CHAPTER - II

REVIEW OF LITERATURE

It is the pre-requisite for any systematic study, to review all the available relevant literature in order to design the study in a meaningful way. It also helps in framing the research questions appropriately basing on the available experiences in the study area.

In view of the importance of NPAs management in banks and in the process of reducing NPAs, large number of studies has been carried out by researchers, on the concept, type, impact, reasons and measures for NPAs in banking industry. Several research studies have been made by academicians, research institutions, Government, working groups and committees appointed by the RBI related to the commercial banks in general and also specific studies pertaining to individual banks focusing on NPAs. Research Students from various institutions and universities have also made significant contribution to this literary wealth.

The available literature relating to NPAs is in the form of committee reports, text books, research publications and research reports. However, review of relevant research papers published since and a brief review of all other available committee reports, text books and research reports relevant to the study area have
been presented chronologically under different categories – committee reports, text books, research publications and research reports.

2.1 COMMITTEE REPORTS

Tandon Committee Report (1975)\(^1\) In the background of the new approach to lending after the Nationalisation of the 14 Major Commercial Banks in 1969, with the emphasis shifting from security-oriented approach to production-related lending, so that banks should keep in close touch with the operations of the borrowers so as to ensure that the borrowed funds were properly utilized if the desired objectives were to be achieved. It was considered necessary in view of the unprecedented inflation in 1973-74 and in the context of the imbalance in the demand for and supply of bank credit and the need to curb the use of bank credit for hoarding commodities in short supply.

The Reserve Bank of India constituted a Study Group popularly known as Tandon Committee in July, 1974 for framing guidelines for commercial banks for follow-up and supervision of bank credit for ensuring proper end-use of funds. The Study Group was asked to make recommendations for obtaining periodical forecasts from the borrowers of their business or production plans and credit needs, suggest an information system for the flow of data from the borrowers to the financing banks and from the latter to the Reserve Bank.

Chore Committee Report (1979)\(^2\) Reviewed the operation of the cash credit system of lending, particularly with reference to the gap between the
sanctioned credit limits and the extent of their utilization. The Committee was required to suggest modifications in the system with a view to making it more amenable to the judicious and rational management of funds by commercial banks. The Committee was also authorized to suggest and recommend alternative types of credit facility so as to ensure greater credit discipline and use of credit limits for increasing production.

This Committee observed that the system of lending should have certain attributes so that it works effectively. The banks should be amenable to rational management of funds by banks. The banks should be able to relate credit limits to changes in output and productive activity. The system should be amenable to credit control measures by the Reserve Bank of India. The system should be convenient in terms of operation both to the banks and their customers.

The Committee indicated that the gap between the sanctioned limits and their utilization is not unique in India only. The gap arises as the credit limits are fixed on the basis of peak level requirements. Sometimes the utilization is low due to the tendency on the part of some of borrowers to inflate their credit requirements while submitting their applications as they need not to pay any commitment charge for the unutilized portion of the limit.

Pendharkar Group Report (1978) 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 of bank management for control purposes.

**Basel Group Report (1988)** adopted weighted risk assets which assigns weights to both on an 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.

**Narasimham Group Report (1991)** led to the erroneous belief that there was little worry about a low capital base of the banks. The lack of proper disclosure norms led to the problem being kept under cover. Poor internal controls raised serious doubts about the integrity of the system. All this was reflected in the need for higher spreads that pointed to the inefficiency of the system. By 1990, there was a cause for serious concern on account of poor financial condition of public sector commercial banks and financial institutions. The Government appointed a high level committee headed by M. Narasimham, Ex-RBI Governor, to examine all aspects relating to the structure, organization, functions and procedures of the financial system. The Committee made certain recommendations relating to Capital Adequacy Norms, Prudential Norms, Revaluation of the Assets, SLR, CRR, etc.
2.2 TEXT BOOKS

Toor N.S. (1997) explained the concept of NPAs and management of NPAs from bankers’ point of view and explains the strategy to be followed in handling borrowing accounts right from pre-sanction stage till recovery of the loan. The book is a practical guide for the practicing bankers and serves as a ready reckoner. However, this book does not contain any statistical data of NPAs.

Tannan M.L. (1998) stated that interest income should not be recognized until it is realized. In respect of non-performing assets interest is not to be recognized on accrual basis but is to be treated as income only when actually received. Income in respect of accounts coming under health code 5 to 8 should not be recognized until it is realized. As regards accounts classified in Health Code 4, RBI has advised the banks to evolve a realistic system for income recognition based on prospect of realisability of the security. On Non-performing accounts the banks should not charge or take into account the interest. On overdue bills interest should not be charged or taken as income unless realised.

Banbar Shahoo (2000) mentioned the various tenets of effective NPA Management and how it helps to improve bankers’ management skills at the field level. Different dimensions of NPAs, effects of NPAs on profitability, return on assets, interest rates, image of banks, the principles of NPAs Management, the
concept of NPAs and prudential norms, methods of prevention of NPAs – credit management and upgradation of NPAs are the aspects covered and it does not contain any statistical analysis of the data relating to NPAs in the banking sector.

Bidani S.N. (2001) discussed the reasons for high NPAs in banks. The cause for slippage of accounts to NPAs category are identified and categorized into (i) borrowers related (ii) bank related and (iii) general causes. The concept of NPAs is explained with references to different credit facilities. RBI instructions on asset classification, prudential norms relating to income recognition and provisioning were also discussed. Monitoring system for existing and likely NPAs along with guidelines for recovery measures and strategies and action plans for reduction of NPAs are also discussed.

Srivastava R.M. (2001) mentioned that NPAs adversely affect lending activity of banks as non-recovery of loan installments as also interest on the loan portfolio negates the effectiveness of credit-dispensation process. Non-recovery of loans also hurt the profitability of banks. Besides, banks with high level of NPAs have to carry more owned funds by way of capital and create reserves and provisions and to provide cushion for the loan losses. NPAs, thus, make two-pronged attack on the bottom lines of commercial banks; one, interest applied on such assets is not taken into account because such interest is to be taken into account only on its realization unlike interest on performing assets which is taken
into account on accrual basis; two, banks have to make provision on NPAs from
the income earned by them on performing assets.

Sundharam K.P.M. & Varshney P.N. (2003)\textsuperscript{11} reported that the declining
interest income was the result of high proportion of the total deposits – being
impounded in SLR and CRR and earning relatively low rate of interest. Further, a
high proportion of bank deposits had to be allocated to priority sectors under
social banking and the rate of interest was relatively lower. Besides, banks were
often forced to lend to dubious parties – in agriculture and industry – and much of
these loans become doubtful debts – commonly known as non-priority assets
(NPAs). The banks have long been suffering from the serious problem of over
dues.

Jain Vibha (2007)\textsuperscript{12} detailed on commercial banks, various aspects relating
to NPAs, methods of reduction of NPAs in PSBs during 1997-2003 etc. Discussion
was made on recovery measures and different types of risks pertaining
to credit management and the solutions for resolving the problems of NPAs in
South and Far East Asian Nations, initiatives and solutions taken in India.

Pai D.T. (2007)\textsuperscript{13} concluded that Indian banking system has emerged
stronger, sounder and more resilient and compares well with global range under all
vital parameters. Author has also attempted a comparison between public and
private sector banks in such areas as branch network in rural semi-urban, urban
and metro-Politian areas, market share of business in deposits advances
investment and assets advances to priority sectors, financial performance, capital and assets quality, ratio of operating profits/net profits to total assets, use of technology etc.

Rakesh Mohan (2009)\textsuperscript{14} opined that, since the beginning of reforms a set of micro-prudential measures have been stipulated aimed at imparting strength to the banking system as well as ensuring safety. With regard to prudential requirements, income recognition and asset classification (IRAC) norms have been strengthened to approach international best practice. Despite tightening norms, there has been considerable improvement in the asset quality of banks. Improvement in the credit appraisal process, upturn of the business cycle, new initiatives for resolution of Non-Performing Loans (NPLs) and greater provisioning and write off of NPLs enabled by greater profitability, have kept incremental NPLs low.

2.3 RESEARCH PUBLICATIONS

Shinde and Kaveri V.S. (1992)\textsuperscript{15} studied about non-performing assets and outlined a brief outcome of the programmes conducted on “Management of Non-Performing Advances”, by National Institute of Bank Management. The outcome was to prevent any advance becoming non-performance asset, it is necessary to identify early warning signals and take timely follow-up measures. Apart from legal remedies, the non-legal remedies include compromise proposals, role of BIFR in respect of Non-Performing assets, encouraging mergers and acquisitions,
debt discounting exchange of debt for swapping of debts, discounting of decrees, write-off of loans, use of the state Government machinery etc. The study also touched upon the recommendations made by Narasimham Committee.

Debanth (1994)\textsuperscript{16} analysed the approach of commercial banks, in managing the non-performing assets. It was observed that the credit management efforts of the banks so far have proved ineffective in checking the problem of growing non-performing assets and altogether new managerial approach was suggested for managing credit assets.

Satyanarayana K. (1997)\textsuperscript{17} has discussed the feasible non-performing asset (NPA) levels of banks for capital account convertibility. It is observed that public sector banks in India may not be able to bring down their gross non-performing assets to 5%. It is also observed that while the strong banks exhibit confidence, moving towards internationally competitive levels of capital adequacy, profitability and adequate coverage of non-performing assets, the position of weak bank is precious in this regard.

Satish and Gopalakrishna (1997)\textsuperscript{18} examined whether non-viability of banking institutions is structurally in built or not. For that they selected for districts of Maharashtra and evaluated in the profitability position of commercial banks. The analysis revealed that there were wide inter-branch variations in interest, income and interest of non-performing assets and deposits mix. In addition to it, a transfer pricing policy adapted by them is nothing intrinsically
non-viable about rural banking operations. It was argued that quantitative expansions and qualitative improvements in other business would lead to economies of scale in banking operations, thereby resulting in lower per unit cost of management and consequently, higher profitability.

Sudhakar V.K. (1998) attempted to analyze the policies pursued by PSBs since the NPA level was high for them. Researcher made an attempt to relate incidence of NPAs to industry geographical area, scheme of finance, sector, etc. and proposed the concept of Critical Amount Due (CAD) for avoidance of fresh NPAs and up-existing NPAs. A ready to use relationship model is developed for identifying CAD in existing NPA and potential NPAs. This model enabled short listing of such accounts under NPA and potential NPA categories for priority action. The NPA management should be regarded as a mass-based movement rather than an administrative function. The important findings of the study were:

1. The Appraisal was just the justification of sanction i.e., decision to sanction precedes appraisal.
2. Credit monitoring and credit appraisal should be viewed as contemporary function and current system is ineffective.
3. Lack of MIS, lack of staff accountability, legal departments etc., were the major factors creating obstacles in recovery of NPAs.
Patel K.V. and Kaveri V.S. (1998) analyzed the repayment pattern of the borrowers. They came out with eleven discernable behavior of borrowers. Ideal behavior, given as the first pattern, was where lending results in productivity Activity. Production was supported by market infrastructure and hence converted in to income of the borrower. This income was used for payment of debt. The second pattern ended with repayment. The third and the fourth pattern are most prevalent among borrowers. They use the income generated with bank rate only for partial payment of debt. The fifth pattern, the borrower diverts the income for productive purposes. In this process the economy may gain for the bankers becomes initially a looser. The sixth Pattern was a case of clear diversion and default in repayment. The remaining pattern will have varying behavioral patterns of the borrower.

Bhatia and Verma (1999) maintained that profitability of banks depends both on exogenous variable (policy determined variables such as reserve requirements and direct credit programmes) and on endogenous variables such as composition of deposit, establishment expenses, burden and spread etc. The study used the technique of step wise multiple regression with the dependent variables as net profit as percentage of working funds. The study led to the conclusion that (i) Net spread (interest spread minus burden) influenced, positively and significantly, the profitability of banks. (ii) Priority sector advances (in absolute term for Nationalised Banks) and as ratio of total advances (for SBI group of banks)
influenced negatively the profitability of public sector banks. The same was also observed with respect to fixed/ current deposit ratio and establishment expenses; and (iii) Although credit deposit ratio was found to be positively influencing profitability, its impact was statistically non-significant. The study suggested that burden ratios can be reduced by banks by way of introducing new technology for superior operational efficiency and by observing strict cost control at all levels.

Gupta (1999) has examined the performance of State Bank of India (SBI) over a period of five years 1994-1998, using the international CAMEL approach. The main findings of the study were that during 1994-1998, SBI has shown substantial growth in assets and corresponding growth in profits and has expanded its net work of branches. Author opined that intensive competition in the Indian Banking Industry and the continued economic slowdown has seriously impaired the interest income growth of SBI in 1997-98 and the bank had to rely on volatile income sources and non-interest income to sustain growth. The study also presented a brief outline of ownership, business operations and SWOT analysis of State Bank of India (SBI). The study found that SBI’s Capital Adequacy Ratio (CAR) had improved mainly due to increase in profit owning to waiting back of excess depreciation on Government securities and a 20% decline in provision and contingencies. Asset quality also improved during 1994-98 as SBI was able to reduce its net non-performing assets (NPAs). The most striking conclusion was the narrowing of Net Interest Margin (NIM) to 4.10% (1998) from 4.47% (1997)
in spite of Return on Assets (ROA) improving substantially to 1.11% (1998) from 0.88% (1997).

Indira Rajaraman, Suman Bhaumik and Namita Bhatia (1999) attempted to explain inter-bank variation in NPAs for the year 1996-97. They have done test for the impact of the region of operation on domestically owned banks in each of the state clusters. Banks’ 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. The findings showed that bank specific characteristics such as ownership of adherence to prudential norms are not suffice to explain inter-bank variability of NPAs. But the regional operation matters. They concluded that no sustainable improvement in the enforcement environment in difficult regions of the country. If the banks report regional wise NPAs the regional exposure effect becomes evident. In the case of foreign banks, it is not the ownership pattern but banking efficiency and technology co-relates in the country of origin of the bank that determine NPA performance in Indian environment.

Puhazhendhi V. and Jayaraman B. (1999) pointed out that with the introduction of prudential norms the dimension to the problem of mounting over dues has become more intense. The consequences of increasing over dues are (i) increasing provisions against over dues, (ii) lower financial margins which encouraged non-repayment of rural loans. High transaction costs added to
financial cost of loans makes the project unviable. They pointed out the factors which influence the transaction costs of bank branches which affects the viability of bank as a whole.

**Article issued by RBI in RBI Bulletin (1999)**25 As the thrust of the second phase of reforms is on improvement in the organizational efficiency of banks, the most critical area in the improvement of profitability of banks is the reduction of NPAs. This issue is intimately connected with the overall stability of the financial system and need to be so recognized for concerned and multi pronged efforts. Apart from internal factors such as weak credit appraisal, Non-compliance and willful default, there are several external factors such as preponderance of certain traditional industries in the credit portfolio of certain banks, majority of which are suffering from serious inherent operational problems, natural calamities, policy and technological changes which increase the incidence of sickness, labour problems and non-availability of raw materials and other such factors which are not within the control of banks. While banks cannot be blamed for advances becoming non-performing due to external factors, there is an urgent need that the banks address the problems arising out of internal factors, and this may call for organizational restructuring of banks, a change in the approach of banks towards legal action which is generally the last step, no sooner the account becomes bad and clear thrust on improving the skills of officials for proper assessment of credit proposal, risk factor and repayment possibilities.
Balachandran Nair K.K. (1999) attempted to study on NPAs and stated that NPA may be defined as a credit facility together with interest which remained past due for a period of four/three/two quarters as on 31st March every year. In the annual accounts of public sector banks according to the directives of RBI, two sets of NPAs figures should be shown i.e., the gross NPA and net NPA. Gross NPA refers to the percentage of bad loans on the total advances whereas net NPA is calculated after deducting from the gross NPA provisions and claims received from the Deposit Insurance and Credit Guarantee Corporation (DICGC). The RBI wants these two NPAs for analyzing the performance of banks because of lower NPA level depicts the fundamental strength of a bank. It is essential to know the level of NPA correctly because it is directly connected with the credit management of banks. Banks with higher level of NPA should keep down their credit expansion. The reporting of NPA by banks as a percentage of total advances as stipulated by the RBI has its own limitations. The banks can bring down their NPA level by accelerating credit growth and keeping a check on the recovery rate of loans. Some times in order to bring down their NPA level, the banks may grant a fresh loan to defaulting borrower in order to enable him to repay the loan in default. Such a short cut methods adopted by the banks results in a decline in the percentage level of NPA, whereas in absolute terms it is on the increase.

Khan (2000) pointed that banks and financial institutions could convert part of the NPA debt into equity of the defaulting company as a recovery strategy.
Researcher advocated usage of credit derivatives and credit default protection contracts as a part of credit risk management and observed that risks associated with economic environment, unforeseen events specific to corporate borrowers are not covered under the present credit risk models.

**Baiju S. and Garbriel Thattil (2000)** highlighted the magnitude of NPAs in the banking sector taking the current position of SCBs. They graded all the four categories – SBI Group, Nationalized Banks, Other Scheduled Commercial Banks and Foreign Banks into very good, good, bad and worst group on the basis of NPAs and Capital adequacy. For the purpose of analysis banks with gross NPAs percentage of 5 or below international standards had been categorized as “very Good”, Banks with NPA percentage of 16% (National Average or less but above 5% were categorized as “Good”. Banks with above 16% and below 20% NPAs were categorized as “Bad”. Banks with gross NPAs of 20% or above were categorized as “Worst”. For the purpose of anlysing capital adequacy ratio (CAR) under each category, number of banks meeting the stipulated percentage of 8% and number of banks which do not satisfy this percentage were taken separately. They came to the conclusion that banks which secured ‘Very Good’ rating in terms of NPAs are new private sector banks and foreign banks. The main reason for this was that these banks had low net work of branches specifically in rural areas. Further, these banks imposed stringent conditions for credit disbursal.
They suggested that managerial cadre has to be trained a vet loan proposals and recovery programmes.

**Professional Banker research Team (2000)** specified the major reason for bank loans to agriculture to the tune of Rs.15,000 crores were written off in 1990-91, thanks to social banking. Such a write-off promoted dishonesty, default and lowering of repayment ethics. The problem of NPAs confronts both public and private sector banks. Banks in their anxiety to recovery dues ignore the advantages of supporting a viable rehabilitation plan. In result the small units on the verge of sickness become actually sick. Banks are advised to shift their policy from recovery to credit management. Banks resort to negotiated settlement out of fear.

**Money and Banking Division (2000)** of the Economic Research Department of State Bank of India analysed the performance of public sector banks for year on four broad parameters: Business performance which, focused on deposits, advances, investments and net profits, efficiency indicators – using Return on Equity (ROE) decomposition model, vulnerability measures by Capital – to Risk weighted Assets Ratio (CRAR) and Non-performing Assets (NPAs) and labour productivity – measures by 3 ratios – Business per employee, Profit per employee and Average assets per employee cost.

**Taori K.J. (2000)** stated the key drivers for the new age banking. The key drivers identified were grouped as (i) business drivers (ii) regulatory drivers,
(iii) environment drivers, (iv) technology drivers and (v) H.R. drivers. According to him the success of a bank depends upon the responding to the drivers or even anticipating the impact of these drivers and taking action on them on a proactive basis by effective information technology.

**Erazi and Hossian (2000)** reviewed the performance evolution of nationalized banks in India for last three decades. In retrospect, the study found that the effectiveness of nationalized banks has been justified so far by the progress of the various banking activities viz., mobilization of deposits, expanding of bank credit, credit to the priority sector (Agriculture, Small Scale Industries and Exports), bank’s profitability, solvency and effectiveness of asset utilization. A comparative analysis among the different banking groups for year 1997 on improvement parameters like deposits, credits, employee strength and Non-performing Assets, was also featured in the study.

**Majumdar Aloka (2000)** discussed the efficiency of debt Recovery Tribunals (DRTs) which were set up in 1993 by an Act of parliament as a Fast Track System for recovery of bank dues. Recent amendments to this Act have incorporated desirable features like empowering DRTs to attach the property of the borrower on filing of the application to that effect and providing for appeal system for persons aggrieved by the order of the Recovery officers. The presiding officers are now empowered to execute the degree of civil courts based on the certificates issued by the DRTs. The DRTs Act now takes precedence over the
companies Act. But the question is, one of the effective implementation of these well thought out amendment. Some lawyers suggested that establishing separate bank courts within the existing legal frame work could accelerate recoveries. DRTs are successful in at least bringing defaulters to the settlement table. However, the High Court and Supreme Court can still be moved by defaulter borrowers against DRT decision. Even now, DRT Act cannot supersede SICA even though the latter is on its way out.

**Nettime and Kuruba (2000)** observed that the pace of reforms in banking sector in India is definitely encouraging and giving positive signals of structural changes in the financial sector. However, it was opined that the reforms would be successful only if the level of NPA is reduced. In order to tackle the problem of NPAs there is need for legal reforms. It is the attitude and efficiency of banking authorities, which have to go a long way in making the banking reforms operationally and functionally effective.

**Patel Urjit (2000)** highlighted the problem of bad loans and growing level of Non-performing assets in commercial banks in the post-reform period. It was observed that it is important for the banks and supervisory authorities to adopt more effective lending practices. At the same time it was also emphasized that corporate entities should be made more accountable through following more stringent disclosure, transparency practices, guidelines and principles. Efficient
legal machinery, the larger number of Debt Recovery Tribunals and Credit
Information Bureau in banks can prove effective and quick recoveries of dues.

Ranjana Kumar (2000)\textsuperscript{36} said that an account does not become and NPA
over night. The account sends out enough signals of the impending problems and
the banker should be alert to catch these signals quickly action. Though appraisal
is important experience has shown that loans often go bad due to poor monitoring
as well. While the importance of credit appraisal cannot be diluted for any reason,
constant supervision is essential to keep the advances performing the task of
containment NPAs by arresting slippage of accounts from standard advance to
Non-performing assets has been a cause for concern. Relentless monitoring and
introduction of loan review mechanism of standard advances may be of some help
to contain the slippage of NPAs.

Ganeshan (2001)\textsuperscript{37} studied that interest cost, interest income, other income,
deposit per branch, credit to total assets, proportion of priority sector advances and
interest income loss were the significant determinants of profit and profitability of
Indian Public Sector Banks. It is found that the average establishment cost
positively contributed to the profitability of the public sector banks. It is also
identified that banking sector reforms and individual bank policies towards direct
investments and direct credit programmes had played a significant role in
improving profit and profitability of banking sector.
Kaveri (2001) attempted to ascertain whether enough signals of weakness were indicated much before the event. Researcher considered nine efficiency parameters - Capital Adequacy Ratio, Net Non-performance assets/Net Adequacy, Net profit/Total Assets, Gross Profit/ Working Funds, Net interest income/Total Assets, Interest Expended/Total Assets, Provisions and contingencies/Total Assets, computed on the data collected from the RBI publications.

Thampy and Baheti (2001) have reviewed the performance of twelve Indian banks both public and private for the period 1995-98, using the economic value added metric (the equity approach). The results showed that several banks, particularly the large public sector banks were not creating value. They concluded that there could be two reasons for this (i) banks could be overcapitalized and (ii) the returns were low. They mentioned high NPA and low employee productivity as the major problems in public sector.

Raghupathy (2001) studied 23 South Indian Banks for the year 1999-2000 and ranked them on the basis of internationally acclaimed set of CAMEL indicators. The analysis found Karur Vysya Bank as the best performing among the South Indian Banks followed by Corporation Bank and Global Trust Bank. The study concluded that in order to sustain their ranking, they should focus on liquidity and earnings performance, management performance, technology and growth strategies in the long run.
Ramachandra Reddy (2001) focused on the seriousness of NPAs in public sector banks. They argued that with the introduction of international norms of income recognition, asset classification and provisioning in the banking sector, managing NPAs has emerged as one of the major challenges mostly for the public sector banks. To reduce the seriousness of the problem, they suggested that the banks should adopt proper policy for appraisal supervision and follow-up of advances and special recovery calls may be set up at regional and zonal levels. The RBI has to publish the names of the defaulters with the threat of social exposure, confiscation of properties and imprisonment; otherwise the NPAs cannot be recovered.

Kulakarni and Shete (2001) studied NPA in SSI sector and found that NPAs in that sector are significantly higher than those in other segments of priority sector. The important cause being faulty methods of financing and target-oriented approach. Banks are not serious about subsequent problems like quality of product, technology, expansion and modernization and credit related problems as noticed in the study.

Subramani and Raghavan (2001) examined the comparative efficiency in six public sector banks, four private sectors and three foreign banks for the year 1996-97. Operational efficiency is calculated in terms of total business and salary expenditure per employee. The analysis revealed that among the public sector banks, Bank of Baroda registered the highest efficiency and operating profit per
employee. Among the private sector banks, Indus Ind Bank followed by City Bank registered the highest operating profit per employee respectively. However, amongst the nationalized banks there existed wide variations of efficiency.

**Abhiman Das (2002)** found the relationship among capital, NPAs and productivity using data on PSBs for the period 1995-96 to 2000-01. Credit risk was measured by the ratios of net NPAs to net Advances. Financial leverage was measured by the ratio of capital to risk weighted assets (CRAR). Researcher postulated a simultaneous equation system comprising of three linear equations, representing the empirical model. The explanatory power of capital equation has significance but has high variability.

**Muniyappan G.P. (2002)** updated the readers by providing a very comprehensive picture of NPA management. While NPAs are coming down in percentage terms, the absolute figure is still going up. RBI has introduced various measures like credit risk management model, compromise settlement methods, effective use of debt recovery tribunals, and Lok Adalats. It also circulates real time information on defaulter against whom suits have been filed for recovery. However, putting in place radical legal reforms and sound corporate governance is essential for the success in NPA management.

**Gulati A and Seems Bathla (2002)** stated that, a high level of incidence of over dues and the resultant bad debts in rural credit are associated with a large number of factors, both internal and external to the system. The major factors are
natural calamities, inadequate income generation, and high transactions costs, inappropriate financial policies, poor working of the Rural Financial Institutions (RFIs) and improper imposition of prudential norms and provisioning of NPAs.

Ram Mohan (2002) evaluated the performance of public, private and foreign banks since deregulation in absolute and in relative terms. It was observed that the efficiency of the banking system as a whole measured by declining spreads has improved. The performance of public sector banks has improved both in absolute and relative terms. He applauds the Indian Banking industry for its ability to keep its head above water log after deregulation. Further, author discussed about the issues of trade-off between efficiency and stability in banking.

Prasanth K. Reddy (2002) found that financial sector reforms in India has progressed rapidly on aspects like interest rate deregulation, reduction in reserve requirements, barriers to entry, prudential norms and risk based supervision. But progress on the structural – institutional aspects has been much slower and is a cause for concern. The sheltering of weak institutions while liberalizing operational rules of the game is making implementation of operational changes difficult and ineffective. Author opined that Changes required to tackle the NPA problem would have to span the entire gamut of judiciary, polity and the bureaucracy to be truly effective and further discussed the effect of the reforms on the level of NPAs and suggested mechanisms to handle the problem by drawing on experiences from other countries.
Jain (2002) highlighted that the future profitability of banks would depend on their alertness, operational efficiency, customer orientation, creation of large volume of performing assets, attainment of optimum levels of productivity. Since retail customers are fast becoming more demanding in the current competitive environment, banks have to offer value-added services. Harnessing technology to improve productivity, to ensure required standard of customer service and internal efficiency, continual product innovation and strengthening of competitive edge on an ongoing basis to mass business will be the key factors that will impact banking sector in the days to come.

Bidani (2002) dealt with the practical aspects of the problem of management of NPAs right from identification stage till recovery of the dues including other aspects connected with the subject like asset classification, assessment of provision, pre-sanction appraisal and post-sanction appraisal and post sanction supervision, monitoring system for existing and likely NPAs, capital adequacy, reduction of NPAs, rehabilitation of sick nonperforming units etc.

Ranjan, Rajiv, Dhal Sarat Chandra (2003) explored an empirical approach to the analysis of NPAs of Indian commercial banks. Through the empirical analysis they evaluated how NPAs are influenced by three major sets of economic and financial factors i.e., terms of credit, risk performance induced by banks size and macro economic shocks. The results suggested that the term credit variables has a significant effect on the bank’s NPAs in the preferences and
macro-economic shocks. It is observed that alternative measures of bank size would lead to differential impact on NPAs. Expectation of higher interest rate increases the size of NPAs. On the other hand, factors like horizon of maturity of credit, better credit culture, and favorable macro-economic conditions lead to lowering of NPAs.

*Sardar Gujral N.S. (2003)* explained the impact on profits and capital base. The mounting NPAs raise the cost of credit and make banks more averse to risks and reduce the credit. Due to the crippling effect of NPAs, asset quality becomes an important parameter in the measurement of performance of banks. Researcher also mentioned that the priority sector and non-priority sector shared almost equally in total NPAs among priority and non-priority sectors.

*Sharma and Bardia (2003)* reported that the biggest challenges of current times in the banking sector is managing Non-performing assets. NPAs are to be kept within tolerance level of the bank as because it is the inevitable burden of any bank. The banks should grant loans only after judging the credit worthiness of their customers. In order to accomplish this objective the banks should use the refined methods of credit risk management.

*Misra (2003)* said that the profitability of the financial institutions largely depended upon the level of income generated through optimum use of the assets after paying the cost of fund for acquiring them and other administrative costs involved therein. Redefined objective of managing NPAs through profit
maximization approach and risk management approach were suggested. The author further concluded that the high rise in gross and net NPAs of the banking sector in the recent past was at an exponential rate giving an indication that present ongoing recession was taking a heavy toll on corporate credit discipline.

Rajput (2003) suggested that Indian banks especially public sector banks will have to learn to live up with competitive environment. They must make persistent efforts to improve their profitability. On the revenue side, they should increase non-interest income by diversifying their operation into Para banking activities on the lines of new private banks. On the expenditure side, they must bring efficiency in their operations to minimize cost and strive hard to control the booming NPAs.

Kumar (2003) discussed in detail the need, process, summary and positive as well as negative aspects of the SARFAESI Act. Researcher analyzed that this Act empowered banks and financial institutions to directly enforce the security interest which was pledged to them at the time of sanctioning the loan without going through the judicial process of DRT or Civil Courts.

Reddy (2003) confirmed that financial stability is an essential prerequisite for sustainable long-term economic growth of any country. The non-performing assets were posing a serious threat to this objective of the banking system. The authors concluded that macro and micro level reforms and adherence to cleaner practices on the part of banks, regulator, borrowers and government will enable
the system to get rid of the NPAs overhang and let financial system be an essential adjunct for economic growth.

Harpreet Kaur and J.S.Pasricha (2004)\(^{58}\) stated that an asset becomes non-performing when it ceases to generate income for the bank. Total elimination of NPAs is not possible in banking business owing to externalities but their incidence can be minimized. It is always wise to follow proper policy for appraisal, supervision and follow-up of advances to avoid NPAs. Given the situation that a large amount of NPAs are towards big industrialists who wield a considerable influence in the corridors of power, only strong political will on the part of Government to act against such elements will bring some tangible results to the fore.

Rais Ahmed and Nasrulla Bhat (2004)\(^{59}\) studied the recovery performance of District Cooperative Banks in Jammu and Kashmir and it is found that over dues are greater than the owned funds of Central Cooperative Banks (1994-95 to 2000-01). The main reason for the accumulation of over dues is the defective lending policies and procedures, unrealistic scales of finance and untimely due date for repayment of loans, poor supervision over societies, absence of proper climate for recovery including excessive and growing patronage of defaulters by the management authorities. It must be emphasized that repayment of credit is essential to its recycling and recycling of credit is crucial to the
development which also builds up confidence among the credit institutions in their climate and among the credit users in their own ability to develop.

**Mohan and Ray (2004)** measured the productivity in twenty seven public sector banks, twenty one private sector banks and fourteen foreign banks during the period of 1992-2000. They measured productivity by using output as loan income, investment income and non-interest income parameters. For inputs, they considered interest and operating cost (which includes labor and non-labor, non interest costs). Out of a total of six comparisons they have made, there are no differences in three cases, PSB’s do better in two, and foreign banks in one.

**Chakraborth K.C. (2005)** outlined the position of NPAs during the four year period 2001-2005 and stated that the strategies to deal with the NPA problem in vogue. Early warning signals or symptoms of sickness should be addressed immediately. The borrowers’ willingness is more important for repayment than his ability. Banks should therefore promote repayment culture among borrowers.

**Milind Sathye (2005)** measured the productive efficiency of banks in a developing country, that is, India. The measurement of efficiency is done 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 is, 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.

Chugh (2005) investigated whether new private sector banks were serving properly to different segments of the economic sectors of India specially to economically weaker sector of the society or not and were the employees of these banks satisfied. Author has concluded that public sector banks were coming up fast to meet the challenges of open competition in financial markets in India. They were adopting latest banking technologies day by day and providing quality services to their respective customers at lower cost.

Bose (2005) mentioned that, while there have been several schemes in the past to facilitate the recovery from NPAs, the success of such efforts in terms of NPAs reduction has been far from satisfactory. SARFAESI Act, it was hoped, would greatly help banks in their efforts to reduce and recover money from NPAs. Nonetheless, the recent developments have also brought out the limitations of the Act, thereby creating apprehensions amongst banks and financial institutions. Notwithstanding this, to take full advantage of the Act, the cool causes of NPAs, which were evident in the system, may have to be addressed first.
Arpit A. (2005) revealed the banks’ expansion strategy through target marketing and doubling its assets under management. Strategies used were expansion of new branches, specialized training programs and target marketing. It revealed that GDP forecast with increasing purchasing power leads to faster growth of banking sector. The study emphasized scope of rise in profit was on account of other income and lower costs of funds.

Khan and Singh (2005) highlighted major defects in DRT system and gave recommendations to overcome them. They have concluded that the DRTs were effective in recovery of banks' dues to a certain extent and would become more effective, provided the given suggestions were implemented in letter and spirit.

Saggar (2005) found that over the years, the performance of banking sector has been a mixed one i.e. strong in widening the business coverage but weak in terms of sustainability and viability. According to the author, profitability of banks is influenced by a combination of factors and she concluded that the public sector banks should move from deposit orientation to profit orientation. Profit plans should be developed to help them in recasting their cost estimates for their activities.

Khasnobis (2005) reported that the Indian banking sector has played a commendable role in fuelling and sustaining growth in the economy. In the recent past a large part of the banking sector’s growth has been on the back of financing
consumption. A growth driver in this phase would involve financing the emerging Small & Medium Enterprises (SMEs) sector of the economy. As such, banks would have to gear up for the challenges of managing growth and consequent risks in the SME sector financing. Farming out the banks’ NPAs portfolio to asset recovery companies, which specialize in this segment of the financial sector, could be an option worth evaluating.

Kumar (2005) observed that the Indian banking sector is facing the serious problem of NPAs. The extent of NPAs are comparatively higher in public sector banks. To improve the efficiency and profitability, the NPAs have to be scheduled. Various steps have been taken by government to reduce the NPAs. It is highly impossible to have zero percentage NPAs. But at least Indian banks can try competing with foreign banks to maintain international standards.

Sangeeta Arora and Shubapreet Kaur (2006) reviewed the performance of banking sector in India in post reforms period. A comparative appraisal of banks has been undertaken on the basis of seven key indicators of financial performance for the period from 1994 to March, 2005. It is found that though Public Sector Banks have improved considerably and their performance is comparable with banks in other sector yet they are lagging behind in thrust area such as business per employee, profitability and asset quality etc. Recommendations and suggestions have been given for improving the performance of public sector banks in India.
Khansnobis S. (2006)\textsuperscript{71} opined that the present definition of NPAs is restrictive and ignores a large number of NPAs presently sitting on the books of banks and financial institutions. Author feels that handling of impaired financial asset needs multi-disciplinary skills-sets covering technology, business model validation, investment banking etc., rendering them into a knowledge and execution hub of different genre. This type of knowledge is a rarity in Indian Banks and stated that the seed of success of managing NPAs lies in the speed of recycling of these assets and their realization into cash. In achieving this objective, it is important to have a conducive legal environment, adequate empowered system and structure, support from the government and finally accessibility to new domestic and foreign capital.

Janardhar G. Naik (2006)\textsuperscript{72} pointed out on the problem of NPAs management in banking sector and concluded that Government of India has to set Asset Reconstruction Companies (ARCs) to manage NPAs to face the challenges before the banking sector.

Murali and Krishna (2006)\textsuperscript{73} observed that there has been a spirit in the lending activity of banks, in the recent past. This is due to two factors, viz. availability of huge surplus funds with the banks and the losses suffered by the banks in investment and treasury activities. While credit growth is needed for survival, it is imperative to ensure that the credit growth does not result in non-performing advances later. For this, banks have to resort to effective pre-
disbursement as well as post-disbursement monitoring. The authors concluded that negligence in monitoring a loan was less excusable than an error at the appraisal stage.

Kumar (2006)\textsuperscript{74} highlighted that the performance of the banks both in the public and private sectors has become more market driven with growing emphasis on better performance and concluded that the much-publicized fact that public sector banks are inefficient is based on a piecemeal analysis in the form of simple, static, partial and isolated ratios having some hidden and often misconceived assumptions about the structure. It is suggested that there was an urgent need of the time to go in for this kind of system wide analysis to explore the intricacies of the complex system.

Harpreet (2006)\textsuperscript{75} studied the problem of non-performing assets in public sector banks. Various developments in the banking sector in India have been analyzed by studying the growth of banking sector in Pre and Post – Independence era and suggested that for effective handling of NPAs, there is an urgent need for creating proper awareness about the adverse impact of NPAs on profitability amongst bank staff, particularly the field functionaries. Bankers should have frequent interactions and meeting with the borrowers for creating better understanding and mutual trust.

Anurag (2007)\textsuperscript{76} mentioned that a strong banking sector is important for flourishing economy and the failure of the banking sector may have an adverse
impact on other sectors. The problem of NPAs is not only affecting the banks but also the whole economy. In fact high level of NPAs in Indian banks is nothing but a reflection of the state of health of the industry.

Krishnan V and Surya Chandra Rao (2007) pointed out that NPAs of Indian commercial banks much above the international standards. Researchers made an attempt to examine the problems of NPAs and evaluate its intensity on different bank groups. There is a review of strategies adopted by banks to manage NPAs.

Mohan N.J. Monteiro and Ananthan B.R. (2007) said that the lending activity of banks carried credit risk, from the failure of the borrowers to fulfill its contractual obligation by not paying interest or installments in time. Non recovery of installments and also interest on the loan portfolio negates the effectiveness or this process of the credit cycle. Non-performing Assets, which represent bad and doubtful debts are endemic in any Bank. According to them, willful default and poor monitoring were the major causes for an account becoming NPA at the first level and diversion of funds at the next level are causes for NPA. Good pre-sanction scrutiny and effective post-sanction supervision and effective recovery steps were in measures to control NPAs.

Irfan Ahmad (2007) analysed the performance of the commercial banks over the period 1998-99 to 2005-06 in terms of NPAs, priority sector advances, capital adequacy ratio, SLR and CRR and provided some valuable suggestions for
further reforms in the banking sector so as to enhance their performance in the years to come and opined that the RBI should appoint another committee to evaluate the ongoing banking sector reforms in order to improve the performance of the banks specially PSBs to meet the challenges of the growing financial integration and global competitive environment.

Bhatia (2007)\textsuperscript{80} explored an empirical approach to the analysis of Non-Performing Assets (NPAs) of public, private, and foreign sector banks in India. The level of NPAs is one of the drivers of financial stability and growth of the banking sector. This study was aimed at finding the fundamental factors which impact NPAs of banks. A model consisting of two types of factors, viz., macro economic factors and bank-specific parameters, is developed and the behavior of NPAs of the three categories of banks is observed. This study explores an empirical approach to the analysis of Non-Performing Assets (NPAs) of public, private and foreign sector banks in India. The NPAs are considered as an important parameter to judge the performance and financial health of banks. The level of NPAs is one of the drivers of financial stability and growth of the banking sector.

Rajendran P. and Karthikeyan K. (2008)\textsuperscript{81} stated that high level of Non-performing assets will also affect the productivity of the banks by increasing the cost of funds and by reducing the efficiency of the bank employees. Since, the employees are involved with the task of recovery of non-performing assets,
productivity of employees is affected. They made an attempt to study the impact of non-performing assets on the productivity of SCBs and observed that the Non-
performing assets continue to influence the profitability and productivity of the scheduled commercial banks in India to a greater extent.

Ritu Goyal and Rajindar Kaur (2008)\textsuperscript{82} studied the New Private Sector Banks and analysed their performance by using various Balance Sheet and Profit and Loss Account ratios. They observed that there is a significant difference amongst the mean ratios of the banks in 12 out of 16 selected parameters.

Sangeeta Arora and Shubapreet Kaur (2008)\textsuperscript{83} analysed the financial performance of diversified banks over a period of 2000-05 considering various internal and external factors like economies of scale and scope, competition, risk reduction etc. which are forcing banks to diversify and found a continuous decline in interest margins after 2001 which indicates that a low level of interest margin pushes the banks to generate income from alternative sources of revenues other than interest income. Banks will have to concentrate more on providing better, faster and more efficient customer service to permit banks to charge higher rates for better and faster service.

Karunakar (2008)\textsuperscript{84} stated that the problem of losses and lower profitability of NPAs and liability mismatch in banks and financial sector depend on how various risks are managed in their business. The lasting solution to the problem of NPAs can be achieved only with proper credit assessment and risk
management mechanism. It is better to avoid NPAs at the market stage of credit consolidation by putting in place of rigorous and appropriate credit appraisal mechanisms.

**Manthoss, Molyneux and Pasiouras (2008)** used the Malmquist index to estimate the productivity growth of banks using variables like capital requirements, official supervisory power, market discipline, and restrictions on bank activities. The results indicate that regulations and incentives that promote private monitoring have a positive impact on productivity. Restrictions on banks’ activities relating to their involvement in securities, insurance, real estate and ownership of non-financial firms also have a positive impact.

**Jasbir Singh Deswal (2009)** concluded that NPA of PSB has been continuously decreasing in all times. Gross NPAs and net NPAs decreased and NPA Reduction Instrument was established. Reserve Bank and the Government of India took several measures to expedite the recovery of NPAs and several channels of recovery measures have been designed.

**Sudarsana Murthy and Narasaiah P.V. (2009)** stated that despite tremendous progress in the availability of institutional credit to rural areas, the contribution of co-operatives and commercial banks together have not exceeded 40% of the estimated rural credit requirements. They concluded that the bank authorities have to implement one time settlement programme towards reducing NPAs level. Regional Rural Banks (RRBs) are not satisfactory due to lack of
operational viability and it is the time for RRBs to strengthen their recovery of loans. To fill the financial health the loss making banks have to be restructured and also implement innovative loan products like commercial banks.

**Nigamanada Biswas (2009)** found profit to be the most crucial parameter of judging the health of a bank. Profit is essential to satisfy the stakeholders’ expectations and expansion of the existing business. The most direct result of profitability changes is increasing competition and narrowing of spreads and its impact on the profitability of banks. Hence, tremendous efforts in the area of technology and to build capabilities of banks to handle much bigger volumes are necessary.

**Avudaiammal B. and Vasanthi G. (2009)** studied NPAs of Urban Cooperative Banks (UCBs) in India and stated that the cooperative banks in India play an important role in rural financing. The operational efficiency of UCBs is crucial in ensuring adequate and timely flow of credit to urban and semi urban people. Improvement in the asset quality of the UCBs during the study year has reflected in a decline in NPAs. They felt that serious and intensive observation of the position of their NPAs is essential to achieve the social objective and cooperative principle by the UCBs.

**Jayakumarb S. and Subbaiah A. (2009)** mentioned that the commercial banks play an important role in all economics and more so in planned or developing economics like India. Banking has a positive role to play in the
economic development of the country as priorities of the people’s savings and purveyors of credit, especially as the success of economic development depends on the mobilization of the resources and their investment in an appropriate manner. They concluded that the financial assistance to the borrowers should be need based rather than based on project estimate. Borrowers who are prompt in repaying the loan must be acknowledged and rewarded at the credit recovery camps in order to motivate the others to repay the loan.

Usha Arora, Bhavana Vashist and Monica Bansal (2009)\textsuperscript{91} analyzed and compared the performance in terms of loan disbursement and non-performing assets of credit schemes of selected banks for the last five years. A positive relationship is found between total loan disbursement and total non-performing Assets Outstanding (NPA O/S) of selected banks. They suggested that proper steps like negotiated compromise, legal remedies, acquisition and take over should be taken to solve the NPA problem.

Sharma (2009)\textsuperscript{92} stated that the public sector banks have emerged strong across all key indicators as the global financial turmoil and slowing domestic economy put the banking sector on a test. According to this study, the public sector banks have shown impressive performance across all the significant banking parameters. Despite lower lending rates, the net interest income growth of the PSBs was much higher than the private banks which fuelled the bottom line growth of public banks. The public sector banks have considerably improved their
quality of assets and the rise in Net NPAs of the private banks was far higher than the public sector banks.

Roopak Kumara Gupta and Ekta Sikarwar (2010)\textsuperscript{93} observed that the Commercial banks, especially the dominant public sector banks, have been facing competition from the banks in the private sector. They stated that Asset Quality is one of the components of performance of banks which can be assessed by Net NPA to Net Advances (NNPA/NA). Asset Quality determines the existing and potential credit risk associated with loan and investment portfolios and other off Balance Sheet transactions. Higher the ratio, lower is the asset quality of the bank.

Chavan V.M. and Sangapur N.B. (2010)\textsuperscript{94} reported that Indian banking sector is facing a serious situation in view of the mounting Non-performing Assets (NPAs). Their study revealed that Gross NPAs of UCBs has been high at 22.7% and 23.2% of the total advances during 2004 and 2005. The gross NPAs have declined to 18.9% and 17% of the total advances during the year 2006 and 2007 respectively. Net NPAs as percentage of total advances went up steeply from 2.1% in 2004 to 12.3% in 2005. However, the net NPAs as percentage of total advances came down to 8.8% in 2006 and further to 7.7% in 2007.

Siva Kumar and Sundar K. (2010)\textsuperscript{95} mentioned that the performance of a bank is closely linked with the size and quality of their loan assets in the balance sheet. Good loans or performing loans generate income for the banks while non-performing loan assets adversely affect the return on assets. NPA always poses a
severe threat to the financial stability of banks, as it ultimately leads to reduction in liquidity profitability and overall performance. Basically NPAs disturb the interest income of banks and therefore the banks are required to make provision for such NPAs from the current profits.

Ashok Khurana and Mandeep Singh (2010)\(^6\) observed that new private banks have a strong competitive advantage over public sector banks on several dimensions such as use of low cost technology and operations to address the urban mass market, alignment between IT and business heads, more focus on value adding activities, better talent management, superior complexity handling and the ability to use infrastructure optimization facilities. In spite of all this, these new generation banks have also become a victim of NPAs. However, NPAs should not be seen as a dilemma but as a challenge for the banking sector.

Jaya Agnani (2010)\(^7\) stated that the financial quarter is undergoing a phase of makeover and convergence and there has been escalating blur of boundaries amid the role of banks and financial institutions, which is likely to set up spirited pressures in the prospecting future. NPAs as a syndrome are not new but are casting adverse impact on financial spine of banking structure during the recent years and are cause for concern. All the factors including level of NPAs, profitability figures and rating given by agencies should be considered collectively to chart out a best investment strategy in banks.
Laxminarayan Ramanathan and Gurav A.M. (2010)\textsuperscript{98} identified the
credit facility extended to Self Help Group (SHG) accounts under the SHG – Bank
linkage accounts by SBI. Looking into the efficacies of micro finance as the
potential tool for poverty alleviation this study attempts to gauge the extent by
inclusiveness’ or financial support how the scheme was able to deliver under
‘Priority sector lending’ by studying SBI which is the market leader in SHG
 linkage since inception as the sample model. The study findings reveal that there
is a continuous positive earning to the bank through SHG lending. As one of the
popular schemes in priority sector advances, SHG Banking is a viable venture
which shows potential for substantial growth in the near future.

Rajini Saluja and Roshan Lal (2010)\textsuperscript{99} observed that the burgeoning
NPAs in baking industry is a matter of deep concern. It is just not a problem for
banks but also proves fatal to the economic growth of the country. The study
concludes that there is huge difference in NPAs of public and foreign banks.
Public sector banks are highly pressurized by the NPAs. Moreover, great quantum
of NPAs was observed in non-priority sector than in priority sector. Gross and Net
NPAs of PSBs have improved over the years because of rigorous policy initiatives
and enforcement of various legal and non-legal measures.

Radhika R. and Jaya Sree (2011)\textsuperscript{100} observed that NPAs cease to generate
any income for the bank and hence become the major concern of banks in India.
NPAs have direct impact on net profit and also on the performance of the banks.
The authors further attempted to establish relationship between net profits and total advances. The impact of NPAs on net profit and impact of total advances on NPAs is also examined.

**Bhavani Prasad G.V. and Veena D. (2011)** reported that PSBs, which currently account for more than 78 percent of total banking industry assets are saddled with NPAs, falling revenues from traditional sources, lack of modern technology and a massive workforce while the new private sector banks are forging ahead and rewriting the traditional banking business model by way of their sheer innovation and service and adoption of modern technology. The best indicator for the health of the banking industry in a country is its level of Non-performing assets. NPAs generally give the impression that banks have strengthened their credit appraisal process over the years and NPAs involves the necessity of provisions, which bring down the overall profitability of banks. The Indian banks are facing a serious problem of NPA. The magnitude of NPAs is comparatively higher in public sectors banks. For better efficiency and profitability of banks the NPAs needs to be reduced and controlled.

**Shalu Rani (2011)** examined the existing position of banks in Scheduled Commercial Banks (SCBs) of India in respect of NPAs, the causes and remedial measures thereof and concluded that the level of NPA has increased, eroding whatever reduction was made with the ever increasing level of fresh NPAs and tightening of norms by RBI time to time. Total elimination is not possible in
banking business so it is wise to follow the proper policy for appraisal, supervision and follow up of advances to avoid NPAs.

2.4 RESEARCH REPORTS

Uttama Durga Devi A. (1994) examined the performance of nationalized commercial banks in terms of branch expansion, deposits, profitability and assistance rendered to the priority sectors. For comparative analysis, researcher has taken up 16 major nationalized commercial banks and the State Bank of India and its seven subsidiaries.

Satya Devi C. (1999) indicated the norms to treat non-performing assets with regard to SAO loans. If interest has not been paid for last two seasons of harvest, it becomes past due then such advances should be treated as NPA. Loans for allied and non-perform activities, if interest remains outstanding a period of 30days beyond two quarters from the due date, it becomes NPA. Interest on term loans beyond two quarters is over due, and then it is NPA. In case of industry plantation and housing loans, loan become due only after gestation period is over. Such loans should be classified as overdue (NPA) when there is default in repayment of principal on the due date.

Singh (2001) attempted to assess the impact of the reforms on the operational performance and efficiency of the commercial banks in India. The study revealed that total income as a percentage of working funds and/or total
assets, and spread as percentage of total income/working funds/total advance/total deposits have improved in the post-reform period may be accepted to some extent.

It was observed that in the public sector banks the size of NPAs has also reduced to some extent and quality of services has improved in the post-reform period. The priority sector lending has registered a decline in the deregulation era.

Raju D.N.M. (2002) traced the evolution of SBI and assessed its performance during the decade 1991-92 to 2000-2001. Researcher made evaluation on the basis of financial and operating performance of SBI region wise using financial variables and also analysed NPAs in the five regions of Vijayawada Zone and arrived at the following conclusions that officers handling advances portfolio are not sound in analysis and interpretation of financial statements. With regard to recovery of NPAs, legal remedy was found to be time consuming. He recorded the opinion of officers at different levels regarding the methods to reduce NPAs.

Radha T. (2002) reported that the advances covered with Government guarantee should be shown to have fuller disclosure and transparency of operations. No change in definition of NPA and banks should avoid practice of “ever greening” by making fresh advances to their troubled constituents dues and avoid classification of loans in question as NPA. No further recapitalization of banks is undertaken from Government as it is not sustainable in long run and further there is no need for institution of an ARF(Asset Reconstruction Fund) as
envisaged by the CFS Report (Committee on Financial Sectors). Banks shall take sensible steps to prevent or limit re-emergence of new NPA through strict application of prudential norms and managerial improvement.

**Boroloi, Jyothish (2003)**\(^{108}\) made a comparative study of financing priority sector by public sector and Co-operative Banks and found commercial banks have a lion’s share, when compared to co-operative Banks.

**Gopala Krishna T.V. (2004)**\(^{109}\) described prudential norms and the causes for NPAs. Researcher opined that the major culprit behind high levels of NPAs are willful default, mismanagement and lack of planning. The distinct effects of implementation of norms on asset classification and income recognition which introduced transparency on profit and loss account and Balance Sheet are liquidity effect, effects on profitability and effect on Balance Sheet. Major findings are that NPAs have a positive correlation with micro level indicators like GDP, Inflation, and Index of Industrial and Agricultural production. It was established that there was a significant impact of NPAs on net profits of banks.

**Lakshmana Swamy Amara (2006)**\(^{110}\) has stated that credit risk is an important factor impairing on financial entities. In order to contain the growth in non-performing assets (NPAs), recovery management has become a keyword for the banking industry in recent years. In the Indian context, several initiatives have been taken by the Reserve Bank in conjunction with the Government to contain the NPAs of banks. As a consequence, NPAs of SCBs have witness a secular
decline since the initiation of income recognition and asset classification (IRAC) norms.

Lakhmana Rao K. (2007)\textsuperscript{111} discussed about the stability in the banking system in view of the level of non-performing assets (NPAs). Asset quality of the commercial banking sector on the whole improved remarkably in spite of gradual tightening of prudential norms and the slowing down of the economy in recent years. Gross and Net NPAs both as a proportion of Advances/Assets have declined since early 1990s. The share of NPAs, in gross as well as net terms, declined significantly during the reform period.

Madhuri U. (2008)\textsuperscript{112} reported that the Non-Performing asset is one, which ceases to generate income to the bank. The NPAs have a direct bearing on the profitability of banks on several counts. They do not bring in interest income, lead to heavy provisioning, cost of maintenance of accounts and litigation charges, low return on assets and capital adequacy etc. The banking sector reforms have gone a long way in improving the performance and operational efficiency of Indian Banks.
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