CHAPTER 2

SURVEY OF LITERATURE

Survey of literature plays an important role for a researcher in finalisation and delimitation of a research problem. It points out gaps in the literature which can be attempted by a researcher in his study. It also introduces the researcher to alternate methods of analysis and familiarises the researcher with the scope and limitations of different studies which may provide guidance to new areas of research. A brief description of some of the selected studies is presented in this chapter. The present chapter is devoted to review the vast literature which has been carried out to measure the performance of banking sector in India

Uppal (2011) analysed the efficiency of all the bank groups in the post- banking sector reforms era. Time period of the study was related to second post-banking sector reforms (1999-2000 to 2005-06).The main objective of the banking sector reforms was to improve the efficiency of the banks and prepare them to face the global competition. The post-bank scenario showed that gap between the efficiency in various bank groups has been widen. No doubt, Indian banks were improving their efficiency but the efficiency of foreign banks was much higher than other Indian bank groups. This period has been chosen taking into consideration the following factors; On the basis of some parameters of efficiency i.e. profitability per employee, per branch, business per employee, per branch and expenses per employee and per branch.

The public sector bank, even old private sector banks have shown poor efficiency in terms of profit per employee as compared to new private sector banks and foreign banks. But our new private sector banks were competing with the foreign banks whose average performance was higher as compared to foreign banks. Hence, on an average, branch profitability of foreign banks was higher than that of public sector banks, old private sector banks, & private sector banks. But, we can also say that private sector banks were quite active and competing with foreign banks. The highest expense per employee incurred by foreign banks. The private sector banks and foreign banks paid higher and attractive salary to the efficient employees; they also provide better facilities and incentives to their employees.

But branch expenses were the highest in foreign banks Overall, we may concluded that among the Indian bank groups, new private sector banks had shown excellent growth in their efficiency and this group was competing with foreign banks in terms of many parameters of efficiency. The business per employee was quite low in public sector banks& old private sector banks as compared to private banks & foreign banks. The average per employee business was the highest in private sector banks. Thus, deposits mobilization and advances per employee were higher in private sector banks & foreign sector banks.

On the basis of some important parameters of efficiency heconcluded that among the Indian banks, efficiency of new private sector banks was quite high, but foreign banks have even edge over new private sector banks. Our new private sector banks were competing with foreign banks with continuous improvement in their performance. But our public sector banks should make effective, innovative policies/strategies to compete with foreign banks if they want to survive in this emerging competitive environment. The vision, values, innovations, leadership and social commitment can convert the challenges of public sector banks into opportunities. The paper concluded that efficiency of all the bank groups has increased in the second post-banking reforms period but these banking sector reforms were more beneficial for new private sector banks and foreign banks.

Singla(2008) examined that how financial management played a crucial role in industrial growth of banking. It was concerned with examining the profitability position of the selected sixteen banks of banker index for a period of six years (2001-06). The study revealed that the profitability position was reasonable during the period of study when compared with the previous years. Strong capital position and balance sheet place.

Srivastava (2006) concluded that in post nationalization period witnessed an unprecedented expansion of banking industry in India. However accompanied inefficiency and poor financial health to overcome this problem and improve the efficiency of banks, various tectonic measures were taken since 1991. This has resulted in improvement in productivity, profitability and strengthening of financial position of the banks so much that they were outshining those of advanced notions. However banks have still to go a long way to sustain their Competitive success. Indian Commercial Banks also need to enhance their system and procedure to international standards and also simultaneously fortify their financial position.

Subbaroo (2007) concluded the Indian banking system has undergone transformation itself from domestic banking to international banking. However, the system required a combination of new technologies, well regulated risk and credit appraisal, treasury management, product diversification, internal control, external regulations and professional as well as skilled human resource to achieve the heights of the international excellence to play its role critically in meeting the global challenge. This paper mainly concentrates on the major trends that change the banking industry world over, viz. consolidation of players through mergers and acquisitions globalization of players, development of new technology, universal banking and human resource in banking, profitability, rural banking and risk management. Banks will have to gear up to meet stringent prudential capital adequacy norms under Basel I and II, the free trade agreements. Banks have coped with challenges posed by technological innovations in banking.

Tiwari and Harstatte (2006) explored the various avenues using the mobile technology for expanding online banking services, as mobile based applications gain popularity. The paper presented the global scenario and technology used in mobile financial services. The paper provides a global overview over services offered and simultaneously analysis various technologies. Using case study it shows how successful offers may be conceptualized and implemented in a real world setting.

Uppal (2008) analysed that the quality of e-banking services in the changing environment. The paper concluded that the customers of e-banks were satisfied with the different e-channels and their services in the spread of e-banking services. This paper also suggested some measures to make e-banking service more effective in the future. The present study was mainly concerned with through e-channels i.e. e-banks. The sample size of bank customers was 25. The data was collected through pre-tested and well-structured questionnaire in Ludhiana, Punjab in May, 2006 through e-channels i.e. e-banks.

Uppal and Kaur (2007) analysed the efficiency of all the bank groups in the post banking sector reforms era. Time period of study was related to second post banking sector reforms (1999-2000 to 2004-05). The paper concluded that the efficiency of all the bank groups has increased in the second post banking sector reforms period but these banking sector reforms were more beneficial for new private sector banks and foreign banks. This paper also suggested some measures for the improvement of efficiency of Indian nationalized banks. The sample of the study in Indian banking industry which comprises five different ownership groups and the ratio method was used to calculate the efficiency of different bank groups. New private sector banks were compelling with foreign banks for continuous improvement in their performance.

Aggarwal and Mittal (2012) explained, the Indian banking system has undergone significant transformation following financial sector reforms, adopting international best practices. Several prudential, payment, integrating and provisioning norms have been introduced, and these were pressurizing banks to improve efficiency and trim down NPAs to improve the financial health in the banking system. It is among the best in the world because Indian banks are favourable on growth, asset quality and profitability; RBI and Government have made some notable changes in policies and regulation to strength Non-Performing Assets (NPAs) problem is one of the foremost and the most formidable problems that have shaken the entire banking industry in India like an earthquake. Like a canker worm, it has been eating the banking system from within, since long. It has grown like a cancer and has infected every limb of the banking system. At macro level, NPAs have choked off the supply line of credit to the potential borrowers, thereby having a deleterious effect on capital formation and arresting the economic activity in the country. At the micro level, the unsustainable level of NPAs has eroded the profitability of banks through reduced interest income and provisioning requirements, besides restricting the recycling of funds leading to serious asset liability mismatches. Unfortunately the high level of NPAs of banks is adversely affecting the profitability, liquidity and solvency position of the banking sector.

For this study, secondary data has been collected using annual report of 'Reserve Bank of India' publication including 'Trend & Progress of banking in India', statistical tables related to banks in India and report on currency and finance. Articles and papers relating to NPA published in different business journals, magazines, newspaper, periodicals were studied and data available on internet and other sources has also been used. In the present study, various statistical tools ratio, Averages, percentages, Ratio analysis, Measure of central tendency, frequency distribution, Standard Deviations, coefficient of variation and Analysis of Variance test have been used to analyse and interpret the data. In the light of objective mentioned above, the present study was confirmed to examine the various aspects of NPAs in PSBs & Private banks of India (selected banks). The study covers the period from 2001-02 to 2010-2011. To study NPA ratio variation data over the year 2010-2011 have been analysed.

They have concluded, Gross NPAs ratio of PNB is less and it has been reduced over the period in comparison to SBI. On the other side as far as Private Banks are concerned HDFC has better performance in comparison to ICICI. And also NPAs Ratio and Problem Assets ratio is reduced of PNB in PSBs & HDFC in Private sector banks. There is more variation in GNPA & NNPA ratio of PNB while in Problem Assets ratio ICICI has more variability. So, it is very necessary for bank to keep the level of NPA as low as possible. Because NPA is one kind of obstacle in the success of bank and affects the performance of banks negatively so, for that the management of NPA in bank is necessary.

Reddy(2002) concluded the importance of a sound understanding of the macroeconomic variables and systemic issues pertaining to banks and the economy for solving the NPA problem along with the criticality of a strong legal framework and legislative framework. Foreign experiences must be utilized along with a clear understanding of the local conditions to create a tailor made solution which was transparent and fair to all stakeholders.

kaur and Pasricha (2004) concluded a research on management of NPAs in Public sector banks over a 8years period ending 2002 and show that gross NPA has registered a constant increase from 1995-2002. This study point out the sector wise and bank wise position of NPA in PSBs. It was suggested that follow proper policy of appraisal, supervision and follow up of advances be taken up to controlling the NPAs.

Prasad and Veena (2011) concluded that PSBs, which currently account for more than 78 per cent of total banking industry assets saddled with NPAs, falling revenues from traditional sources, lack of modern technology and a massive workforce while the new private sector banks are forging ahead and rewriting the traditional banking business model by way of their sheer innovation and service and adoption of modern technology. .

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

Khatri and Ahujag(2010)analysed the advent of liberalization policy and RBI's easy norms several private and foreign banks have entered in Indian banking sector which has given birth to cut throat competition amongst banks for acquiring large customer base and market share. Banks have to deal with many customers and render various types of services to its customers and if the customers are not satisfied with the services provided by the banks then they have defect which will impact economy as a whole since banking system played an important role in the economy of a country, also it was very costly and difficult to recover a dissatisfied customer. Since the competition has grown manifold in the recent times it has become a herculean task for organizations to build loyalty, the reason being that the customer of today is spoilt for choice. It has become imperative for both public and private sector banks to perform to the best of their abilities to retain their customers by catering to their explicit as well as implicit needs. Many a times it happened that the banks fail to satisfy their customer who can cause huge losses for banks and there the need of this study arises. The purpose of this study was to compare the public sector banks and private sector banks in terms of customer satisfaction and to study the various variables of service quality using Seroquel model. The work has been carried out with the objective of understanding the reasons of customer dissatisfy faction and what are the opportunities areas wherein these banks need to focus and strengthen their Customers. The research work uses both the sources of information, i.e. Primary and Secondary sources, and thereafter Servqual model has been used to identify the discrepancy in the service delivery system. Finally the study concluded by giving some recommendations to improve in the area where these banks do not meet the respondents were contacted on a personal basis as well as through email. Their experience was captured through the questionnaire. Analysis of the information has been done by using the statistical package SPSS version15. Different tools like Mean, Standard Deviation and T Test have been used. Conclusion and findings have been derived from analysis and interpretation of data. Descriptive analysis has been done to depict the perception of the respondents to study their perception on the variables of service quality. The analysis of the means& the standard deviation of these variables are used.

The objective of this descriptive research explored the dimensions of customer perceived service quality in the context of the Indian retail banking industry. A set of service quality parameters, drawn from Seroquel model (Parasura man et al., 1984, 1988) have been used to understand customer satisfaction with respect to public and private sector banks.

Although in this study it was attempted to cover all aspects of service quality, there may be certain aspects that may have been omitted or that may become relevant as new trends in banking evolve. In future research, customers may reveal new aspects of service quality in retail banking that were important to them, and these would have to be incorporated in the scale so as to further explore the concept of service quality in the retail banking .

Chaudhary and Sharma (2011) concluded the economic reforms in India started in early nineties, but their outcome is visible now. Major changes took place in the functioning of banks in India only after liberalization, globalisation and privatisation. It has become every mandatory to study and to make a comparative analysis of services of public sector banks and private sector banks. Increased competition, new information technologies and thereby declining processing costs, the erosion of product and geographic boundaries, and less restrictive governmental regulations have all played a major role for public sector banks in India to forcefully compete with private and foreign banks. This paper analysed how efficiently public and private sector banks have been managing NPA.

This paper explored an empirical approach to the analysis of Non-Performing Assets (NPAs) of public and privates banks in India. The NPAs are considered as an important parameter used statistical tools for projection of trends. To judge the performance and financial health of banks. The level of NPAs is one of the drivers of financial.

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 have versed in proper selection of borrower/project and analysing the financial statement stability

Jain (2011) discussed about the relative performance of new private sector banks vis-à-vis the public sector banks of India during the period 2009-11 on many key aspects such as the banks network, banks growth, productivity, capital adequacy, asset quality, management quality, earnings quality and liquidity. The above period was chosen since it is very important to know how different banks fared after sub-prime mortgage crisis of 2008. Further it also helped us to understand if another recession hits the corners who have a better position to survive it. For this Data Envelopment Analysis (DEA) has been done for a pool of 12 banks which comprises of 5 new private sector banks and 7 public sector banks of India to better understand the above argument.

The new private sector banks include Axis, Development Credit, HDFC, ICICI, Indusind, Kotak Mahindra and Yes Bank whereas the public sector banks consists of 19 nationalized banks, IDBI bank and State Bank group. The performance of the two sectors was being judged on eight key parameters that enable banks to achieve better bottom line and remain competitive in a highly volatile and regulatory environment and growth. Data envelopment analysis (DEA) is a linear programming methodology which used to measure the efficiency of multiple decision-making units (DMUs).A comparative analysis of 12 Indian banks is being done here using DEA that includes seven public sector banks and five new private sector banks. The multiple inputs considered for evaluation were equity capital; labour, loanable funds and the multiple outputs were Net Interest Income, Fee Income. The data used for this analysis is the average of all the above mentioned inputs & outputs over the period.It can be concluded tor counterparts during the period 2009-11. This way is very good for Indian banking system since past says that private banks are the most hit during recession. The main reasons for their better performance were:

a) New private sector banks have shown better net interest income margin and fee income than most of the public sector banks.

b) The credit-deposit & investment-deposit ratio of new private sector banks were higher which reflected in higher interest income.

Chaudhary and Singh (2012) discussed the set back of early nineties when the Government of India had to pledge the gold to acquire foreign currency to meet the severe problem of balance of payment temporarily, the Government planned to liberalize the Indian economy and open its door to the foreigners to speed up the development process as a long-term solution for the ailing economy. The economic liberalization move, which was initiated in 1991 when the new government assumed office, has touched all the spheres of national activity. Perhaps one area where the deregulatory policies had the maximum impact was the banking sector. The seed of the reforms in Indian banking were sown by the Narasimham Committee appointed by the RBI under the chairmanship of M. Narasimham, the former Governor of RBI, to examine the aspects relating to the structure, organization, functions and procedures of the financial system and suggest remedial measures.

The Committee submitted its report in November 1991 thus, began a new chapter in Indian banking. Norms for income recognition, classification and provisioning of assets besides capital adequacy were introduced in Indian banking in a phased manner with other measures. Induced by the forgoing revelations, an attempt made to analyse the impact of reforms To achieve the objectives of the study, secondary data collected from the various sources like Report on Trends and Progress of Banking in India, Indian Banking Year Book, Performance Highlights of Public, Private and Foreign Banks in India, various journals such RBI Bulletin, IBA Bulletin, Professional Banker, Chartered Financial Analyst, ICFAI.Journal of Bank Management and various websites. To test the statistical significance, ANOVA technique used. The analysis clearly showed that there was a significant difference in the group-wise asset quality of Indian banks. Nevertheless, reforms have indeed transformed Indian banks into strong, stable and prosperous entities. Indian banking system can now 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. But effective cost management, recovery management, technological intensity of banking, governance and risk management, financial inclusion are the areas, which will have a key bearing on the ability of Indian banks to remain competitive and enhance soundness. In this paradigm, improvement in policy framework, regulatory regime, market-perceptions and indeed, popular sentiments relating sections.

To Asset quality has shown a significant improvement over the years in all the groups of the banks. Therefore, it can be concluded that banking reforms have indeed transformed Indian banks into strong, stable, profitable and prosperous entities. Indian banking system can now claim that their NPA levels are of international standards, with prudential provisioning, classification and an adequate capital base. But effective cost management, recovery management, technological intensity of banking, governance and risk management, financial inclusion are the areas, which will have a key bearing on the ability of Indian banks to remain competitive and enhance soundness. In this paradigm, improvement in policy framework, regulatory regime, market-perceptions, and indeed, popular sentiments relating to governance in banks need to be on the top of the agenda to serve the society's needs and realities while being in harmony with the global perspective.

Misra (2003) examined whether allocate efficiency of the Indian Banking system has improved after the introduction of financial sector reforms in the early 1990s.Allocative efficiency has been studied for twenty three States of India. To get a comparative perspective, allocate efficiency has been estimated for two periods 1981-1992 and 1993-2001; broadly corresponding to the pre financial sector reforms and the post reforms periods, respectively. The analysis carried under panel integration framework reveals that overall allocate efficiency of the banking system has almost doubled in the post reform period. This goes to suggest the success of reforms in improving allocate efficiency of the banking system in India. Allocate efficiency at the State and sectorial level has also been estimated to get a deeper insight Allocate efficiency of an individual bank involves some sort of constrained optimisation. When studied in the cross section dimension, efficiency measurement generally involves use of non-parametric frontier methodology

One of the main aims of financial sector reforms in the post1990s was to improve the allocate efficiency of the financial system. The efficiency improvement of the banking system has a bearing on the overall efficiency of the Indian financial system as the banking sector has a dominant role to play in the entire financial edifice. This study attempted to enquire into the allocate efficiency of the Indian banking system on a wider canvass encompassing twenty three States and across the agriculture, industry and services sectors.

The finding of the study broadly corroborates that there has been an improvement in allocate efficiency for all States taken together as far as elasticity of total output to total credit was concerned. At the sectorial level, however, the picture was mixed. For the services sector there has been a distinct improvement in allocate efficiency of credit in the post reform period. The agriculture and industry sector, however, have witnessed a decline in the allocate efficiency of credit in the same period. At the State level, majority of the States witnessed an improvement in the overall allocate efficiency in the post reform period. While allocate efficiency of Banks' funds deployed in the services sector has improved that in the agriculture and industry has deteriorated in the post reform period for the majority of the States. The study found improvement in the overall allocates efficiency in the post reform period for the majority y of the States. Further, the improved allocate efficiency is more marked for the services sector than for industry across the state.

Dwived and Charyulu (2011)discussed the major objectives of Indian banking sector reforms was to encourage operational self-sufficiency, flexibility and competition in the system and to increase the banking standards in India to the international best practices. The second phase of reforms began in 1997 with aim to reorganization measures, human capital development, technological up-gradation, structural development which helped them for achieving universal benchmarks in terms of prudential norms and pre-eminent practices. This paper seeks to determine the impact of various market and regulatory initiatives on efficiency improvements of Indian banks. Efficiency of firm measured in terms of its relative performance. Data Envelopment Analysis (DEA) has used to identify banks that are on the output frontier given the various inputs at their disposal. The present study confined only to the Constant-Return-to-Scale (CRS) assumption of decision making units (DMUs). Variable returns to scale (VRS) assumption for estimating the efficiency was not attempted. It was found from the results that national banks, new private banks and foreign banks have showed high efficiency over a period time than remaining banks.

It was concluded from the table that the national banks, new private banks and foreign banks have showed high efficiency over a period time than remaining banks. They performed equally in relative terms.

The units under state-owned banks, total-public sector banks and old private banks have improved their efficiency in the recent times when compared to 2005 status. The scheduled commercial banks together improved their efficiency continuously up to 2007-08 and after there was a slight decline in the last two subsequent years In general, the efficiency scores were improved among all the scheduled commercial bank types when compared with earlier research studies. Further scrutiny of these results is needed by bank-wise to get better understanding of them. Similarly, identification of factors for enhancing the efficiency could also be analysed. The variables influencing the bank efficiency negatively could also be identified. This comprehensive assessment will bring better clarity about the efficiency in Indian banking system

Chaudhary and Tandon (2010) analysed the financial performance of public sector banks in India. Public sector banks form major part of total banking system in India so there is a need to evaluate the performance of these banks. The study based upon secondary data covering the period from 1997-2007.The study related to PSB's and it includes 19 nationalized banks and State Bank of India (SBI) and its associates. The proposed of study aim at examining the performance of PSB's in India. The data on the variables selected like total deposits, total advances ,total assets, return on equity, return on assets, interest earned to total assets, interest expended to total assets spread to total assets and non-performing assets to net advances for analysis from RBI website www.rbi.org.in and website of Indian Banker Association www.iba.org.in.

From the above analysis, it was concluded that in terms of growth of advances, deposits and total assets, State Bank of Indore was showing maximum growth whereas from the point of view of return and return on assets, United Bank of India was the best. Punjab and Sind Bank has shown least growth of advances and total assets whereas State Bank of India has shown least CAGR in case of deposits performer so SBI should concentrate for increase in deposits by accelerating rate of interest and catering more and more customers with attractive saving schemes. State Bank of Hyderabad and State Bank of Bikaner has shown least CAGR of return on equity and return on assets respectively and compound growth of return on equity and return on assets could not be calculated in case of Dena Bank, Punjab& Sind Bank and Indian Bank due to negative return on equity and return on assets. Spread ratio was highest in case of Indian Bank and lowest in case of State Bank of Patiala. Decline in the ratio of Nonperforming Assets was utmost in case of State of Hyderabad and least in case of Dena Bank.

It has been observed that the banking sector in India has responded very positively in the field of enhancing the role of market forces regarding measures of prudential regulations of accounting, income recognition, provisioning and exposure, introduction of CAMELS supervisory rating system and reduction of NPA's and up gradation of technology. But at the same time reforms failed to bring banking system at a par with international level and still the Indian banking section controlled by government as PSB's being leaders in this sphere.

It was suggested that government should formulate bank specific policies and should implement these policies through Reserve Bank of India for upliftment of Public Sector Banks .Public sector banks should try to upgrade technology and should formulate customer friendly policies to face competition at national and international level. Growth of non- performing assets ratio also considered for this evaluation. It concluded the CAGR of various variables have shown variation s from bank to bank. State Bank of Indore has shown maximum CAGR in case of total advances, total deposit growth of deposits and advances and State Bank of India has least growth of deposits. CAGR of return on equity and return on assets was at peak of United Bank of India whereas Dena Bank, Punjab& Sind Bank and Indian Bank have shown negative trend in these ratios Decline of NPA's ratio was highest in case of State Bank of Hyderabad and least in case o of Dena Banks and total assets. Punjab & Sind Bank has shown least.

Pal and Malik (2007) in their empirical paper examined the difference in financial characteristics of public, private and foreign sector banks based on factors such as profitability, liquidity, risk and efficiency. Sample of 74 Indian commercial banks consistingof24publicsector, 24 private sector and 23 foreign banks was taken for the period of 2000-2005. Multinomial regression analysis was used and results revealed that foreign banks proved to be high performer in generating business with a given level of resources and they are better equipped with managerial practices and in terms of skills and technology. Foreign banks were more consistent with market system as reflected in terms of net interest margin. The public banks emerged as the next best performer after foreign banks. There were higher returns on equity in comparison to foreign and private banks. It was high performer in economizing their expenses which was reflected from expense rate and efficiency ratio. The private sector banks emerged with a better utilizer of resources as compared to PSB's. Most of the studies were concerned of commercial banks as a whole and were covering very limited number of years. PSB's maintained its dominance in the banking system. Keeping into consideration the research gaps an endeavour made in the present study to examine the performance of PSB's by calculating various ratios and their Compound Annual Growth Rates (CAGRs) and Coefficient of Variation (CV).

Swamy (2001) studied the comparative performance of different bank group's since1995-96 to 1999-2000. An attempt was made by researcher to identify factors which could have led to changes in the position of individual banks in terms of their share in the overall banking industry. He analysed the share of rural branches, average branch size, trends in bank's profitability, share of public sector assets, share of wages in expenditure, provision and contingencies, net non-performance assets in net advances, spread, has been calculated. He concluded that in many respects nationalized public sectors banks much better than private banks, even the than foreign bank.

Ram Mohan (2002) evaluated the performance of public sector banks (PSBs)since deregulation in both absolute and relative terms and also highlighted the reason underlying the improved performance of PSBs. The author mentioned that the banking system has neither collapsed nor there any banking crisis. One important point that advocates the improved performance of PSBs is the improvement in declining spreads of PSBs. The author measured performance of PSBs during the period 1991-92 to 1999-00 on the basis of key performance indicators like interest spread, intermediation cost, non-performing assets, provision and contingencies and net profits as percentage to total assets. But in the relative performance he makes a comparison between public sector banks, private sector and foreign banks from 1994-95 to 1999-00. In this category he also made comparison of the performance of PSBs and old private sector banks during the same period.

The author concluded that partly due to regulatory norms, the government owned banks have had minimal exposure to risky assets such as real estate and stock market. Another reason for survival of banks in the deregulation era was that the government wisely stayed away from the move towards full-blown capital convertibility. In his article, the author also talked of recapitalisation requirement of PSBs. Not the least, government ownership facilitates recapitalisation of banks at outset of reforms and this has arguably precipitated costlier bailouts down the road further, it was explained that the government had no choice but to infuse funds in the banking sector, the fiscal situation notwithstanding, thanks to mandatory Basel norms for banks.

Ram Mohan and Ray (2004) made a comparison of performance among three categories of banks - public, private and foreign banks - using physical quantities of input and outputs and comparing the revenue maximization efficiency of banks during 1992-00. The findings of the study showed that public sector banks performed significantly better than the private sector banks but in no way different from foreign banks. In this study, a comparison of public, private and foreign banks in India has been made using data envelopment analysis (DEA). In DEA, physical quantities of inputs and outputs are used. Therefore measures of efficiency based on output- may be more suitable .In the Indian context, the approach of using deposits and loans as output have been appropriate in the nationalized era when maximizing these was indeed the objective of a bank. But the main business of the banks is to maximize their profits. Interest expense and operating expense are treated as input when amount to maximizing revenue. Finally they concluded that the superior performance of PSBs is to be described higher technical efficiency rather than higher allocative efficiency.

Jain (2006) discussed various ratios relating to profitability of the banks. The author classified the various ratios under three categories, viz. Costing Ratio, Returns / Yield Ratio and Spread Ratios. Such ratios can be used to understand a bank's financial condition, its operation and attractiveness as an investment. He explained that such ratio analysis can be used to make an inter-branch comparison for investigating the strengths and weaknesses of individual banks and to enable them to take strategic decisions and initiate necessary corrective actions.

Under costing ratio, the author advocated for computation of average cost of deposits, average cost of borrowings, average cost of interest bearing liabilities, average cost of funds and operating expenses to average working funds. Similarly under yield/return category, he computed ratios like yield on advances, yield on investment, average return on interest earnings, average return on funds and non- interest income to average working funds and total income. Under spread category, he sub-categorized the ratios like interest spread, net interest margin and burden ratios. The author discussed the significance of ratio analysis as a tool for evaluating the performance of different banks / bank branches. Apart from profitability ratios, the author mentioned the following categories of ratios for undertaking comparative performance of banks, viz. Productivity Ratios, NPA Ratio, Efficiency Ratio, Ratios on Shares (Shareholders front).

Leeladhar (2006) revealed that in the recent years, there has been a considerable widening and deepening of the Indian financial system, of which banking were a significant component. The growing role of the financial sector in the allocation of resources has significant potential advantages for the efficiency with which our economy functions. Given the significance of the Indian banking system, one cannot afford to underplay the importance of a strong and resilient banking system.

The enhanced role of the banking sector in Indian economy, the increasing levels of deregulation and the increasing levels of competition have placed numerous demands on banks. Operating in this demanding environment has exposed banks to various challenges like customer service, branch banking, competition, technology, Basel-II implementations, improving risk management systems, implementation of new accounting standards, transparency and disclosures, supervision of financial conglomerates, know your customer (KYC) guidelines and corporate governance

The author concluded that it is crucial for the banking industry to meet the increasingly complex savings and financial needs of the economy by offering a wider and flexible range of financial products tailored for all types of customers. With the increasing levels of globalization of the Indian banking industry, evolution of universal banks and bundling of financial services, competition in the banking industry will intensify further. Strong capital positions and balance-sheets place banks in a better position to deal with and absorb the economic shocks. Banks need to supplement this with sophisticated and robust risk management practices and the resolve to face competition without diluting the operating standards.

Gopal and Dev (2006) in their research paper empirically analyzed the productivity and profitability of selected public and private sector banks in India. They evaluated the effect of globalization and liberalization on the productivity and profitability of Indian banks during the period 1996-97 to 2003-04. The author observed that emergence of new private sector banks as well as entry of new foreign banks in this era has thrown tremendous challenges in the form of tough competition among the Indian banks. The spirit of competition and emphasis on profitability are also forcing the PSBs towards greater profit orientation.

They selected five large banks each on the basis of highest quantum of deposit mobilization from both the public and private sectors during the period under study. It was found that the process of globalization and liberalization has exerted its huge influence on the Indian banking sector. The ongoing reforms in the banking sector, with a thrust on transparency and efficiency have forced the Indian banking sector to adopt suitable strategies which focus on productivity and sustainability. The study revealed that except few cases, the productivity index found to be greater than one in the selected banks. As far as the matter of achieving the target profitability is concerned, SBI and PNB were most successful followed by HDFC Bank and ICICI Bank but the performance of J& K Bank, Canara Bank and Bank of India was poor in terms of achievements. Interest spread emerged as the only strong factor influencing the profitability. A high degree of positive association between productivity and profitability during the study period speaks about the efficiency of the banks in utilizing their resources.

Brindey and Dubey (2007) made an econometric analysis on the performance of public sector banks in India. They studied the performance of PSBs vis-à-vis other bank groups, i.e., private sector banks and foreign banks present in India. They tested the performance of different bank groups on different profitability and efficiency parameters and through econometric model. In their paper, they tested the hypothesis that government ownership per se makes public enterprises inefficient.

For evaluating a bank's performance, they have used the two profitability measures, i.e., return on assets (ROA) and operating profit ratio (OPR). Two banks with identical OPR can differ in terms of ROA; one, to difference in the risk of their loan portfolio; and two, efficiency measures used in their analysis are net interest margin (NIM) and operating expense Ratio (OER). They applied the statistical techniques like ordinary least square method and bounded influence to analyze the data. They concluded that private sector banks and foreign banks are not found to be superior to the PSBs in any of the performance indicators, namely, ROA, OPR and OER given the present regulation environment. They also found that PSBs scored well against benchmarks as well as against other bank groups in India in the area of profitability (ROA), Non-Performing Loans (gross) (NPL) and operating costs as a proportion of total Assets, Capital adequacy requirement, etc.

The above observations support the econometric findings of their study that PSBs are not inherently less efficient than private sector banks and foreign banks, given the regulatory environment. While the boom in the economy has helped greater operational flexibility, and improved corporate governance has contributed to improved performance. Going forward with the given performance of PSBs they were confident that with greater deregulation and financial sector reforms gaining further momentum, PSBs can meet the challenges of 2009, when RBI proposes to open up the sector in a bigger way to foreign players

Malhotra (1999) analyzed the performance of PSBs as a result of banking sector reforms. The major reforms being deregulation of lending/deposit rates deregulation of entry, revamping of branch licensing policy, measures to improve the financial health, measures to improve the operating efficiency and reserve preemption.

The researcher has discussed the impact of banking sector reforms on PSBs, after dividing the reform period of 1992-98 into two phases. Phase-I pertains to the period 1992-93 to 1995-96, and Phase-II to the period thereafter. The profitability of the banks became negative from 0.28 per cent in 1991-92 to -0.99 per cent in 1992-93 and further 1.15 per cent in 1993-94. The situation started improving in 1994-95 but the negative trend continued again in 1995-96 (-0.07 per cent), however, the profitability has improved during 1996-97 and 1997-98. The study brought that there has been a positive effect of reforms on the profitability performance of the banks.

Ram Mohan (2006) observed that the objective of reforms in general accelerated the growth momentum of the economy, defined in terms of per capital income. Not surprisingly, therefore, performance of the banking sector has repercussions across the length and breadth of the economy. Financial intermediation was essential to the promotion of both extensive and intensive growth. Thus development of the financial system is essential to the generation of higher productivity and economic growth.

The author highlighted how does productivity in banking influence the rest of the economy. Recent research has provided robust evidence supporting the view that financial developments contribute economic growth. A basic indicator of financial development is the contribution of finance related activities to GDP and the process of financial deepening. The author believed that financial deepening is easier to measure; analyzing productivity and efficiency changes in banking is more complex and needs to be viewed in relation to the changing contours of the banking industry in India.

The transformation of the banking sector in India to be viewed in the light of overall economic reforms process along with the rapid changes that have been taking place in the globalized environment within which banks operate. The author also compared the banks of major Asian countries in terms of spread (net interest margin), intermediation cost (operating expense), non-interest income and net profit from 1996to 2004.The author concluded that over the reform period more and more banks have begun to get listed on the stock exchange, which in its wake has led to greater market discipline as well as governance aspect. The pattern of efficiency and technological change witnessed in Indian banking can be viewed as consistent with expectations in an industry undergoing rapid change in response to the forces of deregulation. As deregulation gathers momentum, commercial banks would need to devise imagination ways of augmenting their incomes and more importantly their fee-income so as to raise efficiency and productivity levels. In relation to change of economic environment (market prospects), a few pioneering banks might adjust quickly to seize the emerging opportunities, while others respond cautious