Chapter II

Review of Literature
2. Introduction

Number of government committee reports, Reserve Bank of India, Bank internal studies, and individual research studies are available in analyzing NPAs in India.

In this chapter, an attempt has been made to review the existing studies in order to identify the pertinent issues and gaps relating to NPAs in India.

2.1. Relevance of the Study

Reserve Bank of India as the regulator has set up committees, conducted studies, framed guidelines for identifying NPAs from time to time and published an occasional paper. Indian government took initiative in revamping financial sector and banking system by setting up of Narasimham Committee I, II, Verma Committee especially on restructuring weak banks and PannerSelvam Committee on NPAs. The government as lawmaker responded positively to the accusation of absence of strict legislation for lender protection. The Confederation of Indian Industry constituted a committee under the chairmanship of Kamath. There were internal study reports on NPAs of banks and an international rating agency report on NPAs of selected banks and financial institutions.

Few by researchers carried out empirical studies on various aspects of NPAs such as type of loan and type of borrowers causing NPAs in commercial banks in one of the districts of Andhra Pradesh defaulter profile in Karaikal region, causes for NPAs, variations across Indian commercial banks, lessons from international experience, comparison of efficiency of banks across bank groups in reducing their NPAs, NPAs of public sector banks, determinants of NPAs of public sector banks, cost of NPAs relationship of NPAs with micro and macro variables, quality of advances of private and public sector banks and determinants of NPAs.

2.2. Review of Literature

There have been many researches and studies on public sector commercial banks in India. A brief review of these studies is highlighted in the following paragraphs to highlight the importance of the present study.
Angadi (1983) measured the efficiency in terms of responsiveness of operating cost by using important yardsticks like operating cost responsiveness, administered prices/interest rates to the total business of banks. Joshi (1986) in his study identified banks’ weakness in the fund management due to compulsory provision of SLR, CRR and priority sector lending. The study observed that the low yield rate and rising cost contributed a lot to the declining trend in profitability of banks.

Godse and Padwal (1987) studied the issues of bank’s profitability and developed a simple framework to analyze the factors influencing the profitability of commercial banks. They viewed that any emphasis on the increase of the volume of business and proper management of burden would definitely result in enhancing the profitability of banks. They concluded that the key factor to the profitability of expenses, which were popularly practiced.

Singh (1987) identified many exogenous and endogenous factors causing strains and stresses in the banking system. The majority of them constitute continuous increase in the SLR, CRR by RBI, banks’ compulsion on achieving social goals, growing incidence of industrial sickness, rapid branch expansion in the under banked areas, unfavourable change of deposit mix and growing incidence of financial disintermediation. Malhotra (1991) examined the nature and efficacy of banking instruments and suggested the banks should diversify their product and develop instruments so as to meet the aspirations of borrowers and investors in the context of the emergence of various savings schemes of other financial institutions, post office etc.

Rangarajan (1991) pointed out that improving the quality of loan assets is the true test of improving the efficiency of the banking system. Narasimham Committee
I(1991) identified weakness of banking sector and recommended provision for capital adequacy; liberalization of interest rate; reduction in SLR, rehabilitation of PSBs by government; introduction of prudential norms relating to income recognition, asset classification and provisioning and easy norms for entry of foreign banks. The committee also suggested for directed credit programme to ensure the credit requirement of the priority sector.

Goiporia (1992) made a general review of the profitability of banks and maintained that for adequate profit flow, the following priorities will have to be observed by the banks (a) lending operations have to be directed to areas which would maximize profitability and growth (b) non-fund based operation should be promoted and (c) charging fees for bank services should be determined after taking into consideration the cost and benefit of services offered. Hartough (1994) studied the implications of bankers’ action plan for profitable small business portfolio. He suggested that considering customer’s payment history and market condition etc, bank should make advance to most attractive and growth potential units. Gundannavar and Ojha (1995) commented that, in any system of loaning, some amount of advances turning bad and doubtful was inevitable. The net loan losses as a percent of equity capital for insured US commercial banks during 1971-80 varied between 1.92% and 5.25%. Indian banks do not report the provisions made to meet the losses on account of bad debts. The problem of non-performing assets reached gigantic proportions in India and made several banks sick.

Goldstein (1996) in his study on capital norms of banking sector argued that developing countries, with few exceptions, have not set national capital standard much above the basic minimum norms and their banks do not hold actual capital much above than the banks operating in the countries with stable environment. Patel (1996) in his

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paper realized that the traditional banking ethics were not compatible with the needs of economic development and that the balanced development was not possible without strengthening the hold of commercial banks in the backward and neglected areas. With a view to bring the down-trodden, hitherto neglected sector households to the mainstream, fundamental changes in the traditional banking norms were called for to move away from security based credit towards programme oriented credit.

Kohli (1997)\textsuperscript{13} examined the priority sector lending. He observed the existence of significant linkages between bank credit and investment in both agriculture and industries in India. He suggested that although directed credit programme for priority sector lending is effective in India, however, positive support to small-scale units is required. Toor (1997)\textsuperscript{14} discussed the implications of NPAs result in loss of interest income while provisioning put an end to recycling of funds limiting the revenue further. The losses were huge because of the concessions offered under nursing programmes reduce interest earnings and these reductions were not allowable expenditure for computation of income tax for banks. Further, the stuck up funds become block on the future lending operations including to preferred sectors. The cost of managing credit which includes inspection and record maintenance rise exorbitantly. The time taken for meetings, preparation/submission of various statements/returns is costly propositions. Bankers are bogged down with these matters, thereby neglecting their role as a development catalyst. In fact, the time and costs spent on these accounts can be more profitably devoted to well - run units and related developmental work.

Pritibandla and Prusty (1998)\textsuperscript{15} analyzed the financial system in the context of East Asian Crisis and suggested the need of right and effective financial institutions. Patel and Kaveri (1998)\textsuperscript{16} studied the incidence of NPAs in direct agricultural lending and integrated rural development project – the two sub sectors of priority sector during the period 1989-95. It was found that NPAs increased in both the type of loans over the years. The paper quoted the results of a study conducted by National Institute of Bank

Management on selected accounts in 11 banks (23 branches), which successfully managed their NPAs in the priority sector. According to the managers of the selected branches following factors are responsible for creating NPAs in the priority sector.

- lack of proper follow up,
- failure to take action against willful defaulters,
- lack of income generation due to natural calamities and other uncertainties,
- effect of agricultural debt relief scheme,
- government’s pressure for financing schemes under poverty alleviation programme and other popular schemes,
- mismanagement of funds,
- mentality of people and attitude to default willfully,
- non-cooperation of government agencies in recovery,
- improper selection of borrowers/activities,
- under financing/non-financing in time and bank’s failure to appreciate the acts of good payers.

The work was one of the pioneering efforts in the direction of successful recovery of loans in the branches.

Narasimham Committee II (1998)\footnote{Government of India (1998): Report of the Committee on Financial System II, Ministry of Finance, New Delhi.} addressed the issue of NPAs at length and in detail and made remarkable suggestions. It was asserted that directed lending had affected the quality of assets. It has set target for gross NPAs at 5% by the year 2000 for banks with international presence and 3% for others to be attained by 2002. And the net NPAs should be reduced to 3% and 0% by the same dates. The committee made policy guidelines to banks regarding the ever-greening of loans and cleaning of balance sheets. Since a major portion of the priority sector credit goes to government sponsored poverty alleviation and employment generation schemes, branch managers should be held fully responsible for the identification of beneficiaries under the government sponsored credit linked schemes. Banks in India should widen the scope of priority sector and include employment – oriented sectors like food – processing and related service activities in agriculture, fisheries, poultry and dairying. Elimination of interest

subsidy for priority sector loans and deregulating interest rates on loans less than Rs.2 lakhs will make these loans profitable to the banker.

The committee recommended reduction of 180 days period for identifying loan default to 90 days in a phased manner by the year 2002. Another important suggestion was banks should apply the NPA norms even to the government guaranteed advances. Banks should evolve independent loan review mechanism for large accounts and systems to identify potential NPAs. The committee wanted to differentiate client specific NPAs from other NPAs caused by region specific distress. And it was suggested that the power to declare a particular crop or product or a particular region as distress hit should be based on techno economic consideration entrusted to the technical body like NABARD. The committee addressed the two sides of NPA problem – prevention and resolution at length. Prevention of NPAs required improved systems and techniques of credit appraisal, credit monitoring and exchange of information on borrowers to stop the slippage of standard loans into bad loans. Resolution of existing NPAs was possible with the help of variety of measures, to name a few –

- legal changes to set up Asset Reconstruction Fund,
- special recovery cells manned by people with skills,
- periodical meetings with borrowers,
- exploring possibilities for compromise,
- acquiring additional security for loan assets,
- upgrading information technology for better credit administration,
- more debt recovery tribunals and tribunals for speedier recovery of NPAs,
- compromise and write offs.

Thus the discussion on causes for high level of NPAs concluded that poor credit appraisal, inadequate credit monitoring and policy directions as responsible factors.

Hugar (1998)\(^{18}\) while analyzing first phase of reforms found that with the introduction of reform packages, banks have improved their profitability, started cleaning their balance sheet, improved the NPA position, but they are yet to give more

focus on rationalizing cost structure. Verma (1998) viewed in the context of ongoing globalization process that Indian commercial banks are getting their shape well and becoming technologically better equipped and stronger in the capital base. Economic and Political Weekly (EPW) Research Foundation Group examined the dynamic credit policy (1999) and suggested that against the prevailing backdrop of output, price and monetary trends, the credit policy has to be decisively explanatory. Department of Banking Supervision (1999) studied the impact of priority sector advances on NPAs and found that the incidence of NPAs in priority sector is much higher in view of the fact that priority sector advances constitute 30-32 per cent of the gross bank credit.

Taori (1999) felt the need to reduce NPAs for protecting profitability of banks. A wide range of powers for banks were foreseen along the lines of State Financial Corporations to proceed against defaulters directly and recover the dues by bringing mortgaged property to sale, to take over the management or possession or both of the industrial concern, to go to court for sale for enforcing any surety for transferring the management restraining the industrial concern from transferring or removing its machinery in case of default by any industry and the procedure to be followed by the judge in case of application under Section 31. Such powers ensure protection to lenders through forceful recoveries of default loans. Debt Settlement Tribunal to be set up for resolving NPAs in addition to DRTs. Thus Taori’s approach to NPAs resolution called for more legal powers to lenders.

Verma Committee (1999) identified three banks, viz., Indian Banks, United Commercial Banks and United Bank of India, as weak on the basis of (i) extent of accumulated losses and volume of non-performing assets (NPAs); ii) status of operating profit less income from recapitalization for three consecutive years. The committee viewed that in the long run privatization is good option for restructuring weak banks. It recommended the measures to clean the balance sheet saddled with large

NPAs by creating Asset Reconstruction Fund (ARF) and suggested to introduce Voluntary Retirement Fund (VRF) enabling banks to reduce excess manpower as well as to establish Financial Restructuring Authority. Panner Selvam Committee (1999)\textsuperscript{24} focused its attention on NPAs of public sector banks. It joined the bandwagon of earlier researchers who pointed out the legal inadequacies prevailing in the country as major reasons for the slump in recoveries and growth of NPAs. The time-consuming court procedures caused difficulty in disposing the securities backing the NPAs. The long drawn legal procedures encouraged incidence of NPAs and also prolong their existence.

Thingalaya (1999)\textsuperscript{25} described the history of delinquency of agricultural loans in India. Poor recovery of loans was caused by natural factors, deficiencies of the credit delivery mechanism and human indiscretion. Taking a cue from the success stories of Malaprabha Grameena Bank, Bijapur Grameena Bank in Karnataka and the Ananta Grameena Bank in Andhra Pradesh, it was suggested that successful credit management include steps such as realistic pre sanction appraisal, analysis of the viability of the scheme and assessment of credibility of the borrowers. Since higher recoveries were possible, loan waivers should not be allowed. He reiterated that the level of NPAs in Indian Banking industry was very high because of misdirected credit. It was felt that just because lending is directed; it need not necessarily result in NPAs. Medium and large industries were also found to be contributing to NPAs.

CII Task Force Committee (1999)\textsuperscript{26} explored that NPAs in India were not found to be as endemic as it was in Southeast and East Asia and they do not present a systemic risk but the dangers are real enough. It also looked into the genesis of NPAs were proportionately far greater than total NPAs. It was felt that the commercial banks had to bear the brunt of large NPAs on account of priority sector lending, unviable units, high debt – equity ratios in the projects, failure of the projects, booking of the interest on an accrual basis irrespective of actual payment, directing lending and a wide variety of non-commercial objectives, the banks have to fulfill. Diversion of funds, found in the study conducted by RBI, was the most significant cause of NPAs in non-


priority sector lending. The most radical suggestion made by CII was to privatize the public sector banks and financial institutions, milder ones being adjusting risk weights and provisioning norms according to the credit rating of the companies and the improvement in the disclosure practices of banks and financial institutions.

Rao (2000) opined that management of NPAs became the Critical Performance Area (CPA) for all the public sector banks. He presented a bird’s eye view of the bank-wise gross and net NPAs of the scheduled commercial banks, their lending practices, the available recovery measures, the tardy judicial system and political interventions. Banks were advised to concentrate on credit management and not on recovery management. Taori (2000) felt that higher provisioning requirements on mounting NPAs adversely affect capital adequacy and also bank’s profitability. It was predicted that the position would deteriorate further in the coming years due to more provision requirements on standard assets, invoked government guaranteed accounts and classification of sub-standard assets in doubtful category beyond 18 months instead of 24 months. Besides, this will limit bank’s autonomy and expansion plans into new ventures i.e., insurance sector. To ensure the code of best practices Gadkari (2000) proposed corporate governance in the public sector banks to achieve high standard of corporate behaviour. He also suggested that the board of directors, external auditors and supervisors of PSBs strive to achieve greater degree of openness, transparency, integrity and accountability in the working of the banks. Srivastava (2000) stressed on accelerating the pace of the process of computerization of bank branches to enhance the profitability, operating efficiency, service quality and to diversify the earning base.

Bhattacharya (2001) rightly pointed out the fact that in an increasing rate regime, quality borrowers would switch over to other avenues such as capital markets, internal accruals for their requirements of funds. Under such circumstances, banks would have no option but to dilute the quality of borrowers thereby increasing the

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probability of generation of NPAs. Roy (2001)\textsuperscript{32} articulated that customer loyalty management programme should be an important part of the relationship marketing exercise undertaken at the bank branches. Banmali (2001)\textsuperscript{33} suggested a dispassionate and unprejudiced approach to weed out NPAs. A broad based and multi-pronged attack to the problem is necessary involving all staff members’ right from the grass root level to the controlling points. The banking sector in India poised to meet the changing global environment observed by Kamesam (2001)\textsuperscript{34}. In this context, he viewed the future of banks will largely depend on excellent customer service by keeping pace with changing technology and transparent operations.

Namboodiri (2001)\textsuperscript{35} wondered at the staggering volume of NPAs as on March 31\textsuperscript{st} 2001 and advised bankers on the methods to be applied for NPA management. Adverse selection was found to be one of the major reasons for growing NPAs. Credit monitoring avoids slippage in the asset quality and upgrades the assets while credit appraisal is the earliest best option to ensure asset quality. It was believed that the magic was in 5Cs (character, capital, capacity, conditions and collateral), 6Ms (man, money, machine, material, men and market) and 7Ps (product, project, purpose, place, people, policies and profits). Vidwan (2001)\textsuperscript{36} threw new insights into the computation of percentage of Gross NPAs to Gross Advances. It was argued that the present method should be replaced with NPAs as on 31\textsuperscript{st} March ÷ Advances as on September of the previous year because the definition stated that advances disbursed in the period of 6 months prior to a date, cannot become NPA. Effective training, proper attention to periodical inspection, enlightened supervision along with credit and legal reforms were solutions to the NPAs issue.

Rao (2002)\textsuperscript{37} observed that customer service is a dynamic, creative and interactive process where the banker and customer are actively involved in improving

\begin{itemize}
  \item Vidwan, H. P. (2001): “Non-Performing Advances: A Disease or A Symptom”, Vinimaya, July-September.
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the process continuously. The study concluded that the bankers should aware of keeping themselves at least one step ahead of the customers. Das (2002)\textsuperscript{38} analyzed the level of risk and productivity of public sector banks and observed interrelationship of the fact that the productivity, capital base and risk taking attitude to be jointly determined and reinforced. Bhukta (2002)\textsuperscript{39} articulated that the banking reforms are against the long run objective of reducing fiscal deficit of the government. In this situation he argued that the reform should not be halted rather proceeded following trial and error method.

Muniappan (2002)\textsuperscript{40} was concerned over the high level of NPAs and poor loan asset quality in banks and financial institutions. During 1992-93 to 2000-01, gross and net NPAs decreased. Public sector banks lost more than Rs.5000 crore per annum by way of loss of interest income. High level of NPAs was common in all bank groups in India but the speed with which new private sector banks accumulated NPAs was worrisome. There was vast difference in the state of provisions made by private and public sector banks and those in developed countries and India. A major portion of the NPAs was the legacy of the pre prudential days, when banks were accounting for interest income on accrual basis even when underlying advance was not performing. Impact of NPAs on current profits will be in the form of provisioning requirement, while reduced interest income the recycling of funds resulting in asset liability mismatches. The recovery of NPAs under priority sector advances particularly agriculture, small-scale sector industries was hampered by externalities. Such accounts were spread over a large number of accounts and for small amount. This study agreed with the internal and external factors contributing to NPAs announced in the RBI internal study. Directed lending contributed to the buildup NPAs of banks in India. Large borrowers were reluctant to honour their repayment obligations. Results of the internal study conducted by RBI were reproduced in this report.

\textsuperscript{40} Muniappan, G.P. (2002): RBI Deputy Governor’s Address at CII Banking Summit, Mumbai.
Reserve Bank of India (2002) suggested Early Warning System in banks for identification of NPAs and initiating steps for their prompt recovery. Based on data from banks, the study attempted to identify financial and operational distress signals. The Board for Financial Supervision observed that there ought to be systems in banks to process Early Warning Signals emanating from potential NPAs. It directed the Indian Banks Association to develop suitable software for the same. It proposed to initially bring out a manual incorporating early warning signals for the use of banks. Kumar (2002) argued for making the law a fool-proof one, beyond circumvention by the lenders or abused by defaulters. Suggestions made were on the following lines. Section 2 (zc), should include corporate guarantee, 2 (zf) to include the rights of banks under decree obtained under a tribunal, 5 (1) (b) to be amended to include asset reconstruction companies also, 9 to be redrafted to ensure the provisions of this act to prevail over any other law, 13 (13), declare the transfer of any property by the borrower after the date of notice as void, 13 (4) to insert a provision to enable application of these provisions to the cases already before Debt Recovery Tribunal. The amendments proposed also included – permitting borrowers to raise genuine counter claims, state governments to reduce stamp duty and ensuring that the provisions were not used indiscriminately.

Ranjan & Dhal (2003) dealt with the various reasons behind assets turning non-performing and have also analyzed their macroeconomic implications. Mukherjee (2003) reviewed the recommendations of various committees in India with respect to reduction of NPAs and the international practices for resolving NPAs. Different countries adopted different methods to reduce the NPAs. It was closure of banks, mergers and acquisitions and injection of capital by Government in others. Generally, legal reforms can resolve NPAs. During 1996-97 to 2001-02, there was convergence in the performance of public sector banks and private sector banks with reference to NPAs. The public sector banks had declining gross and net NPAs while the old private

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banks remained more or less constant and the new private sector banks had increasing NPAs. With reference to incremental ratios of gross and net NPAs, performance of public sector banks is satisfactory while that of new private sector banks, which were of recent origin, was very poor. NPAs influenced the interest costs of banks, caused the vicious circle of losses, write offs, loss of capital and weakened the health of the bank ultimately.

Jhaveri (2003) discussed the plight of Indian financial intermediaries which were nursing sizeable amounts of non-performing assets. Vanishing of high quality of borrowers, disproportionate increase in government securities and aversion to small businesses were driving banks towards substitution of industrial assets with retail assets. It was felt that lending for social purpose should be commercially viable to the lenders. Pointing out the gravity of the situation, Shanker (2003) asserted that it would be impossible for a bank with high NPAs to be either vibrant or competitive. Gross NPAs of the banking sector amounted to Rs.70,905 crore in 2002-03, which was 10% of the gross advances of the banking sector. Future of Indian banking under these conditions rests on its ability to recover its money especially from the willful defaulters. Enactment of the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act 2002 by the government helped banks and financial institutions to recover their funds. Proper recovery mechanisms will ease out the pressure on interest rates and genuine borrowers can obtain credit at competitive rates.

Sarkar (2003) portrayed the role of financial sector reforms in strengthening the functioning of financial markets, raised concern about NPAs affecting the profitability and viability of banks. Though NPAs of commercial banks declined over the past several years, they were still high compared to the standards of the developed countries. Banks should be equipped with prudential norms and forward-looking provisioning systems to stay healthy. Provisions against the impaired assets in India were 42.5% of the gross NPAs March 2002, low by the international standards, where

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it will be often as high as 140%. Two-pronged approach should be adopted to clean the balance sheet of banks and prevent future NPA accretion. Monitoring techniques and exchange of credit information among banks can be used to prevent further incidence of NPAs.

Singh and Tyagi (2003)\textsuperscript{48} also reviewed NPA scenario in Indian banks during a four year period and found the declining trend in NPAs. Public sector banks accounted for 89\% of the total NPAs of the banking industry, followed by the old private sector banks. The paper repeated the findings of Muniapppan. Net NPA position of public sector banks improved but SBI group was found to be better than the nationalized group with respect to NPAs coverage ratio, i.e., the ratio of loan loss provisions to NPAs. On comparison with select countries it was found that India was relatively better placed with higher reserves for loan loss assets. Priority sector was the largest contributor for NPAs in 2001, followed by large industries (21\%), medium scale industries and other non-priority sector contributed equal share of 15.8\% while the public sector units contributed 2.4\% to the NPAs.

Gujral (2003)\textsuperscript{49} assessed the NPA situation in Indian Banking System and evaluated the effectiveness of the Securitization Act and other recovery measures. He reiterated the devastating effect of NPAs on the profitability, capital base and recycling of funds of the banks. The quantum of NPAs as on 31.03.2002 was Rs.70,904 crores and the public sector banks were losing more than Rs.5,000 crores per annum as interest apart from servicing and litigation costs. Though various debt recovery measures like Lok Adalat, DRTs, one time settlement, credit reconstructing and securitization act 2002 were available, moral degradation, lack of commitment on the part of the borrowers, slow and inefficient legal system, diversion of funds, demand recession, depressed capital market, changes in the government policies, environment and pollution control measures, fear psychosis among banks for compromise settlements, industrial sickness, labour problems, improper and inadequate credit appraisal systems, poor policing of assets by banks, political compulsions were causing mounting of the dud loans.


According to Reddy (2004), there is a considered view that the lending policy of banks could have crucial influence on non-performing loans. He critically examined various issues pertaining to terms of credit of Indian banks and argued that the element of power has no bearing on the illegal activity. A default is not entirely an irrational decision. Rather a defaulter takes into account probabilistic assessment of various costs and benefits of his decision. He raised various critical issues pertaining to credit delivery mechanism of the Indian banking sector. The study focused on the terms of credit such as interest rate charged to various productive activities and borrowers, the approach to risk management and portfolio management in general.

Ramakrishna and Bhargavi (2004) opined that even though NPAs were not new, the enormous volume has weighed down Indian banks in the recent years. It has caused banking crises and sometimes even threatened to sicken Indian banking system. "..... for every Rs.100 in NPA, the bank is losing Rs.30 per annum - Rs.8 towards average interest paid on deposits, Rs.10 towards provision and Rs.12 towards non-recognition of income at PLR – within 3 years, the loss is as much as the capital". The BIS working paper 13 (2004) examined bank failures in mature economies, the causes, solutions and the impact of such failures on legislative and regulatory changes. Credit concentration risk was cited as the cause in 9 out of 13 episodes. All the episodes that involved large amounts of public support were caused by credit risk problems. It was suggested that insolvencies caused by credit risk might be reduced by the extensive use of credit default swaps and derivatives.

Banerjee and Dan (2004) dealt with different aspects of NPA management. Various curative measures such as systematic and close monitoring of non-performing advances, recovery camps, redesigning of unpaid loans were examined. Preventive measures included establishing credit-monitoring department, strengthening the traditional follow up system, circulation of list of defaulters, adopting risk approach while sanctioning credit and introducing the needed flexibility in the recovery schedule.

Nilesh (2004)\textsuperscript{54} overviewed the NPA level in scheduled commercial banks in India during the period of 1999-03. It was felt that the real amount of NPAs would be quite alarming as there can be hidden NPAs in India apart from the reported NPAs. The genesis of NPAs lied in the unviable pre liberalization units, large post liberalization investments and high dependence on institutional debt in a high interest rate regime. There were various other factors, which added to the NPAs. Pro-active audit, good corporate governance measures and honest efforts to detect and prevent NPAs could prevent NPAs.

Pricewaterhouse Coopers (2004)\textsuperscript{55} conducted a study of NPA management in seven lenders (Banks and Financial Institutions) in India, studied their internal control systems for identification of NPAs, legal framework and regulatory mechanisms. The study dealt with 40\% of gross NPAs of public sector banks, 45\% of gross NPAs of private banks and 53\% of gross NPAs of financial institutions in India. There was significant reduction in NPAs due to various recovery and resolution mechanisms in operation. The region-wide distribution of NPAs was also observed in these institutions. Maximum number of large NPAs was in the western region, followed by the southern and northern region (24\% each). Eastern and Central regions have lower proportion of NPAs at 10 and 6\% respectively. Industrial slow down caused NPAs in the industrialized regions, while 23\% of the NPAs were of priority sector advances. The public sector banks had 46\% of their NPAs arising from priority sector advances. In addition to causes enlisted by RBI internal study, other causes for NPAs were also identified. Lopsided credit monitoring systems, directed lending without commercial imperatives and willful defaulters to mention a few of them. SARFESI Act, OTS, CDR mechanism and strengthening of DRTs could help reducing NPAs in India. Developing the ARC market, introducing credit risk management in banks, transparency in banking activities to disclose and not to conceal NPAs, improvement in legal actions and effective monitoring of restructured loans contribute significantly for the recovery of NPAs.


Pereira (2004)\textsuperscript{56} analyzed the relevant issues in the emerging NPA business that deters investors from investing in NPA portfolio of banks and financial institutions. ARCs provide direct and pooled routes for NPA financing whereas the provisions on securitizing of NPA portfolios are mentioned in the SAFESI Act. Appropriate amendments in consequential financial sector regulations for example changes in tax laws can ensure better environment. The committee on flow of credit to agriculture and related activities from the banking system headed by Vyas (2004)\textsuperscript{57} suggested a change in the norms for agricultural credit classification as NPAs. Current prudential norms were appreciated as they can track defaults not only to a specific account but also to borrower. If any loan amount of a borrower is classified as NPAs, all other loans to the same borrower are classified as NPAs even though they are repaid regularly. It is opined that the current norm of default for two crop seasons is not appropriate for longer duration crops. There are regional disparities in crop duration. For long duration crops, a loan may be treated as non-performing if interest or principal remains unpaid for one crop season after becoming due. The committee therefore recommends that while the current norm of default for two crop seasons could be retained for classification of loans as NPA, the added stipulation of two half years could be removed.

Gopalakrishnan (2004)\textsuperscript{58} dealt with the problem of NPAs in public sector banks and its impact on banks, financial system and the economy. Political, economic, social and technical reasons were identified as causes for NPAs just like in other reports. In addition to other factors, social factors such as lack of education among borrowers, general financial indiscipline in using funds, lack of integrity on the part of borrowers and bankers, delay in realizing their own dues from debtors, poor capital market support, lack of competitive spirit in the conduct of business aggravated the problem of NPAs. Lack of accountability on the part of all key players - accountants, bankers, borrowers, auditors, lawyers and valuers was accelerating NPAs problem. Using regression technique and correlation, the relationship between NPAs and many other

\textsuperscript{56} Pereira Carlton (2004): "Investing in NPAs – Will Investors Bite?" Economic Political Weekly, 16\textsuperscript{th} October, Mumbai.


micro and macro variables was established. The relationship of relationship between NPAs as a percentage of total advances and annual variation in GDP growth, index of industrial production, index of agricultural production and wholesale price index was weak. It was also found that there was negative relationship between NPAs and Fiscal Deficit. The relationship NPAs had with important micro variables such as advances, standard advances, reserves, investments, provisions, net profits, spread, legal expenses and interest on advances was also examined, using simple correlation, simple regression and multiple regression tests. NPAs were found to have high and positive correlation to advances, standard advances, reserves, investment, legal expenses, spread and interest on advances, indicative of mutual influence between these variables and NPAs. But NPAs did not have the same level of correlation with reference to variables such as net profit and provisions. He proposed a precautionary Margin Fund with contributions from banker and borrower to provide for the funds lost as NPAs.

RBI (2005)\(^{59}\) draft technical paper of internal working group identified the issues relating to necessity of priority sector lending. The working group recommended the need for priority sector lending prescriptions, the composition of priority sector which includes agriculture, SSI, small road and water transport operators, small business, professional and self-employed persons, education, housing etc. The existing system of computation of priority sector obligations in relation to NBC is based on the outstanding advances of banks. Linking the priority sector obligations to outstanding advances has its shortcomings as outstanding tend to decline as a result of better recovery, write-offs, etc. Moreover, a portion of outstanding comprises NPAs, which continue to get reflected in the achievement of banks in lending to priority sector. The disbursement during a given period is, therefore, a better indicator of banks' lending.

Arunkumar, Rekha and Kotreshwar, G. (2005)\(^{60}\), in their paper examined and compared in NPAs level, CRM practices of commercial banks, the response to reforms under basel accord II and risk based supervision as between public sector bank and private sector bank. The study found a strong relationship between NPAs level and

\(^{59}\) RBI (2005): *Priority Sector Lending*, Rural Planning and Credit Department Central Office, Internal Working Group, RBI, Mumbai.

credit portfolio diversification. Ahmed (2005)\textsuperscript{61} in a diagnosis observed that commercial banks together have gradually increased the quantum of advances to small industries but the proportion in which total bank credit in priority sector has expanded, the relative share of small sector has not grown in the same ratio during the reform regime. The weak infrastructure facilities may have prevented the greater flow of credit. The industrial campaign, awareness programmes and industrial training to the prospective entrepreneurs from the appropriate authority may be the remedy in this respect.

Sekaran (2005)\textsuperscript{62} reported the opinion of SIDBI chairman that banks consider lending to SSIs as risky as the incidence of NPAs is slightly higher in that sector. Rating is believed to be helpful to the SSIs as bankers extend loans in a speedy manner and at lower rate of interest. SIDBI along with other banks and CRISIL started a new company to rate SSIs as it wanted to be a banker plus. It also realized its duty to give all the assistance to the small industries and banks by creating a knowledge hub on the knitwear sector. Such comprehensive efforts will prevent NPAs in SSI sector. Karunagaran (2005)\textsuperscript{63} looked into the problem of NPAs in Indian banking sector. There was the highest concentration of NPAs in scheduled commercial banks. Private sector banks showed better recovery performance while the old generation and public sector counterparts could arrest the fresh incidence of new NPAs. He also reviewed the recovery mechanisms available to the bankers.

Milind Sathye (2005)\textsuperscript{64} examined the impact of privatization on bank performance and efficiency for the 5-year period from 1998 to 2002. He used synchronic approach and compared the performance of fully state-owned banks with partially privatized and private banks with respect to certain financial performance and efficiency parameters like ROA and loans – deposits ratio. But partially privatized banks from the State Bank of Indiagroup did not record similar improvement. The empirical analysis was done on the basis of performance and efficiency measures – like


\textsuperscript{62} SIDBI Activities, A News Report in the Hindu, 8\textsuperscript{th} February, 2005.


ROA, spread to working funds ratio, establishment expenses to total expenses ratio, loans to deposit ratio, NPAs to net advances ratio and efficiency measures namely - deposits per employee, advances per employee and net profit per employee. Partially privatized banks in the nationalized group performed better as compared to the fully public sector banks in this respect. Partially privatized banks seemed to be catching with those already in the private sector and improving their post privatization performance.

Kausik Chaudhuri and Rudra Sensarma (2006)\textsuperscript{65} examined the problem of NPAs and the factors responsible for them. It was observed that though NPAs declined over the years for all bank groups, domestic banks suffered heavily from NPAs, compared to the foreign banks. When NPAs management was compared across countries India ranked next to Japan, China and Korea. India’s bad loan problem was not as severe as in several other economies. The relationship between NPAs and identified variables was estimated using panel data across banks over years, with the help of random effects regression specification. Net NPAs to net advances was the dependent variable used in the model, while the independent variables were size of the bank; proportion of priority sector advances to total advances; proportion of rural and semi urban banks to total banks; return on assets; operating cost ratio; capital adequacy ratio; GDP growth ratio and growth in advances. It was found that bigger banks have lower NPAs because of better risk management procedures and technology. Rural and semi urban branches contributed to NPAs since maximum amount of priority sector credit disbursed by banks is in the non-urban areas that are generally perceived to have higher default rates. Return on assets was negatively associated with NPAs because profitable banks exhibit lower NPAs. Capital adequacy ratio is also negatively associated with NPAs, which would signify that bad loans problems not severe when the economy at large is doing well. Influence of operating cost and priority sector advances on NPAs was positive but insignificant.

Bhati (2006)\textsuperscript{66} examined the lending climate for banks in emerging economies like India. The study found that due to the government policies, banks in India undertake many additional risks when they lend. This study focused on one specific aspect of lending relationship between branch manager and loan officer of bank branches in India and recommended social risk evaluation is therefore more appropriate for risk evaluation and reduction by banks in India. An assessment on the causes and consequences of NPAs of commercial banks, by Rajesham and Rajender (2007)\textsuperscript{67}, concluded that a strong political will will only be able to find satisfactory solution to the problem of mounting NPAs.

Nil Gunasel (2007)\textsuperscript{68} provides a measure of the probability of financial institutions failure in the North Cyprus banking sector for the period of 1984-02 using a multivariate logit model. The empirical methodology employed in the analysis allows identifying the determinants of the likelihood of bank failure in North Cyprus. In this model, bank failure is a function of CAMELS rating system. He concluded that CAMELS approach appears to be appropriate for identifying weaknesses specific to individual banks. The empirical findings suggest that inadequate capital, poor asset quality, high interest expenses, low profitability, low liquidity and small asset size are significant variables that determine the likelihood of bank failure in North Cyprus.

Misra and Sarat Dhal (2008) made an analysis of pro-cyclicality of bank indicators with a focus on the non-performing loans of public sector banks in India. The empirical analysis demonstrates that banks' NPAs are influenced by three major sets of factors, i.e., terms of credit, bank specific indicators relating to asset size, credit orientation, financial innovations (non-interest income) and regulatory capital requirement and the business cycle shocks. Using panel regression model, the study found that the terms of credit variables such as interest rate, maturity and collateral and bank specific variables had significant effect on the banks' non-performing loans in the presence of macroeconomic shocks.


Uppal (2009)\textsuperscript{69} studied that NPAs were more in public sector bank group while the least was in foreign bank group, because advances by public sector bank group to the priority sector were also high. NPAs in the public and private sector bank group were high mainly due to increase in NPAs in the agricultural sector.

The review of existing literature reveals that there was dearth of empirical analysis on bank group comparison, quantification of losses arising due to NPAs. On the whole, the issue of non-performing assets in domestic scheduled commercial banks was not properly addressed in its full length, consequences, causative factors and their impact. Hence, in this study an attempt has been made to study some of the issues mentioned above in public sector commercial banks with particular reference to State Bank group with the following objectives.