CHAPTER - II
REVIEW OF LITERATURE

The following different studies had been conducted at individual and group levels, in India and abroad, over the last two decades. Many of them delved into various aspects of overdue loans and the practices followed by the Commercial banks to overcome them, bringing to attention the varied weakness pertaining thereto. These groups, from time to time made many recommendations, quite many of which were accepted by the RBI for implementation. The following studies are published in the book titled “Non-Performing Assets in Commercial Banks” by Vibhajain, Reader, Department of Commerce, JDM College, University of Delhi, Regal publications, Delhi 2007.

1. Demirgic-Kunt and Huizinga (DKH)

This international cross -section study of banking performance was conducted more in terms of standardized measures such as interest spread and bank profitability. This is the most - recent and certainly the most comprehensive ever, cross country study of variations in bank performance, using two performance indicators separately regressed on a set of explanatory variables, i.e. interest spread (used as an efficiency indicator) and bank profitability (Demirgic-kunt, Asli and Harry Huizinga, 1998). The data set was taken at bank-level for 80 countries over the period 1988-95. The set of regressors included both bank-specific characteristics (size, leverage, type of business, foreign ownership) as well as country-level variables that describe the macro-economic, legal and institutional environment. The most important finding pertained to differences in the impact of foreign ownership between developed and developing countries. In developing countries foreign banks have greater interest margins and profits than domestic banks. In industrial countries, the opposite is true. However, this result conflicted somewhat with the (+ve) significance of foreign ownership on both interest margins and profits in developing countries, where the better performance relative to domestic banks in different host environment suggested that it is the superior banking technology rather than the operating environment there that is the correlate of higher per capita GDP. Other findings of the DKH study which supported an inverse relationship between
net interest and bank efficiency are that variations in overheads and other operating costs are reflected in variations in bank interest margins, as banks pass on their operating costs (including the corporate tax burden) to their depositors and lenders. The DKH findings thus suggested that any attempt to explain cross-bank NPA variations would do better to capture bank efficiency through operating profits or returns to assets which are less ambiguous in terms of direction than the net interest margin.

2. Michale Cavallo and Giovanni Majnoni

The pro-cyclical effects of capital regulation have overlooked the important role that the bank loan loss provisions play in the overall minimum capital regulatory framework. Inadequate assessment of expected credit losses has led to under provisioning and to the shortage of loan loss reserves at the time of crises. As a consequence capital has to offset both expected and unexpected losses aggravating the negative impact of minimum capital requirements over the economic activity during recessions. In addition, when the expected losses were properly reflected in lending rates but not in provisioning practices, banks earnings fluctuations magnify true bank profitability oscillations. The often-unsatisfactory institutional arrangements for loan loss provisioning might be seen as an effort to mitigate a problem between bank stakeholders (Michele Cavallo and Giovanni Majnoni, 2001, pp.56-72).

The hypothesis whether the banks made provisions for bad loans in good times or not was tested over a sample of 1176 large commercial banks, 372 of which were from non G-10-Countries over the period 1988-99.

The econometric evidence showed that the protection from outsiders claim (minority shareholders in common law countries and fiscal authorities in high public debt countries) has negative effects on the level of bank provisions. They also found that the protection of outsider’s claims over banks had negative effects on loan loss provisioning. Lacking adequate incentives for sound provisioning, banks may not be able to shelter profits and capital from negative, but expected, repercussions of cyclical downturns. Their results suggested that sound provisioning should be
considered as a component of capital regulation and only through sound provisioning practices minimum capital regulation can loose its pro-cyclical features.

3. Sarkar, Sarkar and Bhaumik:

This was a cross bank study for India which regressed two profitability and four efficiency measures (one of which is the net interest margin) on pooled data for two years, 1993-94 and 1994-95, for a total of 73 banks, using single-equation OLS estimation for each. The study focused exclusively on an examination of the hypothesis about the superiority of private ownership in terms of performance. (Sarkar Jayati, Subrata Sarkar and Sumon K. Bhaumik, 1996, pp.262-81).

They had found that the coefficient of foreign ownership was positive and significant (1 percent significance level) for both sets of regressions. However, the coefficient of private ownership was significant only for returns on assets (ROA) and operating profit ratio (OPR). With respect to all other efficiency indicators private domestic banks were no better than the public banks. The coefficient of the foreign ownership on the net interest margin was positive, in conformity with the DKH result for all developing countries.

4. Shivpuje and Kaveri

The study was basically confined to identifying the factors influencing NPAs, suggesting measures that would prevent the growth of NPAs and affect their speedy recovery. The major emphasis was laid on internal factors over which banks and financial institutions have direct control (Shivpuje, C.R. and Kaveri, V.S., 1997).

For the purpose, they surveyed a few branches, had interaction with the branch managers and the borrowers along with the study of inspection reports. In addition, discussions were held with the credit officers, law officers, executives, bank lawyers and civil Judges. Along with this, the secondary data was analyzed to find out the various dimensions of NPAs. They concluded that NPA problem could be solved if proper care of internal factors is taken or in other words recovery from NPAs is possible if efforts of the banks and financial institutions are strengthened. They had also offered several suggestions calling for changes in internal systems, procedures and practices.
5. Sarkar and Dass

The study examined the inter-bank differences in the efficiency of banking sector with respect to profitability, productivity and financial management for the year 1994-95. For each of the performance criteria, area specific efficiency index had been worked out based on 15 indicators (5 for profitability, 5 for productivity and 5 for financial management), using principal component analysis. Profitability criterion was represented by ‘net’ instead of ‘gross’ profit since net profit accounts for provisions for non-performing assets. The relative profitability of a bank was expressed as the ratio of net profits to total income, deposits, and spread.

The results showed that there was a wide variation in the efficiency among the banks according to their ownership pattern. The performance of PSBs was relatively poor compared to other bank groups. The group-wise performance indicated that, excepting few, not much variation could be found in the terms of overall efficiency indices of public sector banks, whereas there was a wide variation in performance within the foreign banks. While a wide variation of performance among the foreign banks was discernible, the public sector banks resembled more or less a homogeneous group. The focus of the study was on a static analysis of efficiency and inter-bank comparison within this framework.

6. Bhattacharya, Arunava and Sahaya

They studied the impact of limited liberalization initiated before the deregulation of nineties on the performance of the different categories of banks, using data envelopment analysis. The study covered 70 banks during the period 1986-91. They constructed a grid for the entire period and measured technical efficiency of the banks under study (Bhattacharya, Arunava, Lovell, C.A. K and Sahay, Pankaj, 1997, pp. 332-45).

They found PSBs had the highest efficiency among the three categories, with foreign and private banks having much lower efficiencies. However, PSBs started showing a decline in efficiency after 1987, private banks showed no change and foreign banks showed a sharp rise in efficiency. They also pointed out that efficiency is to be judged in relation to objective set for management and not in relation to objectives (such as profit maximization) that are believed to be desirable in them.
7. Ajit and Bangar

The study analyzed, in historical prospective the role of banks in financial intermediation in India. The analysis of the structure and progress of banks during the pre-nationalization and post-nationalization period brought out the important structural factors, which affect their performance. An examination of important parameters of banks, their cost and return on various assets, brought out the easing of external constraints on the working of banks and the gradual upward movement in spreads (net interest income) in post-financial sector reform period. The impact of financial sector reform (including prudential regulations) on performance of banks (both group-wise and bank-wise) and issues confronting the banking industry were also examined (Ajit and Bangar, 1998, pp.7-20). One of the major weaknesses of banking was the low recovery of loans. On the basis of the analysis, they concluded that the major achievement of these reforms in India was avoidance of financial instability during the reform period. It was also observed that Indian private banks had higher returns on assets in spite of lower spreads. Other findings of interest were that the wage bill was a major component of intermediation cost in public sector banks unlike for private banks, where the expenditure on capital equipment like computers was the major component.

8. K.V. Patel and V.S.Kaveri

They analyzed the repayment pattern of the borrower and came out with eleven discernible behaviours. Ideal behaviour given as the first pattern was where lending leads to activity that is productive and hence results into production (Patel and Kaveri, 1998, pp.16-23). The second pattern ended with repayment. The third and the fourth pattern could be considered most prevalent once where the income generated with the help of bank credit was used for partial repayment and for improving the consumption and /or investment levels of the family. The fifth pattern may be called the diversion of the income for production purposes. The sixth pattern was a case of clear diversion and default in repayment. The seventh pattern might result on account of nature of activity. The eighth pattern is a typical example of subsidy-oriented credit schemes where the subsidy was repaid and the loan was consumed. The ninth pattern was a clear-cut case of mis-utilization of loan. The tenth pattern indicated an unfortunate situation. These patterns have indicated many
snags that were likely to emerge in the repayment behaviour of the borrower. As a result of these snags, the accounts would be termed as overdue and the banks may face a NPA situation. The significant reasons are lack of proper follow up and socio-political pressures. They suggested some steps for recovery like educating the recovery team, classification of NPAs according to their age, amount, location, etc., setting the target for each member of the team, each member decides the recovery procedure to be followed on the basis of each individual case like reminders, personal visits, putting pressures from friend, co-borrowers, social workers etc., compromise or re-schedulement of loan or the rehabilitation of industry in case of genuine problems.

9. V.K. Sudhakar

The study attempted to analyse the policies pursued by the banks with focus on PSBs since their NPA level was considerably high. The policies followed by different banks vary, based on the magnitude of the problem and limitation imposed by the practices they follow. He made an attempt to relate incidence of NPAs to industry geographical area, scheme of finance, sector, etc. (Sudhakar, 1998, pp. 8-16). He also proposed the concept of CAD (Critical Amount Due) for avoidance of fresh NPAs and the up-gradation of the existing NPAs. He was of the opinion that managing NPAs is seen as a reactive response than a proactive function in almost all the banks. His findings:

(i) Lack of MIS system.
(ii) Lack of staff accountability.
(iii) Lack of legal department, etc., were the major factors causing hurdles in the recovery of NPAs.

It was also observed that the top management of some banks was enlightened and concerned about the problem but the staff below did not appear to share the same.

10. Abhiman Das

The study evaluated the inter-bank variability of profit among public sector banks during 1992-98. The conventional approach to inter-bank profitability
comparison was mainly based on ex-post analysis of descriptive profitability statistics for different banks or for bank groups. However, such a discrete comparison might hide the underlying sequential dynamics of profit generation (Abhiman Das, Summer 1999, pp. 55-73). He had used 17 major banking variables in sequential decomposition model for profitability analysis. All the 17 variables registered noticeable significant inter-bank differences. The inter-bank variability as measured by the coefficient of variations, has registered a decline in the post-reform period.

The principal findings of his study were:

i. Post reform period, public sector banks recorded a reduction in the burden of raising working funds (in terms of non-interest expenses adjusted for non-interest income).

ii. This was attributed to a gradual shift away from traditional banking to improved provisions of financial services and enhanced earnings there from.

iii. Profitability had relatively high degree of variability.

iv. The performance of the banks in terms of profitability was not merely a question of minimizing interest cost. Increasing earnings on assets was a more durable approach. Thus, profitability involved efficient management of both sides of the balance sheet.

11. Indra Raja Raman, Sumon Bhaumik and Namita Bhatia

They made an attempt to explain inter-bank variation in NPAs for the year 1996-97. They have also done specific tests for the impact of the region of operation on domestically owned banks, as measured by percentage branches in each of the state clusters (Indra Raja Raman, Sumon Bhaumik and Namita Bhatia, (1999, pp. 161-67).

Bank specific net NPAs (as a percentage of advances) for the year 1996-97 were regressed on the ownership and regional presence, controlling for the bank specific efficiency and prudential indicators relating to the same year. The findings showed that bank specific characteristics such as ownership or adherence to prudential norms do not suffice to explain inter–bank variability in NPAs, the region of operation matters. They concluded that no sustainable improvement in the
performing efficiency of domestic banks is possible without prior improvement in the enforcement environment in difficult regions of the country. Another finding of some importance is that it is not the foreign ownership in and of it so much as banking efficiency and technology co-relates of the country of origin of the foreign banks, which determine NPA performance in Indian environment.

12. Baiju S. and Gabriel Simon Thattil

This research highlighted the magnitude of NPAs in commercial banking sector of India taking the current position of scheduled commercial bank. They had graded all the four categories, i.e. SBI and its associates, nationalized banks, other scheduled commercial banks and foreign banks, in very good, good, bad and worst group on the basis of NPAs and capital adequacy (Baiju S. and Gabriel Simon Thattil. 2000, pp. 5-9).

For the purpose of analysis, the number of banks with gross NPA percentage of 5 or below (international standards) had been categorised as “very good”. Banks with gross NPA percentage of 16 (national average) or less but above 5 was categorised as “good”. Banks with above 16 percent but below 20 percentage was categorised as “bad”. Banks with gross NPA of 20 percent and above was categorized as “worst”. For the purpose of analyzing capital adequacy ratio (CAR) under each category number of banks meeting the stipulated requirement of 8 percent and number of banks not meeting the same had been taken separately. They concluded that banks, which got a “very good” rating in terms of their NPAs, revealed that such banks were new private banks or foreign banks. They were also of the opinion that the managerial cadre within each banking organization ought to be educated and encouraged to lend, after considering the merit of each proposal and taking up the responsibility for its recovery. Scrutiny of proposals and monitoring of usage should be more stringent for huge loans as they contribute to the major chunk of our NPAs.


He had tried to find the relationship among capital, Non-performing loans and productivity in Indian context using the data on PSBs for the period 1995-96 through 2000-01 (Abhiman Das, 2002, pp. 437-47). He examined the relationship between capital and capital risk and its interaction with productivity as some of the studies
were already undertaken which examined the interplay between capital and portfolio risk (Shriives and Dhal, 1992). The study found that:

i. The explanatory power of Net NPA equation was reasonably high, ranging from 88 to 96 percent. Capital adequacy had a negative and significant effect on asset quality when PSBs were considered in totality. This implied that PSBs as a whole, relatively more capital (lower leverage) tends to be associated with less credit risk.

ii. The explanatory power of capital equation was significant but with high variability, with the adjusted $R^2$ ranging from a low of 60 percent for medium sized bank to a high of 91 percent for large banks. Regulatory pressures, both with regard to capital and NPAs played a significant role in influencing the capital adequacy and asset quality of PSBs.

iii. Annual growth rate of total loans had a negative effect on bad loans.

iv. The important aspect of finding was that aspect of finding was that higher productivity leads to drop in Net NPAs, especially for small banks.

v. Contrary to the widely held beliefs, loan to priority sector did not necessarily lead to high Net NPAs, especially for small banks.

14. Rita Rai

The objective of the study was the gender analysis of NPAs, both in terms of number of accounts and their amounts. Since the gender-segregated data was available for accounts with credit limit of over Rs.25, 000, the gender-wise analysis of NPAs was restricted to those accounts only. This was undertaken in two ways:

i. Male/Female NPAs as a percentage to Male/Female outstanding advances.

ii. Male/Female NPAs as a percentage to individual advances.

She observed that the incidence of non-performing advances, in accounts with credit limit above 25,000, at all India level was far higher in case of men than in the case of women (Rita Rai, 2002, pp.160-79). The study reveals that at all India level, 16.29 percent of the accounts corresponding to 15.88 percent of the outstanding credit granted to males were classified as NPAs. In case of females, on the other hand, the NPA ratio was 9.87 percent, on the basis of number of accounts and 9.37
percent on the basis of outstanding amount. Hence the incidence of NPAs is 50 percent higher in the case of men than in case of women.

Another interpretation made was that while males constituted 89.71 percent of the accounts and 90.12 percent of the amount granted to individuals, they comprised 93.50 percent of the NPA accounts and 93.71 percent of the NPA amount in the individual category. Women on the other hand constituted 10.29 percent of accounts and 9.88 percent of the amount granted to individuals at the all India level but comprised only 6.50 percent and 6.29 percent of the accounts and amount, respectively, in NPAs under individual category. She also observed a sizeable gender variation in the incidence of NPAs across the various states. The variation ranged from 63.4 percent in Nagaland to 5.12 percent in Kerala in case of men while the same percentage in the case of females ranged from 7.3 percent in Nagaland to 2.49 percent in Goa. Another aspect of the gender analysis of NPAs was the average amount involved per male vis-a-vis the female NPA account in various states. In majority of the states/union territories, the average amount per NPA accounts in case of males was observed to be higher that in female accounts. There were nonetheless a few states like Goa, Haryana, Himachal Pradesh, Kerala, Tamil Nadu and Uttar Pradesh, where average amount per female account was higher than the average per male account. The district level data for Gujarat revealed that with the sole exception of Surat district, all other 18 districts, and the NPA amount as a percentage to outstanding amount was lower for women. Overall, the study concluded that women were credit worthier than men.

The findings in this study have important implications for banks. First, given the rapid dis-intermediation process, whereby large corporate houses and blue chip companies are increasingly accessing various modes of financing other than traditional bank credit, banks would now have to focus on small and medium borrowers, individual entrepreneurs, petty traders, etc., for their credit expansion. In this category of borrowers the constituency that had largely been neglected is that of women. Given the existing low level of participation of women in bank finance, despite their significant contribution in the overall economy, there is clearly a vast area as yet untapped that can be assiduously cultivated for profitable credit expansion.
GROUP STUDIES

15. Tandon Group (1975)

The group was appointed to suggest guidelines for commercial banks to supervise credit with the view to ensure the proper end use of funds as well as to keep a watch on the safety of advances. The group was also to suggest the operational data and other information that may be obtained by banks periodically from borrowers and by the RBI from lending banks. The major guidelines suggested by the group were with respect to-

- Norms of inventory and receivables,
- Lending norms,
- Style of credit,
- Follow up and supervision of credit, and
- Bills finance.

The group recommended proper quality-wise grading of advance portfolio by slotting of borrower accounts into four categories as

- Excellent,
- Good,
- Average, and
- Unsatisfactory/bad and doubtful (Raj, A.S., March 1976).


This group was set-up with a view to recommend guidelines for ensuring greater credit discipline as well as enable the banks to relate credit limits to increase in output or other productive activities. The group recognized the need for close watch on the quality of the loans portfolio, and this concern was reflected in its emphasis on regular annual review of all borrower accounts with credit limits of over 10 lakhs (Hingorani, M.L and Chawala, O.P, January-March 1982).

According to the group, an information system was to be introduced, to start with, for all industrial borrowers with aggregate limits of Rs. 1 crore and above and
progressively extended first to the borrowers with limits of Rs. 50 lakhs to Rs. 1 crore and next to those enjoying credit limits of Rs. 10-50 lakhs.

17. Pendharkar Group (1981)

The group recognized the need for classifying advances into different categories, to index the overall quality of the asset portfolio. This was the starting point for the introduction of the health coding system of bank loan portfolio by the Reserve Bank of India in 1985. This system provided information regarding the health of individual advances, the quality of credit portfolio and the extent of advances causing concern in relation to total advances. It was considered that such information would be of immense use to bank management for control purposes.

Reserve Bank of India advised all commercial banks (excluding foreign banks, most of which had similar coding system in their organization) on 7th November 1985 to introduce the health code classification indicating the quality (health) of advances in eight categories viz., satisfactory, irregular, sick-viable, sick-nonviable/sticky, advances recalled, suit filed accounts, decreed debts, bad and doubtful debts, with health code assigned to each borrower account (RBI Bulletin, 1999).


The committee on banking regulations and supervisory practices (Basel Committee) had, in July 1988 released the agreed framework on international convergence of capital measure and capital standards. The committee has adopted weighted risk assets which assigns weights to both on and off balance exposure of a bank according to their perceived risk, as the method of measuring capital adequacy and set the minimum standard at 8 percent to be achieved by the end of 1996. While the banking supervisory authorities in the G-10 countries have applied the framework, the committee has suggested that the banking supervisory authorities of the non-G-10 countries could also try to adopt the framework, in respect of banks conducting significant international business in their jurisdictions.

The fundamental objectives that underlay the Basel Committee work on capital convergence were, that the new framework should service to strengthen the
soundness and stability of the banking system and secondly, that the framework should be fair and have a high degree of consistency in its application to banks in different countries with a view of diminishing an existing source of competitive inequality among the international banks.


The government ownership of the Indian public sector bank led to the erroneous belief that there was little to worry about a low capital base of the banks. The lack of proper disclosure norms led to the problem being kept under cover. The quality of customer service did not keep pace with changing expectations and modern technology, which affected the speed and accuracy of service. By 1990, there was cause for serious concern on account of poor financial condition of public sector commercial banks and financial institutions. Some of these had already become unprofitable, under capitalized and with high level of non-performing assets. Recognizing the urgent need to address the growing problem before it became a danger to the health of the entire financial system of the country, the Government appointed a high level committee headed by Mr. M. Narasimham, Ex-RBI Governor, to address the problem and suggest remedial measures.

The committee believed that it was necessary that banks in India also conform to these capital adequacy standards in a phased manner. For the purpose of the calculation of capital, Bank of International Settlements (BIS) has classified capital into two broad categories, namely, Tier I Capital consisting of share capital and disclosed reserves and Tier II capital consisting of undisclosed and latent reserves, general provisions, hybrid capital and subordinated debt. It has also been indicated that Tier II capital should not exceed Tier I capital.

The Ghosh Committee on the final accounts of the banks had made certain recommendations with regard to valuation of investments in banks’ portfolios. The committee recommended that a bank’s investment portfolio should be bifurcated into two parts, viz., “permanent investment” and “current investment”. They also suggested that it would not be necessary for banks to provide for diminution in the value of permanent investment but that full provision should be made in the depreciation in the value of current investments. The Narasimham Committee
endorsed the recommendations of the Ghosh Committee in this matter, as they believed that a proper system of income recognition and provisioning is fundamental to the preservation of the strength and stability of the banking system. The committee concluded that directed investments and directed credit programmes are responsible for higher NPAs. In both these cases, rates of interest that were available to banks were less than the market-related rates on what they could have secured from alternative deployment of funds. There had been deterioration in the quality of loan portfolio, which in turn had come in the way of banks income generation, and enhancements of capital funds. Inadequacy of capital had been accompanied by inadequacy of loans less provisions. The accounting and disclosure practices also do not always reflect the true stage of affairs of banks and financial institutions.

The Narasimham Committee report says: “However, both banks and the DFI have suffered from excessive administrative and political interference in individual credit decision-making and internal management. The deterioration in the financial health of the system has reached a point where unless remedial measures are taken soon, it could further erode to real value of and return on the savings entrusted to them and even have adverse impact on depositor and investor confidence”.


The decades of nineties was an era of economic and monetary policy change brought about by the Government and the Reserve Bank of India to globalize the Indian economy. The waves of liberalization that swept across the external trade sector, world over, were not without its impact on the domestic sector over the investment policies and indeed the financial sector. The implementation of the recommendations of the Narasimham group ushered the reforms in the Indian banking industry. Consequently, Indian banks were put on the road to becoming more productive, efficient and globally competitive. There was growing awareness to keep non-performing assets at a low level, particularly, as bank spreads have come under increasing strain due to stringent prudential norms of asset classification, income recognition and the consequential provisioning requirements. Though Indian banks adopted international standard of accounting, moving towards prudential regulations as against the structural regulation of yesteryears, the level of NPAs continued their upward trend in absolute terms. This led to the setting up of the
committee by government to analyse in depth the root causes of the continuous increase in NPAs in public sector banks. The measures to be taken for effective recovery of banks’ dues and reduction of NPAs, suggested by the group, have been broadly classified under the following three heads:

1. Measures required to be initiated by Central/State Government and RBI/IBA.
2. Measures required to be undertaken by Banks: Arresting fresh Generation, Reduction of existing NPAs and Other measures.
3. Measures for streamlining BIFR, DRT and Judiciary system.


While the Indian banking sector was following the recommendations of the Committee on Financial System (CFS), which reported in 1991, major changes had taken place in the domestic economic and institutional scene, coinciding with the movement towards global integration of financial services. These developments reinforced the importance of building a strong and efficient financial system. Keeping in view these developments, Government appointed the 2nd Narasimham Committee in 1998. The recommendations of the committee are widely accepted by RBI and are known by the name of Second -generation norms. This generation of reform could be conveniently looked at in terms of three broad inter-related issues:

1. Actions to be taken to strengthen the foundations of the banking system.
2. Related to this, streamlining procedures, upgrading technology and human resource development.
3. Structural changes in the system. These would cover aspects of banking policy, institutional, supervisory and legislative dimensions.

22. Basel Group (June 1999)

The first capital accord of 1988 played a significant role in strengthening the soundness and stability of the financial system by providing a broad framework for making a fair and consistent comparison of capital standards across different countries on the basis of a shared and universally accepted definition of capital. The methodology was nonetheless quite rudimentary and lacked sufficient sophistication,
particularly in capturing the credit risks, market risks, operational risks, etc. Further, over a period of time, financial innovations and the rising complexity of financial transactions necessitated a further review of the existing capital adequacy framework.

In response to this urgent need, the Basel Committee on Banking Supervision, in June 1999 issued a consultative paper on “A New Capital Adequacy Framework” for comments by central bankers, market players, and other interested parties.

### 23. RBI Study (July 1999)

The Reserve Bank of India conducted a study to ascertain the contributory factors for high level of NPAs in banks (Published in RBI Bulletin, July 1999). After studying about 800 top NPA accounts in 17 banks, the RBI study has found the following, in order of importance, to be the causative factors for loan accounts turning NPAs. The over-regulated environment, both in the real as well as financial sector was one of the main reasons, however, there are other important factors also as:

1. Change in the macro-environment like recession, infrastructural bottlenecks, natural calamities, etc.
2. Government policies like changes in excise duties, pollution control, etc.
3. Wilful default, fraud, and misappropriation, promoters/directors disputes.
4. Deficiencies on the part of banks like delay in release of sanctioned limits, delay in release of payments/subsidies by government.

The setting up of Asset Reconstruction Company can also play a vital role in reduction of NPAs and thereby provide necessary liquidity to banks through securitization of banks’ loan assets.

The Report of RBI finally concluded, “Reduction of NPAs in banking sector should be treated as a national priority item to make the Indian banking system stronger, resilient and geared to meet the challenges of globalization. It is necessary that public debate be started soon on the problem of NPAs and their resolution. It is hoped that this paper will provide a base and generate a healthy public debate, which may be helpful in evolving suitable strategies for satisfactory resolution of the problem”. 

CII conducted a detailed study on non-performing assets, analyzing not only the reasons for the occurrence of bad loans but also recommending solutions for the same. The study of 33 public and private sector banks revealed that the incidence of NPAs in the priority sector is much higher than in the non-priority sector. The study concluded that though the priority sector advance as a proportion to gross advance is smaller at 32 percent in 1998 than the non-priority sector advance at 46.4 percent in the same year, the proportion of priority sector NPA is higher at 16 percent as compared with that in the non-priority sector at 12.63 percent. The study held mainly the government policies responsible for the large chunk of NPAs and made the following recommendation:

1. Revision of bankruptcy and recovery laws, restructuring of BIFR, change in DRT procedures, review of stamp duty and registration laws and total revamping of The Banking Regulation Act, 1949.
2. RBI should mandate far better disclosures for all banks and financial institutions.
3. Timely identification of overdue loans.

25. Case Study

Industry Dimension

Published information, regarding impact of industries on NPAs, is not available and even the primary collection of industry-wise data was not an easy task since the same is regarded as confidential. Therefore, the impact of industries has been undertaken only for three banks as a case study. The selection of the banks was not objective but based solely on the availability of the data. The data is strongly influenced by the region of operation, since all the three banks belong to the same region. The industry-wise incidence of NPAs as well as cases registered with BIFR in 2003 in all the three banks (“A”, “B” and “C”) indicate a similar pattern for all major industries viz., (Iron and Steel, Metal and Engineering, Textile, Chemicals, Food processing and Vegetable oil, Electronics and Electricity, Paper and Paper products, Construction, Vegetable oil and Vanaspati, and others). The NPAs of the top five industries (Iron and Steel, Textiles, Chemicals, Engineering and Metals)
alone comprise 55 percent to 65 percent of the total NPAs portfolio of these three Banks. The top five states with the maximum number of large NPAs (by gross value) for the three banks included in the case study are Maharashtra (including Goa), Gujarat, Delhi (including Rajasthan), Andhra Pradesh and Tamil Nadu. The large NPAs in these five states alone comprise 68 percent of the total large NPA portfolio (by gross value), with Maharashtra (including Goa) with nearly 24 percent being the single largest contributor. Gujarat with 11 percent, Delhi (including Rajasthan) also with 11 percent, Andhra Pradesh with 12 percent and Tamil Nadu with just over 10 percent made up the total. The western region has the maximum large NPAs (by gross value) at 38 percent of the total NPAs of these three banks. The northern and southern regions with approximately 26 percent and 21 percent each followed with the eastern and central regions have a lower proportion of large NPAs by gross value at 9 percent and 6 percent respectively. The slow down of industrial activity during the past few years have also been more pronounced in these areas, which have resulted in higher proportion of NPAs.

The following studies are published in the book titled “Non-performing Assets in Commercial Banks” by Vibhajain, Reader, Department of Commerce, RBSA publishers, Jaipur, first published 2005.

26. Sunder Ram Korivi: - The title of the study - Securitization in India – The Road Ahead:

This study traces the epistemology of securitization, the nuances from the perspective of an academician, a financial institution, a capital market participant, and regulator as well as policy maker. Based on the same, it puts forth the proposition that a better understanding of securitization will help to serve the interests of all those having an interface with the financial sector. This study demonstrates the true richness of securitization of a financial engineering tool with risk transferring and liquidity enhancing capabilities. Securitization had its origins in Denmark and later in Prussia, as evident from the current practice of the pfandbriy in the German institutional circles (Kothari, 2000). In its modern form, the practice of securitization has been perfected in the US markets through the issue of pass through certificates PTCs and other complex credit derivatives with liquidity enhancing and risk transferring characteristics (Kohn, 1999), Fabozzi and Modigliani (1998) and, its
latest forms, in Hayre (2001). A comprehensive paper on the various aspects of securitization also exists, by Korivi (2000, 2002). The fallacious notion of securitization so widely prevalent in the Indian financial system, evident on an empirical basis from a survey of over 400 bankers and a review of securitization twisted out of context by the media, over the past five years, have been confirmed.

This paper pin-pointed the nature of the fallacious perception and sought to bring into focus securitization in its full form and suitability with concrete examples. It is hoped that a better understanding of securitization, so vital in the context of large housing and infrastructure related projects on the anvil prevail so that the financial sector in particular and the economy in general is spurred.


The crisis study says that banks can apply the Act only to one-third of the Gross NPAs. There are many flaws, weaknesses and limitations, which defaulters may exploit to the full extent. There will be practical difficulties and financial costs involved in disposal of distressed assets. Serious gaps in enforcement and recovery may come to the fore. The banks and the law enforcement agencies will have to fill the gaps to make this Act successful as intended. Thus, it is clear that there are several debt recovery measures, so far have been introduced but none of them have fared much better. It is a difficult task to change a big elephant overnight. The lack of autonomy is also one of the contributing factors to the ineffectiveness of the banker to tackle this problem. As the competition is intensifying among the banker functioning in India, the PSBs are now left with no option but to cleanup their balance sheet aggressively.

28. Dr. S.L.Gupta, Satish kumar – Impact of SARFAESI Act 2002 on NPAs management in Indian Commercial Banks:-

All public sector banks, foreign banks and private banks are the part of study. The period of the study of the article is from 1999 to 2003. Several initiatives have been taken by the RBI in conjunction with government to reduce the NPAs of banks. The decline in NPAs has also been evidenced across bank groups, except in 2000 - 01. In lining with declining trend NPAs decline sharply in 2002-03. Reflecting, inter-alia statutory impact earlier measures towards NPAs reduction and
enactment of SARFAESI Act ensuring proper and prompt recovery without intervention of court and tribunal. The overall reduction of non-performing to 9.4 percent of Gross advances from 14 percent in 1999-2000. The Indian banking system is generally and relatively more disciplined in observing basic lending norms. This virtue perhaps saved India from the disaster of 1998 that was experienced by Japan and South Asian countries. The banks of these nations recorded very high level of NPAs in the post-crisis period. Government has decided to set up four more debt tribunals in Mumbai and one of each at Kolkata, Chennai and Delhi. This coupled with establishment of credit information bureau can be considered as some tangible steps to redress the problem of NPAs. It can be concluded that bank should not only take steps for reducing present NPAs but necessary precautions should also be taken to avoid future NPAs. It is quite essential that the doctrine of financial responsibility of all borrowers must be enforced. Banking Security Act must be amended for the publications of the defaulter’s names. Willful default must be treated as criminal offence and hence dealt with seriously.

29. B.N.Shubha - Asset Securitisation:-

Securitization, commonly referred to as the Asset securitization is “The issuance of marketable securities backed not by the expected capacity to repay of a private corporation or public sector entity, but by the expected cash flows from specific assets”. The objective of the securitization process essentially is to create “securities” that can be traded in the capital market. Securitization transaction improves the balance sheet structure as it provides liquidity to an originator’s balance sheet apart from transferring the credit risk associated with the pool of assets securitized. Securitization makes room for creation of fresh assets and also enables better portfolio management. It improves the quality of investment and provides better return to investors.

Though market for securitization in India is still in its recent stage, it holds great promise for the future. Appropriate legal tax and accounting regime, investor awareness and understanding can help development of the securitization market in India.
30. Dr. Arvind Jain – Management of Non-performing Assets in Banks:

The concept of NPA came into existence with the recommendations of the Narasimaham committee in the year 1992 – 93. The level of NPAs in public sector banks and old private sector banks, which provides the major portion of bank credit, is much higher than that in new generation private banks and foreign banks operating in India. The loss of yields on such portfolio is adversely affecting the profitability of these banks in India and they are finding it difficult to get rid of these problem loans. NPAs are inevitable in any financial institution. But continuing efforts by banks to contain NPAs can bring the level at reasonable. The concept of “one quarter for identification of NPAs” was introduced by RBI in 2004. So banks had a challenge for a recovery drive on a war footing. Bank’s sincerity and professional approach will only yield success.

31. G.Ramakrishna Reddy, T. Sree Bhargavi – An Appraisal of Indian Banking from NPA perspective:

The Indian banking industry is characterized by a move towards liberalization of the financial, money and capital market and its globalization by entering foreign trade as per the changes in global economy. It has seen many changes in the last decade. Greater competition among banks, entry of new private banks, mergers and increasing complexity in business are its critical success factors. Also more emphasis is given to risk management. No wonder many structural reforms have taken place in the industry.

Even though NPA is not a new phenomenon, for the past few years Indian banks have been weighed down by its enormous amounts. It has caused banking crisis and sometimes even threatened the very health of the banking system. In spite of the prudential norms framed by the RBI and continued focus of the various policy initiatives of the Government of India, a continuous increase in the NPAs level has been experienced by all Indian banks with some variation. Apart from the internal and external complexities, increase in NPAs directly affects bank’s profitability, sometimes even their existence. Statistics reveal that bad debts are accounted for Rs. One lakh twenty thousand crore in the banking sector and financial institutions and banks have written off Rs. Seventy thousand crore as bad debts in the last six years.
Few guidelines for effective NPA management are:
1. Attention has to be paid to high value NPAs.
2. Banks have to take up the rehabilitation of deserving units only.
3. The success of Settlement Advisory Crudite’s (SACs) depends to a large extent on the attitudes of bankers and borrowers.

**Checklist for increasing in Indian Banking**
1. In India investments are around 24 percent and there is a need to increase them to 30 percent. Banks have to take the initiative to encourage savings to extend their credit to potential investors.
2. Dynamic people are to be recruited to collect doubtful debts and for better asset liability management.
3. Banks must operate in a democratic environment.
4. New technologies should be introduced to reduce administrative costs and increase profit margins.

32. **R.K.Raul – Non-performing Assets in Indian context:**

This article seeks to analyze the implications for banks and financial institutions in the context of the Securitization and Reconstruction Act with a special emphasis on the accounting aspect including tax implications on the transfer of distressed assets of the banks/financial institutions to the Assets Reconstruction Companies (ARCs). It is evident that, the Securitization Act 2002 has facilitated the investors to deploy their funds in the NPAs portfolios of banks and financial institutions. With a view to creating a vibrant secondary market, ARCs were formed as independent body corporate to expedite the process of resolving the bad loaned portfolios.

33. **Nilesh V. Suchak – Management of NPAs in India:**

Recent domestic and inter-national experience in the role of Central bank as lenders of the last resort has highlighted some important issues. First while the Central bank’s role in providing liquidity support insures confidence in the financial system, the actual action requires the Central bank to distinguish between solvency and liquidity problems. In view of this, it is imperative that banks and FIs increase
their intrinsic strengths and the Reserve Bank of India needs to be more proactive in unearthing the hidden NPAs.

The following studies are published in the book titled “Management of Non-performing Assets in Banks and Financial Institutions” by Dr. B. Ramachandra Reddy, Associate professor – Department of Commerce, S.V. University, Tirupati, Serial publications, New Delhi, First publication 2004.

34. Prof. S.Vadivelu – NPAs in Public Sector Banks – A Drag on Society:

The health of a vibrant economy largely depends upon a healthy banking system, which in turn depends upon a sound asset structure. When the loan portfolios of a bank get contaminated by bad and doubtful debts, we say that the bank has created Non-performing Assets. When loan accounts are overdue, they neither recover the capital nor earn income in real terms. Such NPAs make the banks sick and unprofitable. This leads to a drain on the social resources. The Government, bank managements and the employees have to realize the NPAs and make the Indian banking system more transparent, more vibrant and more socially responsible with internationally acceptable standards of performance.

35. Prof. B.Mohan & K. Rajesh – Management of Non-Performing Assets in Institutional Agencies:

The end product of any business is profit and wealth creation. Unless profit is earned, no business can survive. Banking business is no exception to this principle. There were lot of bad loans i.e., loans which cannot be recovered or recovery was of little significance and, consequently, there were lot of bank failures world over in the eighties. The BIS (Bank of International Settlements) based on the Basel Committee Report in 1988, has prescribed certain minimum standards in the form of capital so that bank failures can be prevented. Capital adequacy as it is called as bank’s own state in the business to be maintained for running banking business. Some of the suggestions are:

- Provisions for summary attachment of defaulter’s property at the time of filing of suit.
o New legislation to give an opportunity to borrowers for filing counter claims.

o Processing officer to be given more powers to execute official receivers decree.

With all these measures, let us hope that wisdom will dawn on all concerned that a healthy banking system is a must for an efficient and vibrant economy. Real freedom lies in responsible behaviour of all citizens, particularly with regard to the banking system.

36. Dr.D.Krishnamoorthy, Dr. P.R.Sivasankar and K.Ekambaram – Prudential norms and Growth of NPA in Indian Banking Sector:

An attempt is made in this paper to ponder over various financial sector reforms initiated in India since 1991-92, particularly on prudential norms and the growth of non-performing assets (NPAs). Subsequent to the implementation of prudential norms and gradual tightening of such norms, banks have been addressing the problem of NPAs through all the available means. At the end of March 2002, as many as 24 of the 27 public sector banks had Net NPA ratio of up to 10 percent, while in the case of 3 banks, it was between 10 percent and 20 percent. The study made by Indira Rajaraman, Suman Bhaumik and Namita Bhatia clearly indicated that there are wide regional variations in the NPAs of banks. They suggested that sustainable reform in the financial sector and improvement in the performing efficiency of domestic banks require improvement in the enforcement environment in some regions of the country.

To sum up the discussion, given the unfavourable environment for the enforcement of securities, the progress in recoveries in the Indian public sector banks can never be under-estimated. If adequate powers and a proper environment are provided, Indian banking system is sure to show up greater efficiency on par with the most efficiently managed banks in the world.
37. R.S. Raghunathan - Non-Performing Assets in Banking Industry - A Brief:

The Department of Commerce, S.V. University, organized this seminar to understand the concept of NPA and to overcome the problems arising out of the accumulation of these assets suggested remedies for reducing NPAs.

Remedies:
- Proper selection of the borrower activity,
- Financing only viable schemes,
- Extending need based financing,
- Ensuring proper end-use,
- Proper post-sanction follow-up,
- Regular contact with borrowers,
- Regular monitoring of the accounts,
- Avoiding overdrawning extraneous debts, and
- Holding of recovery camps.

38. Dr. M. Chandraiah & B. Penchala Narasaiah on NPAs in the Indian Banking System – Some suggestions:

It is suggested to setup a group of auctioneers. Banks should start with assignment of decrees in their favour. This will enable banks to sell/assign their decrees at an agreed discount to these auctioneers who would in turn execute it for its full worth. However, this does not mean that right of the debtors would not be protected. Rather, they would be vested with power to approach the competent authority for seeking justice if it has been denied to them.

39. Dr. B. Krishna Reddy, Dr. A.V. Ramana and K. Nandeeswaraiah – Management of Non-Performing Assets in Banking Sector – Some Insights:

In essence, it is to be admitted that in the present scenario NPAs are the core of the financial problems of the banks and, hence, ceaseless efforts have to be made to improve recovery rate. Similarly, advances which are not NPAs but are on the threshold should be given special attention because, otherwise, these may become NPAs sooner than later.

As regards the new lending, banks have to be more alert and circumspect so as to acquire one good quality assets. In the competitive environment of today, the
task is not easy. Therefore, banks have to constantly upgrade their credit evaluation skills and system in order to successfully manage their assets.

40. Prof. C. Sivarama Reddy and Smt. V. Kalavathi – Non-Performing Assets in Banks – Causes and Remedies:

NPA is not just a problem for banks, they are bad for the economy. The money locked up in NPA is not available for productive use and to that extent the banks seek to make provisions for NPA or write them off. It adversely affects their profits and results in higher rate of interest to their diligent credit customers. This also raises the cost and thus, denying the diligent credit customer, the benefit of lower rate of interest which would help them to be more effective and competitive. Steps taken at the appropriate time may help in avoiding NPA. Qualitative appraisal, supervision and follow-up should be taken up for the present advances to avoid further NPAs. It need not to be reiterated that the days of soft options are over. Things have reached a stage where a bank looks at some of the basic issues will have to be taken to improve bank’s general capabilities and to meet the prudential requirements.

41. Dr. M. Kirankumar, C. Munisekhar Reddy & K.C. Muktha – Causes of NPAs and Remedial Measures:

The Bank’s bottom line improvement largely depends on reduction in NPAs and preventing fresh NPAs would also help to improve the profitability of banks. However good the credit dispensation process may be, total elimination of NPAs is not possible in banking business owing to externalities but their incidence can be minimized.

42. Dr. D.L. Narayana & V. Venkatesu – Measures to curb NPAs in Public Sector Banks:

Total elimination of non-performing assets is not possible in banking business owing to external factors but their incidence can be minimized. It is always wise to follow the proper policy for appraisal, supervision and follow-up of advances to avoid non-performing assets. Special recovery cells may be setup at regional / zonal levels. Banks should encourage mergers, acquisition of sick units wherever they feel. It may reduce the NPAs. Banks should take full advantage of the tribunals by taking
necessary steps. A number of follow-up visits and regular stock inspection significantly improve recovery.

43. Prof. K. Ramakrishnaiah, Smt. B.C. Saraswathi & Dr. S. Sudhakar Chetty - Management of Non-Performing Assets (NPAs) in Public Sector Banks – A Study of Andhra Bank:

Profitability measures the overall efficiency of banking finance and administration and public sector banks are not an exception. The public sector banks shall tone up and adapt their system of functioning, operations and services in tune with sweeping changes taking places in the socio-economic and technological environment of the country. The Andhra Bank realized this early and accordingly evolved an effective system of NPAs management which is crucial to resurrect its profitability over the past half a decade. The Bank undertook sincere efforts to scale down the magnitude of existing NPAs and avoiding the emergence of new NPAs. Despite these efforts, the level of NPAs in the Bank continues to be at undesirable level. The bank, therefore, needs to further strengthen its efforts to reach the desired level of NPAs in the years to come.

44. Dr. P. Mohan Reddy and D.L. Narayana Reddy – Non-Performing Assets in Regional Rural Banks – A Study of Rayalaseema Grameena Bank:

In a nutshell, a new credit insurance scheme for priority sector lending, substantially improved legal system, meticulous loan documentation, gradual shift from bank-based to market-based system and sound credit management skills will enable the Bank to meet the challenges in business environment and keep its non-performing assets low.

45. Prof. Dr. C.R. Reddy, K. Padmasree & S.Maheshwari – Analysis of Non-Performing Assets – A Study of Public Sector Banks:

The critical area in the improvement of profitability of the banks is the reduction of Non-Performing Assets. This measure is intimately connected with overall stability of the financial system which leads to the recognized as conducive to multi-pronged efforts. The government and the other concerned agencies could device policies having a bearing on the industrial sector, agriculture and trade with a long term perspective to avoid sickness in the industry. The issue of Non-Performing
Assets should, therefore, be treated as national priority to make the Indian Banking System strong, and geared to meet the challenges of globalization.

46. Prof. B. Raghavulu Naidu & A.P.S. Naidu – Impact of Non-Performing Assets on the profitability of Public Sector Banks:

The change in the policy framework was aimed at the complete removal and or reduction of internal and external constraints in the way of smooth and efficient functioning of the banking system in achieving maximum profit. Though there are problems in effecting recoveries and write-offs and in compromise settlements, it is of utmost importance that necessary changes are brought about in the related legislation for making recovery process more smooth and less time consuming and laos create other alternative agencies for reduction of non-performing advances. In order to reduce the ratio of NPAs to total bank loans, the following measures have been suggested:

1. Filing suits to recover bad loans
2. Amendment of laws, and

Then the Indian banking system will be more strong, resilient and geared to meet the challenges of globalization.


This paper deals with the experiences of other Asian countries in handling of NPAs. It further looks into the effect of the reforms on the level of NPAs and suggests mechanisms to handle the problem by drawing on experiences from other countries. The paper stresses the importance of a sound understanding of the macro-economic variables and systematic issues pertaining to banks and the economy for solving the NPA problem along with the criticality of a strong legal framework and legislative framework. Foreign experiences must be utilized along with a clear understanding of the local conditions to create a tailor made solution which is transparent and fair to all stakeholders.
48. A Paper presented by Dr. Milind Sathye, School of Accounting, Banking and Finance, University of Canberra, Titled, “Efficiency of Banks in a Developing Economy – The Case of India”:

The objective of this paper is to measure the productive efficiency of banks in a developing country, that is, India. The measurement of efficiency is done by using Data Envelopment Analysis (DEA). Two models have been constructed to show how efficiency scores vary with change in inputs and outputs. The efficiency scores, for three groups of banks, that are, publicly owned, privately owned and foreign owned, are measured. The study shows that the mean efficiency score of Indian banks compares well with the world mean efficiency score and the efficiency of private sector commercial banks as a group is, paradoxically lower than that of public sector banks and foreign banks in India. The study recommends that the existing policy of reducing non-performing assets and rationalization of staff and branches may be continued to obtain efficiency gains and make the Indian banks internationally competitive which is a declared objective of the Government of India. As per Model A, the Public Sector banks have a higher mean efficiency score as compared to the Private Sector and foreign Commercial banks in India. As per Model B, they have lower mean efficiency score than the foreign banks but still higher than private sector commercial banks. Most banks on the frontier are foreign owned. The study recommends that the existing policy of bringing down non-performing assets as well as curtailing the establishment expenditure through voluntary retirement scheme for bank staff and nationalization of rural branches are steps in the right direction that could help Indian banks improve efficiency over a period of time so as to achieve world best practice.

49. Dr. Janardhan G.Naik M.Com., L.L.B., AICWA., Ph.D., Head, Department of Accountancy, Gogle College of Commerce, Belgaum, has published the cover feature of NPAs Management Challenges before Banking Sector-The Management Accountant, May, 2006:

The problem of NPAs, though not new at all, has assumed different size and magnitude with the growth and structural changes in the banking sector in India. In this study, main focus is on NPAs of public sector banks, old private sector banks, new private sector banks and foreign banks. The co-operative banking sector, regional
rural banks and all financial institutions have been left out, although they too have NPAs problems. This study has found out that the ratio of Gross NPAs to Gross Advances has consistently fallen from 18 percent (1996-97) to 8.8 percent (2002-03). Same is the case with Net NPAs to Net Advances Ratio. It is an indication of good recovery and sufficient provisioning for doubtful debts and write off bad debts. In fact, the provisions made by Indian banks is much higher than the international norm. Going by Basel II norms and other international best practices, our banks are expected to manage NPAs quite efficiently. Surely the reforms in the legal system in the recent years such as SARFAESI Act 2002 will help in faster recovery of NPAs. The Government of India is also determined to see that Indian Banks start their operations on clean slate after wiping all NPAs. For this purpose ARCs are set up to manage NPAs.

50. Indira, Rajaraman, Garima, Vasishtha-Published a paper titled “Non-Performing Loans of PSU Banks–Some panel results”-Economic and political weekly-February 2nd, 2002:

The paper performs a panel regression on the definitionally uniform data available for a five-year period ending in 1999 – 2000, on non-performing loans of commercial banks. The exercise is confined to 27 public sector banks, so as to investigate variations within a class, that is, homogeneous on the ownership dimension. The exercise groups banks with higher than average NPAs into those explained by poor operating efficiency, and those where the operating indicator does not suffice to explain the high level of NPAs, and leaves an unexplained intercept shift. Two of the three weak banks identified by the Varma Committee, Indian Bank and United Bank of India, fall in this category. Recapitalization of these banks with operational restructuring may therefore not be the solution, since there is clearly a residual problem even after controlling for operating efficiency.

51. Indira Rajaraman, Sumon, Bhaumik and Namita Bhatia – Published a paper titled “NPA variations across Indian Commercial Banks–Some Findings”-Economic and Political weekly-January 16-23, 1999:

The Indian commercial banking sector is characterized by both a high average non-performing share in total bank advances and a high dispersion between banks. This paper presents the findings of a formal attempt to explain inter-bank variations in NPAs for the year 1996-97. The specification tests for the impact of region of
operation on domestically-owned banks, as measured by percentage branches in each of a set of state clusters. One cluster of three eastern and seven north-eastern states carries a robust and statistically significant positive coefficient; another cluster of the southern and some of the northern states carries a significantly negative coefficient. These findings bear out those of Demirguc-Kunt and Huizinga on the significance of the operating environment for bank efficiency. No sustainable improvement in the performing efficiency of domestic banks is possible without prior improvement in the enforcement environment in difficult regions of the country. Another finding of some importance is that it is not foreign ownership in and off itself so much as the banking efficiency and technology correlates of the country of origin of the foreign bank which determines NPA performance in the Indian environment.

52. Pradeep K. Mittal, FCs Advocate, Delhi-Chief Advisor-PKMG Law Chambers and Central Council Member, The Institute of Company Secretaries of India-Published an Article, “Powers of Financial Institutions and Banks under Securitization Act: Critical Analysis of Supreme Court’s Judgement in Transcore’s case” – March 2007:

The securitization and reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 was enacted to expedite the realization of money due to Banks with a view to get over the NPA malady of Banks, since recourse to the Recovery Act of 1993 involved delays. An important controversy relating to these two Acts was recently resolved by the Supreme Court in Transcore’s case, highlights in brief of which is presented in this article.


The expert views are, “The success achieved in the management of NPAs should lead to a gradual improvement in the asset quality of banks. Asset quality holds the key to sustainable NPA management”.
54. Mr. Sumant Batra, Senior partner, Kesar Dass B & Associates, India – Published an Article titled, “Developing the Asian Markets for Non-Performing Assets - Developments in India”- Forum for Asian Insolvency Reform (FAIR) – Seoul, Korea 10-11 November, 2003:

The conclusion of this Article, till recent past, corporate borrowers even after defaulting continuously never had any real fear of banks taking any action to recover their dues despite the fact that their entire assets were hypothecated to the banks. This is because there was no legal Act framed to safeguard the real interest of banks with the legislatures having given their mind in enforcement of security, the sun probably would shine on the NPAs–ridden Indian banks. Enactment of SARFAESI ACT, 2002 is evident for drawing this assumption. Also, the passing of the Securitization Act, 2002 came as a bonanza for investors in banking sector stocks that in turn resulted into an improvement in their share prices. While NPA cannot be eliminated, but can only be contained, it has to be done not at a heavy cost of provisioning and increasing the portfolio of credit. Along with recovery fresh inflow of NPA should be brought down at a level much less than the quantum of its exit. If this specific goal is reached, there is an eventual solution for this problem. Radical legal reforms and sound corporate good governance is essential for the success in NPA management.

55. Thirumoorthy Paramasivam – Deputy Director, the Institute of Chartered Accountants of India, New Delhi-The Paper titled, “Future Flow Securitisation- An Innovative Financing Technique for Indian Infrastructure sector” was originally presented in seminar on ‘Financial Management and Institutional Reforms in Highway Sector’ organized by the Indian Roads Congress held on 18th and 19th November, 2002 at New Delhi and printed in the Preliminary Publication. Indian Roads Congress gave permission to reproduce the paper in the (ICAI) Journal – May 2002.

This article explains securitization and shows how organizations involved in infrastructure development and maintenance can use it to gain direct and indirect benefits. More importantly, it discusses how securitization can enable certain companies to achieve a reduction in financing costs by providing access to lower cost capital market funding and also explores potential innovative uses of this financing
technique. Future flow securitization, which is having specific appeal to organizations involved in the development and maintenance of infrastructure, has been discussed. Apart from reviewing the asset securitization environment in India, macro economic policy suggestions have been also given to develop a sound secondary market for securitized instruments in India.


This study makes an attempt to evaluate the technical efficiency of the banks operating in India in the post-reform era. The study uses a non-parametric linear programming-based technique. Data Envelopment Analysis (DEA) is used to determine the technical efficiency of the public, private and foreign banks operating in India. The study has also investigated the relationship between the efficiency and the percentage of non-performing assets (NPAs) of the commercial banks operating in India. The results show that the efficiency of the banks has improved over time and that the foreign banks have outperformed both private sector and public sector banks. Competition has increased sharply amongst the banks in the post-reform era. Therefore, it is evident that banks have responded positively to the reforms. It is concluded that the Indian banking sector is likely to witness greater thrust on reforms in coming years.

57. Nachiket Mor, the Executive Director of ICICI Bank Limited and Bhavna Sharma, an Economist with ICICI Bank Limited – presented a paper titled:

This paper attempts to highlight some major micro-level issues that the authors believe are at the root of why unsustainable performance levels are being observed within banks. The authors argue that unless the micro level issues are dealt with, even after the systematic issues are resolved, the problem of NPAs or other failure of the intermediation process may resurface with greater intensity. The manner in which banks manage the three phases in the life cycle of an asset (creation,
monitoring and recovery) determines the quality of the intermediation process within a bank. In this paper, the need for internally consistent business models to guide the behavior of a bank in each of these three phases is discussed. It is argued that the current set of organizational competencies, the regulatory framework in which the banks operate, the quality of disclosure and the incentive structure of the management and Boards produce an inconsistent framework, which leads to an unsustainable performance level for a bank. The role of parsimonious but sufficient statistics such as the Economic Value of Equity (EVE) and EVE at Risk (EVER) (if mandatorily disclosed on a monthly basis) in making these inconsistencies visible and therefore aiding in their elimination, is also explored in the paper.

58. Gourav Vallabh – Professor (Finance), XLRI Jamshedpur, School of Business and Human Resources, Jamshedpur, India, Anoop Bhatia and saurabh Mishra-student, Business Management, XLRI Jamshedpur, India - presented a paper titled “Non-performing Assets of Indian public sector, private sector and foreign banks: An Empirical Assessment” at the international conference on business and finance held during December 22-23, 2006, at the ICFAI Business School, Hyderabad, India.

This paper aims to find the fundamental factors which impact NPAs of banks. A model consisting of two types of factors, viz., macroeconomic factors and bank-specific parameters, is developed and the behaviour of NPAs of the three categories of banks is observed. This model tries to extend the methodology of widely-known Altman model. The macroeconomic factors of the model included are GDP growth rate and excise duty, and the bank-specific parameters are Credit Deposit Ratio (CDR), loan exposure to priority sector, Capital Adequacy Ratio (CAR), and liquidity risk. The results show that movement in NPAs over the years can be explained well by the factors considered in the model for the public and private sector banks. The collinearity between independent variables was measured by Durbin-Watson test and VIF characteristic and it was found to be a little for public and private banks. The factors included in the model explain 97.1 percent (adjusted R-square value of regression results) of variation in NPAs of public banks and 76.9 percent of the same of private banks. The other important results derived from the analysis include the finding that banks’ exposure to priority sector lending reduces NPAs.

This study investigates the differences in the financial characteristics of public sector banks, private sector banks and foreign banks in India based on factors, such as profitability, liquidity, risk, and efficiency to identify the differences. The multinominal regression analysis was used on the sample of 74 Indian Commercial Banks comprising 27 public sector banks, 24 private sector banks and 23 foreign banks for the period 2000-05. The findings suggest that foreign banks were better performers, as compared with the other two categories of banks, in general and in terms of utilization of resources in particular during the period chosen for the study.

The above mentioned studies did not take into account the NPA level of all the banks operating in India, viz., Public Sector Banks, Old Private Sector Banks, New Generation Private Sector Banks and Foreign Banks operating in India. Hence, the present study has been undertaken by the researcher.