuous declining trend but it is fluctuating in case of new private sector banks over a period of time. It was 3.6% in 1998-99 which was decreased till 2012-13 to 0.4%. In case of new private sector banks, this ratio was 1.6% in 1998-99 and increased to 2.1% in 2001-02. It has a continuous downward trend till the year 2007-08. Again it rose to 0.7% in the year 2007-08 and afterwards downward trend till the year ended 2012-13 to 1.2%. Due to these huge variations in this ratio in case of old and new private sector banks, no definite trend could be traced out in this ratio in case of private sector banks.

In case of foreign sector banks, this ratio has again fluctuating trend. It was 1.1% in 1998-99, decreased till 2007-08 and then again rose to 0.7% in the year 2007-08, then stable in next two years, again decreased in 2011-12 and 2012-13 to 0.2% and 0.40% respectively. So no definite trend could be traced out in case of private sector banks and foreign sector banks with the help of this ratio.

Table 4

Net Non-Performing Assets to Total Assets Ratio (Percentage)

Year	Public Sector Banks	Old Private sector banks	New Private sector banks	Foreign sector Banks
1998-1999	3.1	3.6	1.6	1.1
1999-2000	2.9	3.3	1.1	1.0
2000-2001	2.7	3.3	1.2	0.8
2001-2002	2.4	3.2	2.1	0.8
2002-2003	1.9	2.5	0.7	0.8
2003-2004	1.3	1.8	0.8	0.7
2004-2005	1.0	1.4	0.8	0.4
2005-2006	0.7	0.9	0.4	0.4
2006-2007	0.6	0.6	0.5	0.3
2007-2008	0.6	0.4	0.7	0.3
2008-2009	0.6	0.5	0.8	0.7
2009-2010	0.7	0.5	0.6	0.7
2010-2011	0.7	0.3	0.3	0.3
2011-2012	1.0	0.4	0.2	0.2
2012-2013	1.2	0.4	0.2	0.4

Source: Trends and progress of Banking in India (www.rbi.org.in)

So, the magnitude of the trend of this ratio state that this ratio has declining trend in case of public sector banks, no definite trend in case of private sector banks and huge variations in case of foreign sector banks over a period of time. But the magnitude of this ratio is still high in case of public sector bank than private and foreign sector banks in 2012-13.

4. Net Non Performing Assets to Total Advances Ratio (Percentage) -- This ratio depicts the proportion of Net Non-

Performing advances, the recovery of which is doubtful, as %age of total advances, however provisions have already made for non recovery of non income generating advances and is already deducted so as to show total proportion of non recoverable advances included in the advances in the Balance Sheet. The less the ratio, better it is. The Net Non Performing Assets to Total Advances ratio for the year 1998-99 to 2012-13 have been presented in the Table 5.

Table 5

Net Non-Performing Assets to Total Advances (Percentage)

Year	Public Sector Banks	Old Private sector banks	New Private sector banks	Foreign sector Banks
1998-1999	8.1	9.0	4.5	2.9
1999-2000	7.4	7.1	2.9	2.4
2000-2001	6.7	7.3	3.1	1.8
2001-2002	5.8	7.1	4.9	1.9

2002-2003	4.5	5.2	1.5	1.7
2003-2004	3.1	3.8	1.7	1.5
2004-2005	2.1	2.7	1.9	0.8
2005-2006	1.3	1.7	0.8	0.8
2006-2007	1.1	1.0	1.0	0.7
2007-2008	1.0	0.7	1.2	0.8
2008-2009	0.9	0.9	1.4	1.8
2009-2010	1.1	0.8	1.1	1.8
2010-2011	1.2	0.5	0.6	0.6
2011-2012	1.7	0.6	0.5	0.6
2012-2013	1.8	0.7	0.4	1.0

Source: Trends and progress of Banking in India (www.rbi.org.in)

Table 5 reveals that this ratio has a declining trend in case of public sector banks from 8.1% in 1999 to 0.9% in 2008-09. It again rose to 1.1% in 2009-10 and afterwards increased till the year 2012-13 to 1.8% respectively.

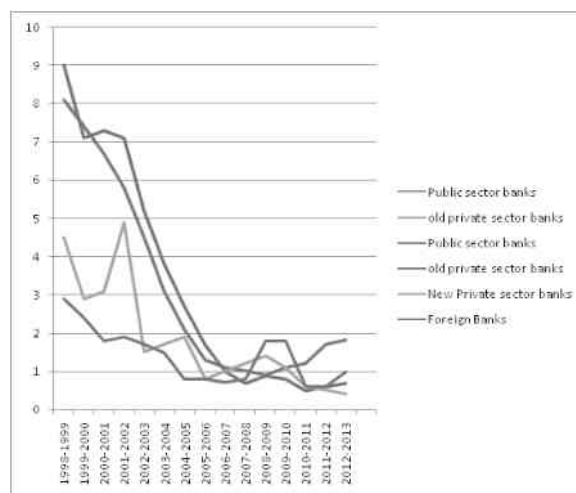
This ratio has fluctuating trend in case of old and new private sector banks. It was 9.0% in 1999 and decreased to 0.7% in 2012-13. It has continuous declining trend over a period of time. But in case of new private sector banks it has fluctuating trend. It was 4.5% in the year 1998-99 decreased to 2.9% in 1999-2000 again rose to 3.1% and 4.9% in 2001-02 and 2002-03 respectively. It decreased in next five years and recorded at 1.2%, 1.4% in the years 2007-08 and 2008-09 respectively. Afterwards it has declining trend and reduced to 0.4% in the year 2012-13. Due to large variations in this ratio in case of old and new private sector

banks, no definite trend could be found out in case of private sector banks.

A very interesting trend could be observed in the case of foreign sector banks for this ratio from table 5. It was 2.9% in the year 1998-99, 1.8%, 1.9% and 1.7% in the year 2000-01, 2001-02 and 2002-03 respectively. Afterwards it reduced in next five years to 0.8% in 2007-08, again increased to 1.8% in the year 2008-09, remained stable in next year and again reduced to 0.6% in the year 2011-12 and increased to 1.0% in the year 2012-13 respectively.

Comparative Analysis of Public, Private and Foreign Sector Banks in India

A comparative analysis of the above ratio can be drawn out for the period of 15 years with the help of pie diagram to show the clear picture of trends of NPAs.



The above figure reveals an interesting picture of overall trend of NPAs over a period of 15 years from 1998-99 to 2012-13 for all public, old and new private sectors and foreign banks in India. The overall trend of this ratio states that the Net NPAs/ Net Advances have been declining in case of Public sector banks, having

variations in case of private sector banks and wavering variations in case of foreign sector banks. So, the picture reveals that the public sector banks are performing well on recovery front than private and foreign sector banks but magnitude of this ratio is still higher in year 1999-2000 and 2011-13 respectively in public sector

banks as compared to other sector banks.

Conclusion & Implementations

The position of NPAs is improving in India. Though NPAs are having a declining trend over a period of study, but Non Performing Assets of public sector banks are still higher than private and foreign sector banks. Top management of private and foreign sector banks is more professional, core competent and expertise than public sector banks. So, they are more competent in making plans for recovering funds from borrowers (both individuals and institutional). The public sector banks are required to lend money to weaker sections of the society also, where the chances of recovery is almost negligible. That is why, though the NPAs of public sector banks have sharp declining trend, still it is higher than private and foreign sector banks. Further various steps have been taken by the government to recover and reduce NPAs. Say, one time settlement / compromise scheme, Lok Adalats, Debt Recovery Tribunals, Securitization and reconstruction of financial assets and enforcement of Security Interest Act 2002, Corporate Reconstruction Companies, Credit information on defaulters and role of credit information bureaus etc. With the recent ruling by Supreme Court (upholding the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002), banks are now confident of a faster recovery of dues.

'Thus, need is to have 'Now performing assets' than 'Non-performing assets'.

References

- Aggarwal, Monika, 2004, "NPA Prevention & Cure", Diviner-A Research Journal of Social Sciences, 1, June, pp 49-56.
- Arora, Usha, Vashst, B and Bansal, M., 2009,"An analytical study of growth of credit schemes of selected Banks, The ICAFI University Journal of Seervices Marketing, VII (1),March, pp. 51-65.
- Baiju & Thatil, 2000, "Performing banks with Non-Performing Assets-An Analysis of NPA's," Yojana, March, pp. 5-9.
- Bhavani, P., and Veena, V.D., 2011, "NPAs in Indian Banking sector-Trends and Issues", Journal of banking, Financial services and Insurance Research, 1(9), pp. 67-84.
- Goswami, Umesh, 2003, "Banks to banks on", Business Today, Dec. 7, pp. 142-143
- Goyal, K. 2010,"Empirical study of NPAs Management of Indian Public Sector banks", APJRB, 1(1), October.
- Gurumoorthy, T.R., 2012, "Non Performing Asserts (A study with reference to Public Sector Banks), Indian Journal of Applied Research, 2(2), November.
- Jain, Vibha, 2007, "Non Performing Assets in Commercial Banks", Regal Publications, 1st edition, pp. 78-79.
- Joshi Naveen Chandra, 2000, "Urgent need for recovery of Debts", Civil Services Chronicle, October.
- Joshi, A., 2003, "Analysis of NPAs of IFCI Ltd", accessed from www.ssrn.com/abstract=921860.
- Kaur, A. 2012, "An empirical study on the performance evaluation of Public Sector Banks in India", International Journal of Marketing, Financial services and Management Research, 1(11), November, pp. 117-131.
- Mohnial, P., Deshmukh, M., 2013, "A study of NPA on selected Public and Private Sector Banks," International Journal of Science and Research, 2(4).
- Ramu, J. 2009, "Dimensions of NPAs in Urban Cooperative Banking in Tamil Nadu", Global Business Review, 10(2), pp. 279-297.
- Ranjan, R. and Dhal, Surat, C., 2003, "Non-Performing Loans and Terms of Credit of Public Sector Banks in India: An Empirical Assessment", RBI occasional papers, RBI Publications, 24(3), pp. 81-121
- Rajamohan, S. 2012, "Analysis of NPAs of Public Sector Banks in India", International Journal of Business Management Tomorrow, II(9), September, pp. 1-6.
- Shalini, H.S., 2013, "A study on causes and remedies for NPAs in Indian Public Sector Banks with special reference to Agricultural development Branch, State Bank of Mysore", International Journal of Business and Management Invention, II(1), January, pp. 26-38.
- Sharma Meera, 2001, "NPA Management Redefined", Indian Management, Vol. 40, Feb. pp 63-71.
- Singla, H.K., 2008, "Financial Performance of banks in India", The ICAFI Journal of Bank Management, 7(1), pp. 50-62.
- Subrahmaniya, Susheela, 1997, "Revisiting Banking Reforms in Crucial Areas", Southern Economist, Vol. 37, July.
- Data for all banks in India has been accessed from www.rbi.org.in
- Various articles and experts views on NPAs accessed from www.google.com
- Information on the Public Sector and Private sector banks has been accessed from www.bankersindia.com
- Non Performing assets of banking sector, accessed from <http://indiabudget.nic.in/es2004-05/chapt2005/chap35.pdf>
- 'Public sector banks have settled about 30% of their NPA (non-performing assets) cases for which they issued notices under the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act 2002', Accessed from <http://www.banknetindia.com/banking/0448.htm>
- Database on NPAs of All Public, Private and foreign Sector banks have been accessed from <http://dbie.rbi.org.in/DBIE.rb?site=statistics>. On March, 2, 2014.