CHAPTER - II

REVIEW OF LITERATURE

A considerable amount of research has been done in the area of Non-performing Assets (NPAs) of commercial banks in India, by academicians and researchers. The literature obtained by investigators, in the form of reports of various committees, commissions and working groups established by the Union Government, Reserve Bank of India, the research studies, articles of researchers, the comments of economic analysts and news, is briefly reviewed in this part.

Kaveri (2001)[50] studied the non-performing assets of various banks and suggested various strategies to reduce the extent of NPAs.

Prashanth k Reddy (2002)[51] in his study focuses on comparative study on Non-Performing Assets in India in the Global context.

Ramu, N (2009)[52] has made an attempt to analyze the asset quality in selected UCBs in Tamil Nadu. The researcher also pointed out that, with the tightening of prudential norms, the banking sector has been consistently conforming to and adopting international prudential norms and accounting practices.

Meenakshi Rajeev and Mahesh, H.P. (2010)[53] in their study concluded that accounting norms have been modified substantially and mechanisms are in place for reduction of bad debts. Bhavani Prasad and Veera D (2011) studied NPAs in Indian Banking sector and concluded that PSBs accounted for 78% of total NPAs and this is due to falling revenues from traditional sources.

Jaynal Ud-din Ahmed (2011)[54] in his study concluded that the earning capacity and profitability of banks has been adversely affected by the high level of NPAs and the reduction of NPAs in banks is posing the biggest challenges in the Indian economy.
Veerakumar, K. (2012)[55] in his research study concluded that the bank management may speed up recovery of good loans and bad loans through various modes to decelerated growth of NPAs from the present level and also to prevent re-emergence of NPAs over the minimum level.

Siraj, K.K and Prof. P. Sundarsanan Pillai (2012)[56] in their research study concluded that NPA still remains a major threat and the incremental component explained through additions to NPA poses a great question mark on efficiency of credit risk management of banks in India.

Sandeep and Parul Mital (2012)[57] analysed the comparative position of non-performing assets of selected public and private sector banks in India to find their efficiency through comparative study.

Zahoor Ahmed and Prof. Jagadeeshwaran M. (2013)[58] in their research study concluded that NPA is a major problem and hurdle faced by banking industry. And also assessed the various causes for accounts for becoming NPAs are wilful defaults, improper processing of loan proposals, poor monitoring and so on.

Ganesan, D. and Santhanakrishnan, R. (2013)[59] have made an attempt to analyse the sector-wise NPAs, category-wise priority sector NPAs and impact of spread on Gross and Net NPAs. They also analysed the reasons for assets becoming NPA and remedial measures to be taken and concluded that due to various steps taken by the Government of India, NPAs were reduced to considerable level.

RBI and Govt. of India had appointed various committees and Study Groups from time to time to study in depth different aspects on Banks Credit, Legal Reform and Non-Performing Assets. All these subject matters are co-related and interconnected to this research study and hence it is necessary to know, in brief, about the purpose of appointment of such Committees, their terms of reference and some of the valuable recommendations made by them. Non-performing Assets have been plaguing the Indian financial sector since long but were not in the public domain till early nineties. By that time, significant amount of loan assets involving uncertainly with respect to ultimate collection piled up creating concerns with the opinion makers about health of Indian banking and financial sector. NPAs reflect
natural waste of any economy. In advanced economies the financial markets are well
developed and segmented; with various players operating in identified niches,
catering to various users/risk segments. This constitutes an effective institutional
mechanism for targeting risks to players with appetite for such risks. Commercial
bank is conducted in a highly risk managed and mitigated ambience, unlike their
Indian counterparts who are often required to take unmitigated risk as a part of
business policy.

Mohina satish Kulkarni (1986)[60] The author reviewed the progress made
by the scheduled banks since nationalization in financing agriculture. The study also
emphasized on interstate and regional imbalances. Deals with adoption of multi
agency approach and agricultural credit which will enable disbursement of credit
directly or indirectly to the borrowers and also suggest maximum agricultural credit
is utilized by the rural borrowers. The study mainly deals with agricultural credit and
there was an imbalance between the states and union territories and the percentage of
credit level exceeds rural populations.

Srinivasan (1991)[61] dealt with national level accelerated the flow of credit
to the neglected sector and also brings correlation between state development and
relative human material resource endowment. The researcher has provided certain
recommendations which if practiced by the public sector banks can reduce the level
of NPA.

Chandran Sankarnarayanan (1992)[62] The last two decades have
witnessed unprecedented crises in banking sectors across the world, developed and
developing countries alike. The author deals internal strengths and weaknesses,
which matter in handling NPAs of the Bank, it has also been endeavored to evaluate
broadly the various strategies available for meeting the issue. The study does not aim
to work out purpose-related or area-based strategies for managing NPAs.

Desai Maulesh-(1992)[63] the huge burden of NPA is breaking the back
bone of the banking sector. Credit monitoring and recovery are the methods applied
for NPA management. The research study recommends various issues relating to
NPA exclusively in the Gujarat Zone. Author provides insight into warning signal
emitted before the credit becomes NPA. Aspects relating increase in bills receivable
without changing business propositions affects the profitability. The author has highlighted in order to avoid NPA the bankers should be careful keeping in mind the warning signals which can avoid the disastrous situations or alarming contingencies.

Deshpandey (1994)[64] Since NPA erodes the profitability of the banks as well as the industry the author conducted a detail study in evaluating the credit function at zonal level with special reference to Ahmedabad zone of Central Bank of India. Non priority Sector was the prime consideration of the research. The study covered advances to non-priority sector with special reference to large and small scale industries. The study provides an insight to performance appraisal and region wise award for the best performance which will increase the efficiency and reduce the NPA.

Gunasekaran (1995)[65] The author highlighted through his research financing of agriculture by commercial banks in micro level. His study was restricted to Tanjaur District in Tamil Nadu. The researcher examined the lending pattern and disbursement of farm finance and their over dues on farm finance by the commercial banks. Over all comparison of the commercial banks in farm lending with other institutional partner namely the crop finance. Deals with areas of farm lending and their improvements in quantitative & qualitative lending pattern & recovery methods also brings about scheme lending operations on user which is effectiveness in rural areas.

Kishor Bhoir(1999)[66] deals with the various aspects of NPA in public sector banks... Study highlighted the main reason which turns the performing advances to non performing ones. The author recommends remedial measures taken by the public sector banks and compromise settlement as one of the solutions to the problem faced by the Public sector banks. The author analyzed internal and external Industrial sickness. According to the researchers NPA has a multiple effects on the total working of Indian banking system and the banks looses further opportunity of investment. The study also emphasized different categories of borrowers.

Pankaj B.Trivedi (2000)[67] brings about the causes and factors responsible for lower Profitability and impact of inflation and changes in price level. It very clearly implies that there is correlation between efficiency and profitability. The
author has made an attempt to suggest business strategies that PSBs will have to adopt to come out of adverse effect. The research explains the changes that are necessary in the present set up of PSBs and their business policies to raise their operational efficiency and profitability. The author correlates two factors namely efficiency and profitability. The author suggested that weak bank should constantly monitored by Financial Restructuring Authority and RBI. Such reform will enable to increase the profitability of Public Sector Banks.

**Kalkoti (2003)[68]** The bank faces various difficulties in good performance with respect to priority sector. Any defect in the performance can bring down the profitability of the bank. As a result, various banking regulations and quality of assets and various measures to identify the risk has been introduced and also the efforts are made to bring about the awareness in the industry. The researcher in his study brings about the performance of MGB with banking credit planning and parameters useful for improving the flow of credit planning.

**Veerachamy (2006)[69]** the bank faces various difficulties in good performance with respect to priority sector. The researcher in his study clearly deals with the performance of primary co-operative agricultural and rural development in Dindigul District in TamilNadu. The author analyzed and examined through his study the impact of over dues of the banks. The study revealed the external factor and internal factor as to the cause of borrower not making the due and account becoming NPA. Socio economic institutional, psychological and political factors. Default in payment of credit is correlated with literacy and illiteracy of a borrower.

**Ananth (2007)[70]**, The Indian banking and financial system has made commercial progress in extending its geographical spread and functions reach. The study brings about the performance of private banks in the post liberalization era and analyzing the cause of the poor performance and suggesting the measures to improve upon it. The study highlighted the strength and weakness of only the private sector banks. Emitted various financial problems and focus on the financial problems and encourages new technology and new products with the result the profitability and efficiency can be increased. The parameter considered in performance and
profitability is factors such as spread, burden and financial leverage have been found to be encouraging.

**Gita.A.Kumta(2007)[71]** The study evolves modes for efficient management of funds with special reference to inflow, planning functions and policy changes. The study highlights to identify various steps taken by various agencies to guide the District Central Co-operative in Maharashtra. The author opined that the cooperative banks are unable to take the advantages of the liberalization measures unless the cooperative societies Act and Banking Regulation Act give full protection to DCCB. The opinion of the author further more highlights on the fact that unless there is a reliable bench marks the study may not yield a proper conclusion and also there could be a possibility of window dressing in the financial statements.

**K.Ramesha (2003)[72]** Co-operative banks have made substantial progress in India; the movement cannot be termed as a vibrant one in regard to cooperative values and philosophy as enunciated in cooperative principles. While the extension of financial sector reform programme mainly the prudential standards to cooperative banking on par with commercial banks. The notion of code of good practices though intuitively appealing the temptation to prescribe universally valid model codes which do not allow for differences in institutional development, legislative framework. The paper identifies several broad areas for the intervention of researchers under three categories, i.e. prudential standards, professional management and governance and supervision and regulation against the backdrop of financial sector reforms.

**Rajesh Chakrabarti and Gaurav Chawla (2004)[73]** Authors suggested increasingly popular methodology of Data Envelopment Analysis to evaluate the relative efficiency of Indian Banks in comparison with Foreign Banks. The result of the study suggests on a value basis, the foreign banks, as a group, have been considerably more efficient than all other bank groups, followed by the Indian Private Banks. From the quantitative performance aspect private banks supersedes the other bank group. The study emitted their views on regulatory mechanism is a cause for poor performance aspects like poor quality of goods is a cause of NPA and emphasizing the level of profitability and in performance.
Rajesh Chakrabarti (2004)[74] the author highlighted the Reforms and Reorganization in banking industry in India. The banking industry in India is undergoing a transformation since the beginning of liberalization. The social objectives rural credit of banking measured in terms of rural credit are expectedly taking a back seat. Adoption of SARFAESI Act and Basel II norms implies new challenges for Indian banks as well as regulators. Financial performance of Indian banking industry has become more competitive and raised issues about efficiency and regulatory effectiveness.

Sukhdev Singh (2006)[75] The author had suggested the alternative measures for improvement in the banking industry. The study evaluated the performance of banks against benchmark and ratio analysis was employed as the tools. The analysis of the NPA observed the decline in post liberalisation period. The study insisted that the ideal level benchmark is less than 1 percent, the segments curtail the growth rate of NPAs and followed certain policy like counterparts who had not only arrested the NPA but reduced them.

Arabi.U (2007)[76] Keeping in view the alternative sources of finance and its role in economic development in India, the study aims at evaluating bank credit role and how it is channelled to the different sectors in India. The author has made an attempt to understand the effective performance of credit delivered to different development sectors. The paper also deliberated the analysis on the bank credit to the various sectors like agriculture, SSI, micro finance, housing finance, infrastructure lending, Government. Finally the author concludes in their findings the need to further liberalise the interest rate structures to ensure efficiency in financing the credit to core sectors.

Aastha Bhasin (2007)[77] the fast changing and increasingly competitive financial environment exposes the banks to various types of risks. It is imperative that financial intermediaries, in particular banks need to not only understand the various types of emerging risks but also the ways and means to measure and mitigate them. The paper discussed the important concepts in task management as applicable to banks against the backdrop of Basel II. The paper thus aimed to develop a basic
understanding on major risks surrounding a banking institution as also the more popular means of measuring them.

**Milind (2007)[78]** The objective of the paper is to measure the productive efficiency of banks in developing country. The measurement of efficiency in this paper is done using Data Envelopment Analysis. The study shows 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 and brings an insight to the existing policy of reducing non-performing assets.

**Shinde (1999)[79]** the importance of Return on Equity (ROE) as an instrument to judge the financial performance of the bank. The author has analyzed the component which determines Profit Margin (PM), Asset Utilization (AU) and Equity Multiplier (EM). The study dealt with the strategies which may be adopted by the bank management to improve the PM and the AU which may be ultimately results into higher ROE. The highlight of the study dealt by the author is major components of banking risk. The author looked at various tools of financial analysis as a yard stick to judge the performance of a bank and its management.

**Kulkarni (1999)[80]** the small scale sector has been assigned an important role in national economy. Competitiveness of the products of SSI units, particularly in the international market, is dependent on their prices and quality considerations. Besides providing financial inputs, the need for extension services assumed importance. In the liberalised economic era, the role of technology up gradation and modernisation had assumed significant importance. The paper emphasized light on the role played by the Government of India and the SIDBI towards achieving the goal. In view of the priority accorded to technology up gradation and modernization for SSI sector in the Ninth Plan the initiative should be taken to bring the awareness of technology up gradation and modernization needs among small entrepreneurs.

**George, D.Namasivayam, G.Ramachandraiah (1999)[81]** development of agriculture can take place only if farmers move from traditional to modern agriculture, besides a large variety of inputs and services. This paper tries to put together empirical data on cost of borrowing by the farmers. This paper also analyzes
the impact of the cost of borrowing on the repayment behaviour of the borrowers. The author emphasized on issues such as source and type of defaulters, to find out farmers borrowing cost, identify crop and term loan, different types of institutional and non-institutional sources.

**Namboodiri (2001-2002)[82]** identifies 5Cs, and 7Ps which are simple and basic point a banker has to apply his mind and be alert about while appraising a credit proposal. And also adds the phrase as banker an employee should act in good faith and without negligence to avoid the problem by the bank. The author emphasized NPA is really breaking the backbone of the Indian Commercial banks. Credit appraisal is the best early opportunity available to the bankers to ensure the asset quality. Study has proved ‘adverse credit selection’ is one of the major reasons for the growing number of NPAs. To improve the quality of credit appraisal is the core study conducted by the author.

**Ramesha (2002)[83]** While the growth in terms of deposits and advances of urban banking sector in the post reforms period has been appreciable, the vexatious issues such as duality of control, presence of large number of weak/sick banks, lack of professionalism and legislative rigidities continue to bother this sector. The author dealt monetary and credit policy and its implication for Urban Cooperative Banking Sector. The study reflects major recommendations of the Madhava Rao Committee. The author in his study mentioned the setting up of a new supervisory structure for UCBs. The study highlighted the concept of Scheduled UCB Sector and Scheduled Commercial Banking Sector. The author has also made a reference of a leading cooperative bank.

**Shete (2003)[84]**, deals with priority sector advances of banks during the post reform period addressed two major issues in this article, viz, to displace evil moneylenders and cheap credit was necessary to allow poor and rural household to adopt new technologies and to escape the cycle of poverty and indebtedness and also considers performance of PSBs lending to priority sector, agricultural advances, advances to SSI, advances to other priority Sector, weaker section financing. The study has also dealt with the policy initiation of banking sector reforms. There has
been a significant and favourable changes related to reduction of CRR, and SLR, interest rate deregulation.

**Sanjay Choudhari and Arabinda Tripathy (2004)**[85] in their study made an attempt to use Data Envelopment Analysis (DEA) to evaluate the relative performance of public sector banks in India. The authors made an attempt to evaluate the banks on five indicators namely, Profitability, Financial Management, Growth productivity, and Liquidity. The analysis showed that most of the banks form efficient frontier in profitability and financial indicators compared to productivity, growth and liquidity indicators. The authors emphasized on lacuna that banks are not giving importance to other measures such as productivity, growth and liquidity as compared to profitability and financial management.

**Uday S Bose (2005)**[86]. The growing NPA and its implications on the banking system need no emphasis. While there have been several schemes in the past to facilitate the recovery from NPAs, the success of such efforts in terms of NPA reduction has been far from satisfactory. SARFAESI Act greatly helps bank in their effort to reduce recovers money from NPAs. Attempts to provide a glimpse of the Act against this backdrop. The author has cited certain limitation on the Act and also put certain light of the Supreme Court landmark Judgement in ordinance 2004.

**Pasadilla (2005)**[87] Philippines has the highest number of Non-Performing Loans in Asia. As a result, the government provided a legal framework through which banks can transfer NPA to separate entity called Special Purpose Vehicles (SPV), which are private owned Asset Management Companies are responsible for recovery of bad loans in a phased manner.

**Christian Roland (2005)**[88], The author focused on the changing intensity of three policies that are commonly associated with financial repression, namely interest rate controls, statutory pre-emotions’ and directed credit as well as the effects the policies had. The study attempted to evaluate the reforms that have occurred in the banking sector by focusing on the changes in three policies that are commonly associated with financial repression, namely interest rate controls, statutory pre-emption and directed credit. The indices were used to evaluate the changing intensity of repressive policies.
Kanishka Garg (2006)[89] clearly brings some current scenarios in India which strongly suggest the requirement of a tool that can convert house equity into liquid cash also brought an alternative measures for implementation and other related issues that the lenders bank will face, in the context of Indian laws, regulations and taxations. The study gives direction and attempts to identify the possible markets for this product in India. This study enables financial security as well as residential security but due to problem of regular income at time the repayment of loan amount becomes difficult has been evolved through this measures.

Vijaykriushnan (2006)[90]. Bankers and term lenders had accepted Debt Service Coverage Ratio (DSCR) as most important indicator of the repayment capacity of the borrowing entities. The author has made an attempt in the article to identify the change in the instalment is based on high or low DSCR and analyzed on the basis of the available data and emphasized DSCR is only indicative methods and new ratios developed should be sensitive to the liquidity, profitability, and solvency in a holistic manner.

Amrit Patel (2006)[91] Agriculture has been the most important sector contributing to the overall economic growth as well as providing livelihood to very significant proportion of rural population in India. The articles dealt with the disbursement and percentage growth and achievements of financing of new farmers. Comparative study is conducted on Commercial Banks, Cooperative Banks and RRB. The author highlighted in his study that fragmented work will not give complete scenario.

Rabindran James (2006)[92]. The study dealt with the measures suggested by the lenders such as bar-coding of the mark sheet, radio frequency identification and notation in the degree certificates of the borrower and also highlighted the role of Bureau of Engineering and Professional Students (BEAPS). The service rendered by the BEAPS through these articles reveals that the NPA through educational loan can be minimised or could even be brought to nil.

Bagchi (2006)[93] Commercial banking world over is best with the dominance of credit risk syndrome. The study reveals that dilution with reference to security implied reduction of intensity and strength of relative security. The author
highlighted the situation whereby Indian Commercial Banking is sufficiently resilient and guarded deeds against the major event of dilution risk loss situations. Dilution of risk is the new term in credit risk family. The study suggested that book-debt or receivable financing should not be allowed and similarly no advance to be allowed against the book-debt.

Abhinna Mohan Nanda (2006)[94] Fraudster availed finance by creating mortgages on fictitious title deed to the property or properties and also mortgage fake title deeds to the non-existent property since no registration of mortgage is done in bank’s favour in the office of Sub-registrar. The author suggested in his articles a harmonious blend of equitable and registered mortgage with a very nominal additional cost with all attendant benefits of both. Bank’s charge under the suggested method will be reflected in the Encumbrance Certificate serving as due notice to the public at large and other banks/financial institution which will help in preventing fraud and supplementary recitals to be recorded at the branch of the bank.

Khasnobis (2006)[95] A large part of the banking sector growth, has been on the back of financing consumptions, as reflected in the growth of retail banking. Growth driver would involve financing the emerging Small and Medium Enterprise sector of the economy. The evaluation of the NPA has been blended by the author by the asset companies which specialise in certain segment of the financial sector. The author highlighted pre-liberalization and post liberalization effect through these articles.

Bagchi (2006)[96] Capital Stock in any business organisation is the ‘buffer’ against the vicissitudes of risks facing in the market driven environment Basel Committee announced the guidelines on Capital Adequacy. The author stressed upon the solvency status of the bank through the concept of capital adequacy. The study also observed the blend between Innovative Perpetual Debt Instrument and Hybrid Debt Capital Instrument. The author also highlighted the new area through which the capital adequacy can be enhanced in banking industry.

Narayanaswmy, K.Aruna Rao and Srimathi S.Mayya (2007)[97] made an attempt to construct a scale for measuring the performance of Primary Agricultural Credit Societies (PACSs) and establish the robustness of scaling
techniques and the scale itself. An attempt is made to evaluate the performance of co-operatives by using the tools developed for the co-operative sector which does not seem to be appropriate. Corporate is an ‘outward looking’ entity whereas co-operative is an inward looking entity the scaling technique developed in this paper is both simple and robust and address the problem of non-normal data.

**Henry James (2007)**[98], deals with the problems on rising volume of overdue of the loan of the banking system both credit cooperative credit societies and of commercial banks, but also other regulating agencies like RBI, NABARD and other policy makers at national level. It also gave a solution that high overdue payment leads to the bank in inconvenient position at the time of availing refinancing facilities from the external sources. The author in his research has preferred drought prone areas since the trend recovery of loan has been worsening. The demand for the recovery was higher than actual recovery.

**Sankar Thappa (2007)**[99] has dealt with the Securitization process at the time of lending and borrowing money from the banks and financial institution. Globalization has resulted into rapid transformation of the financial system all over the world. As a result capital market, money market and debt market are getting widened and deepened. The study has involved the process of securitization and five stages involved in securitization of the assets. The author has also revealed the future for securitization in India.

**John Ferry,(2008)**[100], projected the most recent phase of the financial crisis in reference to Basel II, Pillar II that covers three aspects for controlling risk viz. responsibility for the board and senior management stressed the importance of internal control over external supervision and sets target for banks capital to match the risk profile of the banks. Author highlighted liquidity risk management public disclosure and the role of supervisors.

**Kaveri (2008)**[101] The Basel Committee on Banking Supervision published a paper on Compliance Functions in Banks in April 2005, which discussed certain principles of compliance. The RBI reviewed the working of compliance system in banks, which was found to be not effective. Subsequently, the RBI set up a working group to make suitable recommendations to strengthen the compliance system.
These guidelines cover Compliance Principles, Process, Procedures, Compliance Policy, Compliance Structure, Responsibility of Board and Senior Management, Compliance Risk, Compliance Programme, etc. Paper highlighted various aspects of compliance function in banks.

**Kapil Sharma and P.N.Mishra (2008)[102]** one of the fundamental issues in finance is how risk and returns of an investment are related to each other. The Capital Asset Pricing Model (CAPM) was the first concrete step towards finding an answer to the issues suggested. CAPM gives an insight into what kind of risk is related to return, it offers powerful predictions about how to measure the risk and the relation between expected return and risk. The paper dealt with the key ideas of the CAPM, its applications importance in the field of finance and its weakness.

**Goel (2008)[103]** The Indian banks need to manage their advances portfolio in such a manner that risk factor should be minimised at the early stage of their bearing capacity. The author has resorted to Alternate Dispute Resolution (ADR) which can entail a fair deal to all concerned without unlawful means and pro-court bias. The articles has made an effort to bring awareness to banks and customers for settlement of NPA dues promptly and also settle various other banking disputes in the best interest of both the parties.

**Kamal Das (2008)[104]** last two decades there has been a crisis due to volume and growth of NPA that holds the prime resources resulting in severe strains on the normal resource allocation process essential for development. The author made a study on the factors associated with NPA. The study attributes to the macroeconomic factor such as increasing interest, economic slowdown, and currency devaluation. The observation of the study led to systematic framework with a clear objective, flexibility and adequate financial support was required to resolve the distressed situation and for the strategy to succeed, adequate legal provisions.

**Sundararaman (2008)[105]** in hot pursuit of NPA the articles dealt with the formation and procedural aspect of DRT which also includes the issue of summons, counter Claim and DRAT (Debt Recovery Appellate Tribunal). The author had considered various factors for the delay in pronouncing the judgement. Thus banks and financial institution should bring about some measures which could bring moral
or social pressures upon the concerned borrowers which can act as deterrent for unscrupulous disposal of secured assets.

**Usha Janakiraman (2008)[106]** financial innovations had transferred the traditional mortgage loan agreement into an instrument that could trade like stock and bonds. The author observed that losses in the sub-prime mortgage market triggered reaction in other financial markets and affected the entire sector shaking the trust and confidence in the investors in the system as a whole. The paper examined the crisis, highlighted the areas which are likely to be scrutinized and discussed while trying to distil the lesson to be drawn and their implications for policy.

**T.Chithralekha and P.S.Nirmala (2008)[107]** banks face various risks and it is very essential for the banks to manage risks. Poor risk management can bring down even well-performing organizations. The paper focused on Basel norms and the various challenges and impacts of implementing Basel II in India. For better management of risks, the bank has to understand these norms and implement them. Author has described the challenges and categorised them into people, financial and technical challenges.

**Naushad. M.Mujawar (2009)[108]** Lending has always been associated with credit risk, arises out of the borrower’s default in repaying the loan with the stipulated time. In recent years some UCBs, which are mostly engaged in retail banking, have faced mergers and strict action by RBI for having failed to successfully manage their NPAs. The inflating bubble of NPAs may mar the balance sheets of the banks if they fail to adopt better credit monitoring practices to prevent further slippage of NPAs. In the case study, an attempt has been made to tackle the problem of NPAs. The objective of the study is to understand the concept of NPA and classification of assets

**Satish Chander Gupta (2009)[109],** healthy competition among the banks contributes to the growth of the economy. India resorted to liberalization and deregulation of the banking sector to keep pace with the global changes and to cope with ongoing reforms in real sector. The paper blended various factors such as effective management of NPA, compliance of Basel II norms, Proper implementation of risk management, etc. The author considered certain parameters such as
productivity, efficiency, profitability, return on capital, net interest margin and return on assets for assessing the level of NPA.

Amit Singh Sisodiya and Ramana Pemmaraju (2009)[110]. The study covers Indian banking sector’s performance. The analysis of the study shows, the domestic banking sector has done remarkably well on parameters like returns, maintaining profitable growth, and risk management, though there warning signal and underlines the fact that banks have successfully waded through a tough liquidity scenario without hampering the credit growth.

Tarun Bhatia (2009)[111] the global economic crisis had a significant impact on the economies and financial systems of several countries. The paper refer to the success of Indian performance is the accumulation of the capital. India’s banks have maintained healthy capitalisation levels in the past decade. The author observed that it is necessary and beneficial for the banks to raise capital through hybrid instruments in order to maintain a healthy Capital Adequacy ratio. Banks’ healthy and improved capitalization cushions the impact of higher NPAs.

Vaidyanathan (2009)[112] as the economy grows it is necessary to recast financial system to ensure the growth. The author has made a comparison between PSB, Private Bank and NBFC. The study made has been evaluated on the reduction of interest, enhancing credit delivery mechanism, revising relationship. PSB have been geared to Asset Based Lending’ rather than lending based on the forecast cash flows. Thus the author concludes NBFC need to integrate domestic financial markets through the system of making UIBs (unincorporated Bodies).

Jagadish, R. Raiyani (2010)[113] SSI contributes substantially to the production, exports and employment in India. The paper dealt with the progress made by SSI and policy laid by the government exclusively for the socioeconomic objectives. The author has brought in the analysis the major problem faced by the SSI. Problems, such as scarcity of power supply, human resources, availability of raw material, etc. are the cause of obstruction for the growth of SSI. The study reveals one of the solution to the growth is developing policy by the government with the result the development can be achieved.
Ghatpande[114] of Bank of Maharashtra had submitted dissertation on the subject of “Recovery of Bank loans – an investigation into the existing judicial process review of costs and time factors and recommendations”. Banks seek intervention of courts for recovery of dues. The study discussed the theoretical aspects of seeking intervention of court and analyzed the existing legal system. This is followed by the application of the legal system for suits filed by banks and to review the amounts blocked in civil suits. It further classifies the cases to know the different facts in recovery of Bank’s dues. Detailed analysis of the time spent at various stages of suit and general causes for delay at each stage is explained.

Sudhakar[115], Bank of Baroda had submitted dissertation on the subject of “Policies and Perspectives of NPA Reduction in Public Sector Banks” to The Indian Banks Association, Mumbai, 1997-98. This study attempted to examine the issue relating to policies and practices prevailing in the area of NPA reduction. This study also indicated that though the top management of Public Sector Banks (PSBs) were enlightened and concerned about the dimensions of NPAs in their bank, the same is not shared by the staff at operational level. NPA reduction as organizational goals not translated into action in true spirit. The methods and system followed by most PSBs can at best be categories as conventional and crude.

Ranjana Kumar (2004)[116] speech delivered at the Business Session “Strategies for Managing Risk in Volatile Time”, on April 4, 2003 on the occasion of “Banking Summit 2003” organised by the Confederation of Indian Industries at Mumbai April 3rd to 5th 2003. The address of the chairperson emphasised on the annual financial inspection and the process is based on the CAMELS (applicable to all domestic banks)/ CALCS (applicable to Indian operations of banks incorporated outside India) approach where Capital Adequacy, Asset Quality, Management Aspects, Earnings, Liquidity and Systems and Control are examined keeping in view the requirement of Section 22 of the Banking Regulation Act, 1949. (BRA). Author concluded that implementation of “Risk Based Supervision” has been firmly laid by the regulators.

Khedekar Pooja S. (2012)[117] A strong Banking Sector is essential for a flourishing economy. Indian banking sector emerged stronger during 2010-11 in the
aftermath of global financial meltdown of 2008-10 under the watchful eye of its regulator. The level of NPA's act as an indicator showing the credit risks & efficiency of allocation of resource. NPA involves the necessity of provisions, any increase in which bring down the overall profitability of banks. An excessive rise in interest rates over the past 18 months has led to a sharp increase in non-performing assets. This not only affects the banks but also the economy as a whole. This paper deals with understanding the concept of NPA, the causes and overview of different sectors in India.

Selvarajan B. and Vadivalagan, G. (2013)[118] Over the few years Indian banking, attempts to integrate with the global banking has been facing lots of hurdles in its way due to certain inherent weakness, despite its high sounding claims and lofty achievements. In a developing country, banking is seen as an important instrument of development, while with the demanding Non-Performing Assets (NPAs), banks have become burden on the economy. Non-Performing Assets are not merely non remunerative, but they add cost to the credit Management.

The fear of Non-Performing Assets permeates the psychology of bank managers in entertaining new projects for credit expansion. Non-Performing Assets is not a dilemma facing exclusively the bankers; it is in fact an all pervasive national scourge swaying the entire Indian economy. Non Performing Asset is a sore throat of the Indian economy as a whole. Non Performing Assets have affected the profitability, liquidity and competitive functioning of banks and developmental of financial institutions and finally the psychology of the bankers in respect of their disposition towards credit delivery and credit expansion. NPAs do not generate any income for the banks, but at the same time banks are required to make provisions for such NPAs from their current profits. Apart from internal and external complexities, increases in NPAs directly affects banks' profitability sometimes even their existence.

Meeker Larry G. and Gray Laura (1987)[119] in 1983, the public was given its first opportunity to review bank asset quality in the form of non-performing asset information. The purpose of this study is to evaluate that information. A regression analysis comparing the non-performing asset statistics with examiner
classifications of assets suggests that the non-performing asset information can be a useful aid in analyzing the asset quality of banks, particularly when the information is timely.

Paul Purnendu, Bose, Swapan and Dhalla, Rizwan S. (2011) In this paper we attempt to measure the relative efficiency of Indian PSU banks on overall financial performances. Since, the financial industry in a developing country like India is undergoing through a very dynamic pace of restructuring, it is imperative for a bank to continuously monitor their efficiency on Non-Performing Assets, Capital Risk-Weighted Asset Ratio, Business per Employee, Return on Assets and Profit per Employee. Here, Non-Performing Assets is a negative financial indicator. To prove empirically, we propose a framework to measure efficiency of Indian public sector banks.

Veerakumar, K. (2012) The Indian banking sector has been facing serious problems of raising Non-Performing Assets (NPAs). Like a canker worm, NPAs have been eating the banking industries from within, since nationalization of banks in 1969. NPAs have choked off quantum of credit, restriction the recycling of funds and leads to asset-liability mismatches. It also affected profitability, liquidity and solvency position of the Indian banking sector. One of the major reasons for NPAs in the banking sector is the 'Direct Lending System' by the RBI under social banking motto of the Government, under which scheduled commercial banks are required to lend 40% of their total credit to priority sector.

The banks who have advanced to the priority sector and reached the target suffocated on account of raising NPAs, since long. The priority sector NPAs have registered higher growth both in percentage and in absolute terms year after year. The present paper is an attempt to study the priority sector advances by the public, private and foreign bank group-wise, target achieved by them and a comparative study on priority and non-priority sector NPAs over the period of 10 years between 2001-02 and 2010-11. This paper also aims to find out the categories of priority sector advances which contribute to the growth of total priority sector NPAs during the period under study.
Murthy, K. V. Bhanu Gupta, Lovleen. (2012)[122] One of the major reasons cited for this state of health of banking industry has been the persistence of 'Non-performing Assets' (NPAs). In this study the focus is on the impact of liberalization on the non-performing assets of the four banking segments, namely, public sector, old private sector, new private sector and foreign banks by studying the overall trends in NPAs. We have used the Structure- Conduct- Performance (S-C-P) approach that shows the relationship between competition and conduct, concentration and growth in NPAS. Our results show that on an average across the banking industry segments, average non-performing assets in the past 11 years have been declining at the rate of 13% p.a. compounded growth rate. The old private sector banks' nonperforming assets have reduced at the rate of 11.98% and that of public sector banks have declined at the rate of 18% and foreign banks at 11.4%. Though new private sector banks and the foreign banks seem to be more efficient but their conduct does not show consistency and stability.

Joseph, Mabvure Tendai Edson, Gwangwava(2012)[123] The purpose of the study was to find out the causes of non-performing loans in Zimbabwe. Loans form a greater portion of the total assets in banks. These assets generate huge interest income for banks which to a large extent determines the financial performance of banks. However, some of these loans usually fall into non-performing status and adversely affect the performance of banks. In view of the critical role banks play in an economy, it is essential to identify problems that affect the performance of these institutions. This is because non-performing loans can affect the ability of banks to play their role in the development of the economy. A case study research design of CBZ Bank Limited was employed. Interviews and questionnaires were used to collect data for the study. The paper revealed that external factors are more prevalent in causing non-performing loans in CBZ Bank Limited. The major factors causing nonperforming loans were natural disasters, government policy and the integrity of the borrower.

Toor N.S. (1994)[124] stated that recovery of non-performing as-sets through the process of compromise by direct talks rather than by the lengthy and costly procedure of litigation. He suggested that by constant monitoring, it is possible to detect, the sticky accounts, the incipient sickness of the early stages itself and an
attempt could be made to review the unit and put it back on the road to recovery S.N. Bidani (2002)[125] Non-performing Assets are the smoking gun threatening the very stability of Indian banks. NPAs wreck a bank’s profitability both through a loss of interest income and write-off of the principal loan amount itself. This is definitive book which tackles the subject of managing bank NPAs in it’s entirely, starting right from the stage of their identification till the recovery of dues in such ac-counts.

Debarsh and Sukanya Goyal (2012)[126] emphasized on management of non-performing assets in the perspective of the public sector banks in India under strict asset classification norms, use of latest technological platform based on Core Banking Solution, recovery procedures and other bank specific indicators in the context of stringent regulatory framework of the RBI. Non-performing Asset is an important parameter in the analysis of financial performance of a bank as it results in decreasing margin and higher provisioning requirements for doubtful debts. The reduction of non-per-forming asset is necessary to improve profitability of banks and comply with the capital adequacy norms as per the Basel Accord.

Kavitha. N (2012)[127], emphasized on the assessment of non-performing assets on profitability its magnitude and impact. Credit of total advances was in the form of doubtful assets in the past and has an adverse impact on profitability of all Public Sector Banks affected at very large extent when non-performing assets work with other banking and also affect productivity and efficiency of the banking groups. The study observed that there is increase in advances over the period of the study.

Rajeshwari Krishnani(2002)[128] focused on the problem of swelling non-performing assets in banks and financial institution of the country becomes more and more unmanageable and created threats for the financial sector. She found that securitization can be used for the liquidating the illiquid and long terms debut like loan receivables of the financial institutions or bank by issuing marketable securities against them. She concluded that the SARFAESI act is defiantly and big leap forward not only in the filled of NPA management but also promoting the securitizing market in India. The act may be required to fine tuned to bring in ‘natural justice’.
Lakshman[129] in his study pointed out the reasons for NPA’s in Indian bank. He started the reasons could be, diversion of the bank fund, time/cost overrun while implementing the project, business failures like product failing to capture market, inefficient management, strained labor relations, old technology and product obsolescence, recession in some foreign countries and adverse exchange rate government policies toward excise, imports and exports, willful default frauds, misappropriations, deficiencies in the system of credit appraisal monitoring and follow up, delay in settlement/subsidies. He further mentioned some of the methods to recover NPAs they are Recapitalization and asset reconstruction fund. He highlighted the steps taken contain NPAs they are as following RBI stressed the need for credit appraisal and credit supervision since the basic problem is at lone decision stage, stressed the need to monitor stock and operation and end use statements, detailed guidelines have been issued to take steps to avoid sickness and also to nurse bake the align units, stressed the need to constitute recovery cells, NPA management departments and fixed recovery target for banking units, the debt recovery tribunal should depose off the issues within six months. It should be given freedom to regulate its own Procedure subject to the provision of the Act of 1993, on the filling of suit in court law, the following guidelines are prescribed which registered and the enforceable. He made suggestions that areas which created the problem, in most costs the barrowers are ot be found. The documents charging should with the bank including the location map of properties. Must avoid expert’s orders to eliminate scopes for reopening the mater and also further litigation cost memo should be filled with in 7 days from the date of court order which includes application fee, advocate fee, insurance /go down /storage charges and other expenses incurred by a bank.

Chandrashakar Rao[130] studied the present and most critical issue faced by the banking system has been hug pile- up of nonperforming assets which the bank have come to be saddled with. As result the survival of many weak bank managements and unions of their employees. He noticed that the main reasons for the banking units to become weak leading to mounting NPAs in diversification of funds by promoters, the other region is the tardy legal system and the inadequate legislation for recoveries. The reasons stated for the increasing NPAs in the primary
sector are directed and pre-approved loans sanctioned under sponsored programmers’, absence of any securities, lack of effective follow up etc., In view of this, it is not desirable to expect the other hand, they have to work as promoted of the economic development on the other hand, this call for effective risk return approach to be adopted by the banks. It is found that majority of the defaulters are willful defaulters and hence criminal proceedings against corporate defaulters are to be issued to recover this national wealth. Government shall ensure proper legal foundation for enforcement of contracts and recovery of dues by banks.

Rajaseker Reddy and D. Ramama Reddy[131] made a conceptualized study in Andhra Pradesh in nonperforming asset. They noticed that the internal and external courses for NPAs have included are many sector of industry. Failures to introduce financial management, managerial deficiency over the estimation demand, underestimation of capital costs, delay in implementing project which result is cost acceleration, of finance and working capital, surplus labor, recession in demand, inadequate availability of resources like relation caused heavily industrial sickness which paneled the way to the evaluation of NPAs in industrial sector.

They figured out the problem of NPAs in state and made some suggestion they are extending role of banks and financial institutions not to keep their activity limited to financing but also to monitor the functioning of industry from time to time, introducing entrepreneur training, counseling and guidance for the new entrepreneurs. Establishing a separate department of rehabilitation of NPAs which concentrates on diagnosing the reason for NPAs and to detect rehabilitation process by catering to economic, administrative, technical and infrastructural help. They concluded that the growing industrial sickness among private, public an co-operative endeavors, certain selections were suggested to encounter industrial sickness and to minimize the chances of evolution of NPA in any industry. The suggestions are promotion and encouragement to traditional industrial depending upon the skill and workmanship of the workers engaged, reforming the role of financial institutions not restricted only to lend finances but to act as guide and co-coordinator in functioning of the industry so as to help them thrive, establishment of a separate and special department for rehabilitation of NPAS which mainly concentrates on and diagnoses the reasons to economic, administrative, technical and infrastructure help.
Sivarami Reddy and Smt. V. Kalavathi studied the reasons remedies of non-performing assets, they found that the reasons for NPA were diversification of funds, mostly for expansion / diversification of business like product / market failure, failure, inefficient management, inappropriate technology, labor unrest etc., changes in the macro environment like recession, infrastructural bottlenecks etc., time / cost over runs during project implementation, changes in government policies, and delay in release of sanctioned limits by banks. They highlighted various steps for reducing NPAS they are, study the Problems of NPA branch wise, amount wise and age wise, prepare loan Recovery policy and strategies for reducing NPA, create special cells at the Head office / zonal office level to look after critical branches where NPAs are on the high side, select prepare technique suitable for the NPA and monitor it in a time bound action plan. They concluded that NPA is not just a problem for banks they are bad for the economy. The money locked up in NPA is not available for productive use and to that extent the banks seek to make provisions for NPA or write them off.

Sabato (2006) in his article Managing Credit Risk for Retail Low – Default Portfolios analyses Low default Portfolio’s are portfolio’s where there are very low level of default. Hence unable to measure Loss Given default, Probability of Default and Exposure at Default. The mentioned paper discusses about measuring risk of such portfolio’s DJ Hand, MJ Crowder during (2005) “Measuring Customer Quality in Retail Banking” describes such a model that separates the observed variables for a customer into primary characteristics on the one hand, and indicators of previous behaviour on the other, and links the two via a latent variable that is identified as customer quality.

Kocenda (2011) in their paper “Default Predictors and Credit Scoring Models for retail banking” develops a specification of the credit scoring model with high discriminatory power to analyze data on loans at the retail banking market. Parametric and non-parametric approaches are employed to produce three models using logistic regression (parametric) and one model using Classification and Regression Trees (CART, nonparametric). The models are compared in terms of efficiency and power to discriminate between low and high risk clients by employing data from a new European Union economy.
Hlawatsch and P Reichling (2010)[135] in an article “A framework for Loss Given Default validation of Retail Portfolios” state that Modeling and estimating loss given default (LGD) is necessary for banks that apply for the internal ratings based approach for retail portfolios. To validate LGD estimations, there are only a few approaches discussed in the literature. In this paper, two models for validating relative LGD and absolute losses are developed. The validation of relative LGD is important for risk- adjusted credit pricing and interest rate calculations. The validation of absolute losses is important to meet the capital requirements of Basel II. Both models are tested with real data from a bank. Estimations are tested for robustness with in-sample and out-of-sample tests.

Kavitha N (2012)[136], in their article entitled, “An Insight Into Determinants Of Funds Management In Indian Scheduled Commercial Banks” Analyse the Banks in India, R.B.I., especially SBI Group, Nationalized Banks Group and the Private Banks Group They use variables like Government Securities, Assets, Investments, Approved Securities, Investment, Deposits, Return On Investments, Debt Equity Ratio, Capital Adequacy Ratio, Term Deposits, Total Deposits, Liquid Assets, Provisions, Contingencies, Cash, Deposits, Other Assets, Credit Deposits, Fixed Assets, Assets, Priority Sector Advances and Advances, Ratio Of Borrowings, Funds Management is the first step in the long-term strategic planning process. Therefore, it can be considered as a planning function for an intermediate term, It has also explained the investment pattern and optimal mix of assets and liabilities of scheduled commercial banks in India.

Sunil Kumar (2008)[137] in An Analysis Of Efficiency–Profitability Relationship In Indian Public Sector Banks, Analyse Efficiency–Profitability Quadrants using variables relating to production, intermediation, net- interest income, interest expenses, interest income and efficiency frontier maximization Efficiency profitability matrix models. They have explored the relationship between technical efficiency and profitability in Indian PSBs using the “efficiency–profitability matrix”

Vinod Kumar (2013)[138] in an analysis of the Success Parameters Of Indian Commercial Banks use Secondary data that had been used in the study: .
Report on Trend and Progress of Banking in India, RBI, 2008 to 2012. The analysis covers data of Nationalized Banks, SBI and its associates, Old Private Sector Banks (OPSBs), New Private Sector Banks (NPSBs), Foreign Banks (FBs), Interest income and interest expenses of banks, Non-Interest income and operating expenses of banks, Total Income and Total Expenditure. He has analysed the data using arithmetic mean and percentage statistical techniques.

It is concluded that no bank group is successful in controlling its operating expenses within limits as compared to its non-interest income. Apart from this, SBI and Its Associated bank group and New Private sector bank group are more successful as compared to other bank groups as their percentage increase in income side is more than the percentage increase in expenditure side.

Ashfaq Ahmad, Kashif-Ur-Rehman and Muhammad Iqbal Saif (2010)[139], in their article on Islamic Banking Experience Of Pakistan: Comparison Between Islamic And Conventional Banks find positive relationships between service quality and borrower satisfaction regarding Islamic banks in Pakistan. There will be positive relationships between service quality and borrower satisfaction. They use variables like Islamic and conventional banks, relationship between service quality and borrower satisfaction, using IBSQL-IBCS model, CBSQL-CBCS model. Correlation, Linear Regression Model. This study examined the relationship between service quality and borrower satisfaction by comparing Islamic and conventional banks operating in Pakistan. The researchers collected data from 720 respondents. The responses of bank borrowers were analyzed by Pearson’s Correlation and regression. The results indicate that there is strong direct and positive relationship between service quality and borrower satisfaction. The magnitude of relationship between service quality and borrower satisfaction is greater in Islamic banks as compared to conventional banks.

Syed Ibrahim M (2011)[140] in Operational Performance Of Indian Scheduled Commercial Banks-An Analysis use variables like Deposits, Investments, Credits, Loans and advances, Reserve Bank of India, Aggregate Deposits of Scheduled Commercial Banks, Credits Deployed by Scheduled Commercial Banks, Investments made by Scheduled Commercial Banks, Credit-Deposit Ratio and
Investment Deposit Ratio, Deposits and Credits of Scheduled Commercial Banks per Office, Role of Scheduled Commercial Banks in the Priority Sector Lending, diagnostic and exploratory in nature and makes use of secondary data. This study is confined only to the specific areas such as Aggregate Deposits mobilized by these banks, Loans and Advances, Credit-Deposits Ratios, Investment-Deposits Ratios, for the ten years period starting from the year 2000 to the year 2009. In order to analyze the data and draw conclusions in this study, various statistical tools like Descriptive Statistics, „t” test, and Correlation have been applied. This research paper reveals that the operational performance of Indian Scheduled Commercial Banks has improved since the year 2000. Aggregate deposits show a constant increase. The percentage of time deposits to aggregate deposits mobilized by the Scheduled Commercial Banks was high in 2009. It was found that there is a positive correlation between demand deposits and time deposits. Credits deployed and investments made by these banks have shown significant performance. The Indian Scheduled Commercial Banks have been more efficient by maintaining the C-D ratios in an increasing trend over the period of the study.

Mahipal Singh Yadav (2011)[141], in his study on Impact of Non Performing Assets on Profitability And Productvity Of Public Sector Banks In India study the Non-Performing Asset Of Public Sector Banks, Aggregate Impact Of Non-Performing Assets On Profitability, Impact Of Non-Performing Assets In Priority And Non- Priority Sector, Aggregate Impact Of Non-Performing Assets On Profitability With Other Banking Variables, Non- Performing Assets And Productivity, Non-Performing Assets And Productivity use variables like Total Advance, Gross NPA, NPA of Priority sector, NPA of non-priority Sector value of spread and burden, Priority sector advances, Credit–Deposit ratio, Operating expenses, Term deposits, Provisions and contingencies, Value of Non-performing assets, using Regression Analysis. The study concludes that gross non-performing assets of public sector banks in absolute terms has shown increasing trend till 2001 and declined later on, whereas its percentage shown declining trend. One fourth amount of total advances of public sector banks was in the form of doubtful or non-performing assets in the initial year of nineties, which raising question mark on the credit appraisal performance of the public sector banks in India.
Uma G. Gupta, William Collins (1997)[142], in his study, “The Impact Of Information Systems On The Efficiency Of Banks: An Empirical Investigation”, use variables like usage rate of different types of computer technologies, usage of different types of computer technologies, percentage of companies investing in software, hardware, system development, system maintenance, and training. Success in aligning IS with different organizational goals, significance of the contribution of IS to different organizational goals, perceptions regarding different IS-related issues, different measures used to assess returns on IS investment, Client Servers, Vans, Lans, Workstations, microcomputer, minicomputers, mainframes, EFT, ATM, optical storage, EIS, EDI, DSS, Image Processing, GIS, Multimedia, Expert Systems, Case, software, hardware, system development, system maintenance, and training. Organizational goals: Increasing productivity, Enhancing borrower service Utilization of existing system, Instituting cross-functional systems, Building integrated information systems, Cash management, Product, Borrower information, Retail Banking, Regulatory Compliance, Integrated product information, Marketing Research, ATM Planning, bank marketing, Bank acquisition, media marketing. Their survey confirms the technology predictions of many practitioners and experts in the IS community, namely, the increasing growth of client server systems and local area networks. Empirical study which investigated the contribution of IS to banks in Florida. There are several interesting findings that emerged from this study. First, there is a lack of rigorous analysis and theoretical frameworks that explore the link between IS investments and a bank’s efficiency. Second, top IS professionals strongly feel the need for developing more rigorous cost-benefit methodologies that will help them sell the technology to top management. Third, traditional measures of productivity, such as decrease in operating costs and increase in profits, continue to be the most popular measures of efficiency and return on investments, although these measures may not be suitable for information systems and technologies.

Median profit per employee, Non-interest income to working funds, The ratio wage bill to total expenses, the cost to income ratio, Cash reserve ratio and statutory liquidity ratio. They conclude that there has been a decline in spreads and intermediation costs widely used measures of efficiency in banking and a tendency towards their convergence across all bank-groups. In short, only cost effective, costumer focused, technology driven, capital strengthen banks which follow prudential regulations can only sustain in attracting depositors and borrowers in the current competitive environment.

**Uppal (2011)**\cite{Uppal2011} in an article E-Delivery Channels In Banks-A Fresh Outlook analyse the data of Nationalized Banks G-I, State Bank Group G-II Old Private Sector Banks G-III, New Private Sector Banks G-IV, Foreign Banks G-V Computerization in Public Sector Banks, Branches and ATMs of Scheduled Commercial Banks, Transactions through Retail Electronic Payment Methods, ATMs as a percentage of Total Branches, Internet Banking Branches as a percentage of Total Branches, Mobile Banking Branches as a percentage of Total Branches, Tele Banking Branches as a percentage of Total Branches. They conclude that technology is taking place but this speed is quite slow in Indian banking industry particularly, in public sector banks. The future outlook demands heavy investment in information technology. The study concludes that more developments in technology are taking place. In the face of the new competitive pressures, inherent rigidities in public sector banks to enhance serious challenges. The gap between partially using IT in banks and fully using IT in banks has widened.

**Hemali G. Broker and Bhadresh H. Senjaliya (2013)**\cite{Hemali2013} in the article on “Pros & Cons Of Banking Facilities In India”, use variables like FDIC Insured, Getting Paid to Save, Loans, credit, Automated Teller Machines ATM, Electronic Clearing Service (ECS), Electronic Funds Transfer (EFT), tele-banking, internet banking etc Investors' Trust, Economics of Scale, Resource Utilization, Profitable Diversification, Easy Marketing, One-stop Shopping. The study concludes saying, Banking has become very, the demands of the people are still on the increase and banks are now thinking of new schemes and policies to protect and promote the interests of their Borrowers. The prospect of E-Banking is becoming popular day by day. Even people who do not have an access to the Internet can perform banking
transactions through the telephone. The latest trend in banking is M-banking or mobile banking, which is a venture now on the test run.

**H.S. (2013)** in her study A study on causes and remedies for non-performing assets in Indian public sector banks with special reference to agricultural development branch, state bank of Mysore has studied that bankers can avoid sanctioning loans to the non-creditworthy borrowers by adopting certain measures. There should be careful appraisal of the project which involves checking the economic viability of the project. A banker must consider the return on investment on a proposed project. If the calculated return is sufficiently higher than the credit amount he can sanction the loan. Secondly, he can constantly monitor the borrower in order to ensure that the amount sanctioned is utilized properly for the purpose to which it has been sanctioned. This involves the post sanction inspection by the banker.

**Kumar (2013)** in his study on A Comparative study of NPA of Old Private Sector Banks and Foreign Banks has said that Non-performing Assets (NPAs) have become a nuisance and headache for the Indian banking sector for the past several years. One of the major issues challenging the performance of commercial banks in the late 90s adversely affecting was the accumulation of huge non-performing assets (NPAs). The quality of loan portfolio is very crucial for the health and existence of the banks. High level of (NPAs) has many implications on profitability, productivity, liquidity, solvency, capital adequacy and image of the bank.

**Selvarajan & Vadivalagan (2013)** in A Study on Management of Non-Performing Assets in Priority Sector reference to Indian Bank and Public Sector Banks (PSBs) their research paper has studied that the growth of Indian Bank’s lending to Priority sector is more than that of the Public Sector Banks as a whole. Indian Bank has slippages in controlling of NPAs in the early years of the decade. Therefore, the management of banks must pay special attention towards the NPA management and take appropriate steps to arrest the creation of new NPAs, besides making recoveries in the existing NPAs. Timely action is essential to ensure future growth of the Bank.
Singh (2013) in his paper entitled Recovery of NPAs in Indian commercial banks says that the origin of the problem of burgeoning NPA’s lies in the system of credit risk management by the banks. Banks are required to have adequate preventive measures in fixing pre-sanctioning appraisal responsibility and an effective post-disbursement supervision. Banks should continuously monitor loans to identify accounts that have potential to become non-performing. Banks have to be given powers of inspection of the use of loans and the loan should be disbursed on the point of purchase by the borrowers to ensure proper utilization of deposits. Banks may also be given powers to recover loans from the guarantor of the borrower.

Gupta (2012) in her study A Comparative Study of Non-Performing Assets of SBI & Associates & Other Public Sector Banks had concluded that each bank should have its own independence credit rating agency which should evaluate the financial capacity of the borrower before than credit facility. An effective committee can be formed for management of NPA comprising of financial experts who have wide knowledge in this field. Banks can appoint professionals to identify the genuine borrowers & can analyse their profile. NPA can be considered as a crucial rating factor for any bank; it should continuously monitor the borrowers A/C to prevent NPA. The credit rating agencies should regularly evaluate the financial condition of the clients. Special accounts should be made of the clients where monthly loan concentration report should be made.

Rai (2012) in her study on Study on performance of NPAs of Indian commercial banks said that till recent past, corporate borrowers even after defaulting continuously never had the fear of bank taking action to recover their dues. This is because there was no legal framework to safeguard the real interest of banks. However with the introduction of SARFAECI ACT banks can issue notices to defaulters to repay their loans. Also, the Supreme Court has recently given the banks the freedom to sell mortgage assets of the borrowers, if they do not respond to the legal proceedings initiated by lender. This enables banks to get sticky loans thereby improving their bottom lines.

Khanna (2012) in her research paper entitled Managing NPA in commercial banks has said that the primary function of banks is to lend funds as
loans to various sectors such as agriculture, industry, personal loans, housing loans etc., but in recent times the banks have become very cautious in extending loans. The reason being mounting non-performing assets (NPAs) and nowadays these are one of the major concerns for banks in India. NPAs reflect the performance of banks. A high level of NPAs suggests high probability of a large number of credit defaults that affect the profitability and net-worth of banks and also erodes the value of the asset.

Chatterjee, Mukherjee and Das (2012)[153] in their study on Management of non-performing assets - a current scenario has concluded that banks should find out the original reasons/purposes of the loan required by the borrower. Proper identification of the guarantor should be checked by the bank including scrutiny of his/her wealth. Framing reasonably well documented loan policy and rules. Sound credit appraisal on well-settled banking norms with emphasis on reduction in Gross NPAs rather than Net NPAs Position of overdue accounts is reviewed on a weekly basis to arrest slippage of fresh account to NPA. Half yearly balance confirmation certificates should be obtained from the borrowers.

Kaur and Singh (2011)[154] in their study on Non-performing assets of public and private sector banks (a comparative study) studied that 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. The Financial companies and institutions are nowadays facing a major problem of managing the Non-Performing Assets (NPAs) as these assets are proving to become a major setback for the growth of the economy.

Prasad and Veena (2011)[155] in their study on NPAs Reduction Strategies for Commercial Banks in India stated that the NPAs do not generate interest income for banks but at the same time banks are required to provide provisions for NPAs from their current profits. The NPAs have destructive impact on the return on assets in the following ways. The interest income of banks reduced it is to be accounted only on receipt basis. The current profits of the banks are eroded because the providing of doubtful debts and writing it off as bad debts and it limits the recycling funds.
Chaudhary and Sharma (2011)[156] in their research paper on Performance of Indian Public Sector Banks and Private Sector Banks: A Comparative Study stated that it is right time to take suitable and stringent measures to get rid of NPA problem. An efficient management information system should be developed. The bank staff involved in sanctioning the advances should be trained about the proper documentation and charge of securities and motivated to take measures in preventing advances turning into NPA. Public banks must pay attention on their functioning to compete private banks. Banks should be well versed in proper selection of borrower/project and in analyzing the financial statement.

Karunakar (2008)[157], in his study Are non - Performing Assets Gloomy or Greedy from Indian Perspective, has studied the important aspect of norms and guidelines for making the whole sector vibrant and competitive. The problem of losses and lower profitability of Non-Performing Assets (NPA) 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.

Bhatia (2007)[158] in his research paper entitled, Non-Performing Assets of Indian Public, Private and Foreign Sector Banks: An Empirical Assessment, 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. This paper aims to find the fundamental factors which impact NPAs of banks. A model consisting of two types of factors, viz., macroeconomic factors and bank-specific parameters, is developed and the behavior of NPAs of the three categories of banks is observed.

Kaur (2006)[159] in her thesis titled Credit management and problem of NPAs in Public Sector Banks highlighted the problem of non-performing assets in public sector banks. Author 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.

Murali and Krishna (2006)[160] in their paper, Ensuring Qualitative Credit Growth through Effective Monitoring of Advances, 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.

Balasubramaniam (2001)[161] in Non-performing assets and profitability of commercial banks in India: assessment and emerging issues said that the level of NPAs is high with all banks currently and the banks would be expected to bring down their NPA. This can be achieved by good credit appraisal procedures, effective internal control systems along with their efforts to improve asset quality in their balance sheets. However, maintaining profitability is a challenge to commercial banks especially in a highly competitive era and opening up of banking business to NBFC and foreign banks in general.

2.1 REVIEW OF LITERATURE ON GROWTH OF BANKING AND ITS IMPLICATIONS

Growth of banking is inevitable for social and economic development. They are the biggest purveyors of credit and they also attract most of the savings from the people (Mohanty and Mahapatra, 2010)[162]. The modern banking, in addition to intermediating function, also carry out many other financial services and ventured into other financial markets including insurance, etc. The stability and viability of commercial banking is synonym for sustainable economic development. Banking distress leads to economic crisis. The post-liberalization period witnessed an era of
deregulated regime and competitive pressure in banking sector, leading to improved significance for asset quality for sustained competitive edge in the market. Even though banks in general are regulated by Reserve Bank of India, bank efficiency depends on the quality of credit risk management followed by banks. NPA management is considered vital for overall efficiency of banking sector. The best indicator for the health of the banking industry in a country is its level of Non-performing assets (NPAs). Reduced NPAs generally gives the impression that banks have strengthened their credit appraisal processes over the years and growth in NPAs involves the necessity of provisions, which bring down the overall profitability of banks (Prasad and Veena, 2011)[163].

Koeva, P (2000)[164] recognized the importance of nonperforming loans as one of the major indicator in explaining the bank level variation in intermediation costs and profitability during the financial liberalization period. The economic crisis in fact emanate from banking crises due to higher levels of nonperforming assets.

Khan and Bishnoi (2001)[165] observed that banking crises exists in countries if the level of NPA touches 10% of GDP. NPA is a virus affecting the economy. NPA impact banks differently including a reduction in interest spread (Brahmananda, 1999)[166], reduction of profitability and shareholder value (Kaur and Singh, 2011)[167] and jeopardize the viability of the bank (Micheal et al, 2006)[168].

On one hand, it reduces the income earning capacity of banks, at the same time, banks need to provision from their income towards probable credit losses. The effect of NPA is not limited to bank alone, it affect the economy, borrowers, creditors, industries, etc. At macro level, NPA blocks the flow of funds to prospective borrowers and hence results in reduced capital formation and economic activity. Also, higher levels of NPA force banks to invest in risk free government securities and other investments. This also results in reduced capital formation and economic activity. Management of NPA is one major objective promulgated in various reform measures since post-liberalization period. Prudential measures on income recognition, asset classification, provisioning, etc were carried out in order to control the NPA in banking sector. Various committee’s (including Narasmiham
Committee, Verma Committee) were appointed to chalk out strategies and reform measures to manage NPA. The reform process has shifted the focus of public sector dominated banking system from social banking to a more efficient and profit oriented industry (Ketkar and Ketkar, 2008). Literature on efficiency of NPA management is wide folded. Some literature explained the efficiency of several recovery management measures, such as SARFAESI, Debt Recovery Tribunals, Lok Adalats etc (Siraj and Pillai, 2012), while different studies also observed the comparative efficiency of different bank groups in India and explaining their NPA levels (Rajeev and Mahesh, 2010; Siraj and Pillai, 2012; Vallabh et al, 2007; Malyadri and Sirisha, 2011; Chaudhary and Sharma, 2011. Since post-liberalization period, various studies have utilized NPA statistics while assessing the relative efficiency of banks in India (Prabhakar, et al, 2012). The reforms in post-liberalization period have led to the increase in resource productivity, increasing level of deposits, credits and profitability and decrease in non-performing assets (Badola and Verma, 2006).

Indian banking system can claim that their level of NPAs have registered a declining trend over a period of time and is of international standards, with prudential provisioning, classification (Chaudhary and Singh, 2012). NPA results from many internal and external causes. The reasons for NPA are classified differently; into systematic and situational causes (Istrate et al, 2007) into overhand component and incremental component (Poongavanam, 2011), into internal and external factors (Misra and Dhal, 2010; Muniappan, 2002), based on its effects (Islam, et al, 2005). The reasons classified into internal factors and external factors are more common in literatures. NPA cannot be eliminated completely from the market; rather it can be controlled and brought in to acceptable limits.

Rawlin and Saran (2012) observed that there is strong correlation between Gross advances and NPA of banks and NPA can be predicated based on its relationship with Gross advances. Studies also indicated the relevance of directed lending mostly priority sector advances to generate NPA of banks (Uppal, 2009). The RBI, in its Annual Policy 2012-13, has proposed that as bank branches are fully computerized, it will mandate banks to have the following: A
robust mechanism for early detection of distress signs and taking measures, including prompt restructuring in the case of all viable accounts wherever required, with a view to preserving the economic value of such accounts. A proper system-generated segment wise data on the NPA accounts, write offs, compromise settlements, recovery and restructured accounts.

**Goven (1993)**[179] in his article, “NPAs on account of priority sector lending”, it was pointed out that there may be only a marginal difference in the NPAs of banks’ lending to priority sector and the bank’s lending to private corporate sector. Against this background, the study suggests that given the deficiencies in these areas, it is imperative that banks need to be guided by fairness based on economic and financial decisions rather than system of conventions, if reform has to serve the meaningful purpose. Experience shows that policies of liberalization, deregulation and enabling environment of comfortable liquidity at a reasonable price do not automatically translate themselves into enhanced credit flow. Although public sector banks have recorded improvements in profitability, efficiency (in terms of intermediation costs) and asset quality in the 1990s, they continue to have higher interest rate spreads but at the same time earn lower rates of return, reflecting higher operating costs.

Bakshi (1998) in his article, “NPAs Management in Banks” discussed that there was a health code system which classify the assets in 1998 but the norm was not so effective. RBI introduced prudential norms to regulate NPAs which involves asset classification, recognition of income and provisioning norm. After introduction of the norm NPAs are in decreasing mood both net NPAs and gross NPAs.

**Jain (2002)**[180] in his thesis titled, "Non-performing Assets in Commercial and Development Banks in India” 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. Ensuring optimum performance by each manager and staff will also be vital.

Bidani (2002)[181] in his book titled, "Managing Non-Performing Assets in Banks," highlighted that banks are concerned with their heavy NPA portfolio which was impairing their profitability and are taking all possible steps to contain the same. Banks have achieved a reasonable degree of success to bring down their existing NPAs but due to heavy slippage of standard accounts to NPA category the overall position continued to deteriorate. The main reasons responsible for such a situation include - slow economic and industrial growth, slump in capital market, financial indiscipline, Willful defaults by the borrowers, overburdened and slow judiciary, competition faced by local industries from the multi-nationals, lack of support to the borrowers from the banks at the time of the need, etc. In this book, the author has made an effort to deal 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.

Rajput (2003)[182] in his thesis titled, "Banking Sector Reforms in India - A study of Post- Liberalization Period", highlighted that decade of nineties in last century brought revolution in Indian banking sector. Banks were made free from the clutches of hefty regulations and allowed to decide their own fate. Author 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.


discussed in detail the need, process, summary, positive as well as negative aspects of the Act. He 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.

Misra (2003)[184] in his article, "Managing Non-Performing Assets: A Professional Approach", highlighted 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.

Reddy (2003)[185] in their research paper, "NPAs: Threat to Financial Stability", confirmed that financial stability is an essential prerequisite for sustainable long-term economic growth of any country. Banking system being the largest component of financial system should take care to immunize itself from the macro economic shocks through maintaining optimal and quality asset portfolios to achieve the objective of smooth flow of funds into the most economic channels. The nonperforming 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.

Khan and Singh (2005)[186] in their Report on "Effectiveness of DRTs in Recovery of Bank Dues", have evaluated the performance of DRTs in recovery of bank dues during the years 1996 to 2004. They have highlighted major defects in DRT system and also 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)**[187] in her research book titled, "Commercial Banks in India", stated that it has been found over the years that 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. Overtime, the viability particularly of a number of public sector banks has become a matter of great concern.

According to author, profitability of banks is influenced by a combination of factors such as quality of asset-liability management, productivity levels, operating costs, organisational culture and most critical issue in present context, i.e., the non-performing assets (NPAs). 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 (2006)**[188] in his article, “NPAs Emerging Challenges in India” studied 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, as reflected in the growth of retail banking. While the progress on this front is likely to continue, sustaining this growth in the coming years may require focus on the supply side – capacity building. 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. Addressing this issue and putting in place a suitable risk mitigation mechanism is going to be a fairly daunting challenge. One way of ensuring focus would be to free up capital – both financial and human – and make them available for sustaining the growth in assets and profitability. Farming out the banks’ Non-Performing Assets (NPAs) portfolio to asset recovery companies, which specialize in this segment of the financial sector, could be an option worth evaluating.
Kumar (2005)[189] in his article, “Non-Performing Assets in Indian Banks” studied that the Indian banking sector faced a serious problem of NPAs. The extent of NPAs has comparatively higher in public sectors 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 standard.

Bose (2005)[190] in his research paper, "SERFAESI Act: An Effective Recovery Tool", elaborated 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. SERFAESI 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. The author has made an attempt to provide a glimpse of the SERFAESI Act against this backdrop.

Chugh (2005)[191], in his research book titled, "Indian banking today- Impact of Reforms", has attempted to investigate 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. Some other important parameters such as assets size, level of NPAs, interest and other incomes etc. were selected to make comparison between new private sector banks and public sector banks. Impact of economic reforms on banking sector has also been examined in the study. He concluded that public sector banks were coming up fastly 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.

Harpreet (2006)[192] in her thesis titled “Credit management and problem of NPAs in Public Sector Banks” highlighted 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. The study has covered the prudential norms given by RBI and also analyzed the NPA management policies of public sector banks. Viewpoints of the managers regarding problem of NPAs have also been studied by selecting 120 managers from various branches of public sector banks in Punjab. Perceptions of borrowers contributing to NPAs have also been studied by selecting 100 defaulters from public sector banks in Punjab. Author 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.

Kumar (2006)[193] in his research book titled, "Banking Sector Efficiency in Globalize Economy," 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. Author has explored the broad structure of banking system in India, analyzed the overall efficiency of the system in terms of financial parameters into two components: technical efficiency and allocation efficiency. He 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. The study concluded 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.

Murali and Krishna (2006)[194] in their paper, "Ensuring Qualitative Credit Growth through Effective Monitoring of Advances", 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 nonperforming 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.
2.2 **NON PERFORMING ASSETS (NPAS): SOME PARAMETERS TO DECIDE**

A Non-Performing Asset (NPA) shall be a loan or an advance where:

- Interest and / or instalment of principal remain overdue for a period of more than 90 days in respect of a term loan.
- The account remains ‘out of order’ in respect of an overdraft / cash credit (OD / CC).
- The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted,
- Interest and / or installment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purposes, and
- Any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.

2.3 **CAUSES OF NPAS IN PUBLIC SECTOR BANKS**

Various reasons can be cited for an account becoming NPA. An asset leads to NPA when the borrower fails to repay the interest and/or principal on agreed terms. The reasons for NPA are classified differently; into systematic and situational causes (Istrate et al 2007) into overhand component and incremental component (Poongavanam, S. 2000; Kumar, BS. 2005), into internal and external factors (Misra and Dhal. 2011; Muniappan. 2002), into random and non-random factors (Biswas and Deb, 2005) based on its effects (Islam, et al. 2005) and into bank-specific business and institutional environment factors (Boudriga et al, 2009). The reasons classified into internal factors and external factors are more common in literatures.

With regard to the reasons for NPA, Reddy, PK (2002)[195] opined that the problem of NPA is not mainly because of lack of strict prudential norms, but due to legal impediments, postponement of the problem by the banks to show higher returns and manipulation by the debtors using political influence.
Dash et al (2010)[196] briefed that macro-factors that includes real effective exchange rate and growth in real GDP affect the level of NPAs. With regard to the bank specific variables, the authors found that banks which charges relatively higher real interest rates and have a penchant for taking on risk tends to experience greater non-performing loans. Gopalakrishnan, TV (2005)[197] classified the causes for NPA into political, economic, social and technological. The author opined that neglect of proper credit appraisal, lack of follow-up and supervision, recessional pressures in economy, change in government policies, infrastructural bottlenecks, and diversion of funds etc as the major cause for NPA.

Aggarwal and Mittal (2012)[198] pointed out that the major reasons for NPA includes improper selection of borrowers activities, weak credit appraisal system, industrial problems, inefficient management, slackness in credit management and monitoring, lack of proper follow-up, recessions and natural calamities and other uncertainties.

Espinoza, R and Prasad, A (2010)[199] emphasized that financial system shocks emanate from firm specific factors (idiosyncratic shocks) and from macroeconomic imbalances (systemic shocks). Fainstein, G (2011)[200] classified reasons for NPA into macroeconomic, banking sector and also microeconomic level variables.

Gopalakrishnan, TV (2005)[201] has classified the factors leading to NPA into political, economic, social and technological reasons. The economic causes are further classified in internal and external causes. In a similar study on NPA, Collins, NJ and Wanjau, K (2011)[202] explained a direct relationship between interest rate and NPA. The study noted that interest rate spread affect performing assets in banks as it increases the cost of loans charged on the borrowers, regulations on interest rates have far reaching effects on assets nonperformance, for such regulations determine the interest rate spread in banks and also help mitigate moral hazards incidental to NPAs.

Some of the important reasons for NPA, mentioned in various literatures are summarized below:
1. Wilful defaults, siphoning of funds, fraud, disputes, management disputes, mismanagement, misappropriation of funds etc.,

2. Lack of proper pre-appraisal and follow up.

3. Improper selection of borrowers/activities.

4. Inadequate working capital leading to operational issues. Under financing/untimely financing.

5. Delay in completing the project.

6. Non-compliance of sanction terms and conditions.

7. Poor debt management by the borrower, leading to financial crisis.

8. Excess capacities created on non-economic costs.

9. In-ability of the corporate to raise capital through the issue of equity or other debt instrument from capital markets.


11. Failures to identify problems in advance.

12. Diversion of funds for expansion\modernization\setting up new projects\ helping or promoting sister concerns.

13. Deficiencies on the part of the banks viz. in credit appraisal, monitoring and follow-ups, delay in settlement of payments\ subsidiaries by government bodies etc.,

14. Time involved in the legal process and realization of securities.

2.4 IMPACT OF NPAS ON THE PERFORMANCE OF BANKS

Batra, S (2003)[203] mentioned that the most important business implication of the NPAs is that it leads to the credit risk management assuming priority over other aspects of bank’s functioning. The bank’s whole machinery would thus be pre-occupied with recovery procedures rather than concentrating on expanding business. RBI, through various circulars, stipulated guidelines to manage NPA. This view was
supported by Yadav, MS (2011)[204] and stated that higher NPA engage banking staff on NPA recovery measures that includes filing suits to recover loan amount instead of devoting time for planning to mobilization of funds. Thus NPA impact the performance and profitability of banks. The most notable impact of NPA is change in banker’s sentiments which may hinder credit expansion to productive purpose. Banks may incline towards more risk-free investments to avoid and reduce riskiness, which is not conducive for the growth of economy.

Sethi, J and Bhatia, N (2007)[205], clarified on implications of NPA accounts that Banks cannot credit income to their profit and loss account to the debit of loan account unless recovery thereof takes place. Interest or other charges already debited but not recovered have to be provided for and provision on the amount of gross NPAs. All the loan accounts of the borrower would be treated as NPA, if one account is NPA. Many authors emphasized the straddling impact of NPA and stressed its impact on loan growth. A higher NPA force banks to invest in risk-free investments, thus directly affect the flow of funds for productive purpose. (Tracey and Leon, 2011; Heid and Kruger, 2011 and O’Brien, 1992)[206-207-208]

Bloem et al (2001)[209] remarked that issues relating to NPA affect all sectors (in particular if parallel issues with defaulting trade credit is also considered). The most serious impact, however, is on the financial institutions, which tend to own large portfolios, indirectly; the customers of these financial intermediaries are also implicated; deposit holders, share holders and so forth. Add to this, NPA is not only affecting the banks and its intermediaries, it is having impact on the development of the nation as well. For a bank, NPA means unsettled loan, for which they have to incur financial losses. The cost for recovering NPA is as well considerable. There are banking failures on account of the mounting NPA since it is affecting the profitability and long run survival of the bank.

Karunakar, M et al (2008)[210] explained that NPA results in deleterious impact on the return on assets. It happens in the following ways;

- The interest income of banks will fall and it is to be accounted only on receipt basis.
• Banks profitability is affected adversely because of the provision of doubtful debts and consequent write off as bad debts.

• Return on Investment (ROI) is reduced.

• The capital adequacy ratio is disturbed as NPAS are entering into the calculation.

• The cost of capital will go up.

• The assets and liability mismatch will widen.

• The economic value additions (EVA) by banks gets upset because EVA is equal to the net operating profit minus cost of capital, and

• It limits recycling of the funds.

2.5 MANAGEMENT OF NPA

Ranjan and Dhal (2003)[211] opined that horizon of maturity of credit, better credit culture, favorable macroeconomic and business conditions lead to lowering of NPAs. In its annual report (2010) RBI noted that “management of NPA by banks remains an area of concern, particularly, due to the likelihood of deterioration of the quality of restructured advances”. The NPA of banks is an important criterion to assess the financial health of banking sector. It reflects the asset quality, credit risk and efficiency in the allocation of resources to the productive sectors.

Ahmed, JU (2010)[212] noted that since the reform regime there has been various initiatives to contain growth of NPA to improve the asset quality of the banking sector. Commercial banks have envisaged the greatest renovation in their operation with the introduction of new concepts like income recognition, prudential accounting norms and capital adequacy ratio etc which have placed them in new platform. The growing competition from internal and external constituents and sluggish growth in economy coupled with poor credit-deposit ratio, the large volume of NPAs in the balance sheet and lack of automation and professionalization in the operation have been affecting the banking situation in the country.
Murinde, V and Yaseen, H (2004)[213] on management of NPA made it clear that the traditional approaches to bank regulation are not conducive for management of NPA. These approaches emphasized the view that the existence of capital adequacy regulation plays a crucial role in the long-term financing and solvency position of banks, especially in helping the banks to avoid bankruptcies and their negative externalities on the financial system. In general, capital or net worth serves as a buffer against losses and hence failure. Rather than accommodating measures to combat the NPA issues, the traditional measures tried to protect the interests of deposits through maintaining adequate capital in liquid form. This has impacted the availability of funds for productive purpose, since banks were not able to lend it, rather forced to keep as reserves.

Strengthening financial systems has been one of the central issues facing emerging markets and developing economies. This is because sound financial systems serve as an important channel for achieving economic growth through the mobilization of financial savings, putting them to productive use and transforming various risks. Borbora, RR (2007)[214] emphasized that the essential components of sound NPA management are i) quick identification of NPAs, ii) their containment at a minimum level and iii) ensuring minimum impact of NPAs on the financials.

Panta, R (2007)[215] noted that all kinds of lending involves three stages where discretion needs to be exercised (a) Evaluation and assessment of the proposal (b) Timely monitoring and evaluation and (c) Proper assessment of exit decision and modality.

Prashanth K Reddy (2002)[216] in his thesis titled, “A comparative study of Non Performing Assets in India in the Global context - similarities and dissimilarities, remedial measures” highlighted that financial sector reform in India has progressed rapidly on aspects like interest rate deregulation, reduction in reserve requirements, barriers to entry, prudential norms and risk-based supervision. But progress on the structural-institutional aspects has been much slower and is a cause for concern. The sheltering of weak institutions while liberalizing operational rules of the game is making implementation of operational changes difficult and ineffective. Changes required to tackle the NPA problem would have to span the
entire gamut of judiciary, polity and the bureaucracy to be truly effective. The study deals with the experiences of other Asian countries in handling of NPAs. It further looks into the effect of the reforms on the level of NPAs and suggests mechanisms to handle the problem by drawing on experiences from other countries.

**Jain (2002)** in his thesis titled, "Non-performing Assets in Commercial and Development Banks in India" 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. Ensuring optimum performance by each manager and staff will also be vital. Another critical factor upon which would hinge the future of banking system would be the ability and competence of banks to build up large volumes of quality assets in a constantly increasing competitive environment, while adhering to prudential norms and maintaining prescribed levels of capital adequacy on risk assets simultaneously. Productivity and efficiency will be the watchwords in the banking industry in the years ahead. Continuous quest for skill upgradation at all levels, development of vision, mission and commitment are some of the aspects, which require urgent attention by the banking industry in future. Darwin’s principle of survival of the fittest may, in all likelihood, operate in the case of banks too. Banks, which are pro-active, respond quickly to the changing needs of the customer, and give adequate attention to the changing scenario, alone can survive successfully, perform well and prosper.

**Bidani (2002)** in his book titled, "Managing Non-Performing Assets in Banks," highlighted that banks are concerned with their heavy NPA portfolio which was impairing their profitability and are taking all possible steps to contain the same. Banks have achieved a reasonable degree of success to bring down their existing NPAs but due to heavy slippage of standard accounts to NPA category the overall position continued to deteriorate. The main reasons responsible for such a situation
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**Saggar (2005)**[224] in her research book titled, "commercial Banks in India", stated that it has been found over the years that 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. Overtime, the viability particularly of a number of public sector banks has become a matter of great concern. According to author, profitability of banks is influenced by a combination of factors such as quality of asset-liability management, productivity levels, operating costs, organisational culture and most critical issue in present context, i.e., the non-
performing assets (NPAs). 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)[225]** in his article, “NPAs Emerging Challenges in India” studied 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, as reflected in the growth of retail banking. While the progress on this front is likely to continue, sustaining this growth in the coming years may require focus on the supply side – capacity building. 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. Addressing this issue and putting in place a suitable risk mitigation mechanism is going to be a fairly daunting challenge. One way of ensuring focus would be to free up capital – both financial and human – and make them available for sustaining the growth in assets and profitability. Farming out the banks’ Non-Performing Assets (NPAs) portfolio to asset-recovery companies, which specialize in this segment of the financial sector, could be an option worth evaluating.

**Kumar (2005)[226]** in his article, “Non-Performing Assets in Indian Banks” studied that the Indian banking sector faced a serious problem of NPAs. The extent of NPAs has comparatively higher in public sectors 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 standard.

**Chugh (2005)[227]** in his research book titled, "Indian Banking today-Impact of Reforms", has attempted to investigate 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. Some other important parameters such as assets size, level of NPAs,
interest and other incomes etc. were selected to make comparison between new private sector banks and public sector banks. Impact of economic reforms on banking sector has also been examined in the study. He concluded that public sector banks were coming up fastly 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.

Harpreet (2006)[228] in her thesis titled “Credit management and problem of NPAs in Public Sector Banks” highlighted 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. The study has covered the prudential norms given by RBI and also analyzed the NPA management policies of public sector banks. Viewpoints of the managers regarding problem of NPAs have also been studied by selecting 120 managers from various branches of public sector banks in Punjab. Perceptions of borrowers contributing to NPAs have also been studied by selecting 100 defaulters from public sector banks in Punjab. Author 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.

Kumar (2006)[229] in his research book titled, "Banking Sector Efficiency in Globalize Economy," 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. Author has explored the broad structure of banking system in India, analyzed the overall efficiency of the system in terms of financial parameters into two components: technical efficiency and allocation efficiency. He 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. The study concluded 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.
Murali and Krishna (2006)[230] in their paper, "Ensuring Qualitative Credit Growth through Effective Monitoring of Advances", 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.

Bhatia (2007)[231] in his research paper entitled, “Non-Performing Assets of Indian Public, Private and Foreign Sector Banks: An Empirical Assessment”, 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. This paper aims to find the fundamental factors which impact NPAs of banks. A model consisting of two types of factors, viz., macroeconomic factors and bank-specific parameters, is developed and the behavior of NPAs of the three categories of banks is observed.

Karunakar (2008)[232] in his article, “Are non - Performing Assets Gloomy or Greedy from Indian Perspective?” has discussed that the economic reforms initiated by the then finance minister and present prime minister of India Dr. Manmohan Singh would have been remained incomplete without the overhaul of Indian banking sector. The problem of losses and lower profitability of Non-Performing Assets (NPAs) and liability mismatch in banks and financial sector depend on how various risks are managed in their business. An attempt is made in the paper that what are NPAs? The factors contributing to NPAs, the magnitude of NPAs, reasons for high NPAs and their impact on Indian banking operations. Besides capital to risk weightage assets ratio of public sector banks, management of credit risk and measures to control the menace of NPAs are also discussed. 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.

**Sharma (2009)**[233] in his research paper entitled, “Performance Analysis of the Indian Banking Sector”, 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. The public banks have not only reduced the lending rates but have also managed to record higher average net profit and lower NPAs level than their private sector counterparts.

According to the study the public sector banks (PSBs) have shown impressive performance across all the significant banking parameters. While they have reduced their prime lending rates, by private banks, their credit growth has far surpassed the latter registered by private banks. 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. Progressing upon bringing a significant shift in their conventional image, the public sector banks have considerably improved their quality of assets. The rise in Net NPAs of the private banks was far higher than the public sector banks.

### 2.6 RESEARCH GAP

After studying all these research papers, some major points can be concluded, like NPA are becoming a major threat to the profitability of both Public as well as Private sector banks. The level of NPA is more in Public sector banks than private banks and the most important reason of high level of NPA in public sector banks is priority sector lending or directed loan system. Besides this, various studies show that the other important reason for rising NPA level are poor credit appraisal system and poor follow up of the borrower. And unavailability of credit rating information about the borrower is also not available. Among the important ways of curbing rising NPA level is that banks should have their own independent credit agency and a proper credit appraisal of the projects should be done before granting loan to anyone. And effective follow up should be done once the loan is granted. Changes in legal
framework as well as government policies regarding priority sector lending needs to be changed.

On the basis of the review of literature and expert opinion, the gap is Crystal clear that, NPAs management in public sector banks needs a review and bring out the bottlenecks for further policy framing and to reduce NPAs in public sector banks. Hence, the present study is taken up for research.