CHAPTER II

LITERATURE REVIEW

Literature review is regarded to be one of the significant components in the research process. It is basically concerned with examining earlier research studies, research reports, survey reports, M.Phil / Ph.D and other data pertaining to present chosen research problem. A literature review has been in existence in one or the other form in every walk of life and it is not only confined to a researcher or M.Phil / Ph.D scholars. A doctor while examining a patient makes a review with regard to patient’s family background, nature of occupation, initial symptoms, tests done and type of treatment undertaken so that a patient can be given right treatment. An auditor, before approaching to audit of a company examines earlier internal audit reports, statutory audit reports, company missions, past performance, control systems etc, and accordingly, an effective plan for audit can be developed. An investor, before taking an investment decision in stocks and shares of a company, he / she will prefer to review a company’s profitability trend, sales trend, earning per share, pricing trend in stock market, present market value etc, and based on the review a balanced decision between risk and return can be arrived. A bank manager, while sanctioning a loan to a customer, will study customer’s background, earning capacity, earlier borrowings from other banks and financial institutions etc, so as to arrive a sound decision regarding sanctioning of loan. A sales manager, while preparing sales budget, reviews past sales budgets, actual achievements, production cost structure, taxes and duties, Govt. policies, sales force, demand and supply trend, market share etc, and accordingly a scientific projection for the future can be done. A consumer, while deciding to purchase washing machine will prefer to make a small survey of
neighbours and friends who bought washing machine with regard to their experience, brand, after sales service, price, maintenance cost etc, which in turn enables a consumer to take a right decision. In a similar line, a researcher is no exception to this review of literature so as to develop methodologically good research design for his / her proposed research problem. The significant contributions of literature review to researchers in terms of acquiring intricacies of research process are:

1. **It Introduces Researcher to Research Gaps:** Research gaps for the purpose refers to gaps between what was emphasized in earlier research studies and what was not focused in spite of its need and valuable relevance to chosen research problem in the present context in terms of research objectives, methodological approach to research problem, sampling, variables / parameters to accomplish research objectives, data sources, respondents, survey methods etc.

2. **Familiarizes Researcher to Research Process:** Research process is regarded to be series of steps/actions that are undertaken systematically in a sequential order to achieve set goals/objectives of the study. A researcher, after having done reasonably good original research based and relevant literature review relating to his/her chosen research problem, will become familiar with various stages right from formulation of research problem till writing a project report.

A thorough literature review will certainly instill in researcher, intricacies of research and it will provide a meaningful base for setting relevant research objectives and developing an effective research methodology for carrying out research on the proposed research topic. Considering valuable contribution of existing literature review in the research process, an effort is made to review the following research papers
Ataullah et al (2004) compared the technical efficiency of commercial banks in India and Pakistan by employing the Data Envelopment Analysis for the period 1988-1998. The sample included all the commercial banks in India and Pakistan for which data for at least three years were available. The information for the analysis was obtained from the Reserve Bank of India annual reports and various issues of Financial Analysis of Banks published by the Indian Banks’ Association and Banking Statistics of Pakistan published annually by the State Bank of Pakistan. The study identified that after 1995-1996 the overall technical efficiency of the banking in both countries improved. In the case of India, efficiency increased due to improvement in both pure technical efficiency and scale efficiency, while in Pakistan it was due to an improvement in scale efficiency. The analysis also revealed that due to high non-performing loans in the asset portfolios of banks in the two countries a gap in efficiency has been created and the implementation of the financial liberalisation closed the efficiency gap between large and small banks.

Badola B.S. & Verma Richa (2006) attempted to identify the key determinants of profitability of Public Sector Banks in India. The analysis is based on step-wise multivariate regression model used on temporal data from 1991-92 to 2003-04. The variables considered for the present study include Spread (S), Non-Interest Income (NII), Credit/Deposit Ratio (C/D), NPA as percentage to Net Advances (NPA), Provision and Contingencies (P&C), Operating Expenses (OE), Business per Employee (BPE), Profit per Employee (PPE) and Net Profit (NP). In this study, the reference period is 13 years from 1991-92 to 2003-04. This period is selected mainly because banking sector of our country resorted to speedy reforms and liberalization, since the beginning of the nineties. In order to identify the variables that have high
explanatory powers and are, therefore, more important in managing the operations of a bank. Multiple Regression Model is applied. To eliminate the problem of multicollinearity, the backward estimation method of regression analysis is used. The study has brought out that the variables non-interest income, operating expenses, provision and contingencies and spread have significant relationship with net profits. To strengthen the position further, the public sector banks must strive to greatly enhance efficiency through a control over shrinking spread, increasing non-interest income, and maximizing business per employee and per branch, etc. Technology upgradation, provision of better service quality, inculcating customer driven work culture, mental revolution among the staff of public sector banks, use of modern risk management practices are also the most sought after steps that are needed to ensure the sustainable level of profit.

**Battese et al (2000)** analyzed the impact of the deregulation and the consequent banking crisis on productive efficiency and productive growth in Swedish banking industry in mid-1980s. Stochastic Frontier Approach with a specification of translog cost function has been adopted to estimate the labour use in Sweden banks. An unbalanced panel data of 156 banks with 1275 observations were considered for the analysis. The study identified that there were significant technical inefficiency effects for labour use in banks and the overall inefficiency was estimated to be around 12 percent and it is due to dramatic increase in real rate of interest.

**Bhosale S.T. (2012)** studied the level of satisfaction of service users regarding E-banking services. The researcher has evaluated E-banking services in nationalized and private sector banks. The nature and relationship between independent variables (E-
banking services) and dependent variables (nationalized and private sector banks) are perceived and stated in the form of causal hypotheses. These hypotheses are tested on the basis of collected primary data.

The key intention of the study is to evaluate those factors that manipulate the nature of the service users towards electronic banking and their growing tendency towards the online banking. Therefore, main objective of the study is evaluation of E-banking service users in nationalized and private sector banks with reference to Sangli district. The sample is divided into two subgroups based on service users opinion regarding e-banking based on the Nationalized and the Private sector banks. Service users are selected randomly from the respective banks. The stratified random sampling technique was used for selection of service users for collecting data from Sangli district for the study purpose. This helped to choose the banks in Sangli district. For research purpose, sample size of 10% among the total population has been selected. Therefore 17 banks out of which 11 banks from Nationalized and 6 banks from Private Sector in Sangli district were selected for the study. For evaluating E-banking services in national and private sector banks, 10% banks have been selected among the total bank branches of nationalized and private sector banks (i.e. 167). For the selection of banks, primary survey has been conducted for studying distribution of bank branches and E-banking services provided by each bank. It is seen that, Bank of India, State Bank of India, Bank of Maharashtra are leading nationalized banks, whereas ICICI, Axis, HDFC, Karnataka Ltd are some of the leading private sector banks. Majority of the banks are providing almost of E-banking services i.e. debit card, credit card, electronic fund transfer, mobile banking, internet banking to their service users. Bank branches have been selected for the study purpose on the basis of, ranks based on E-banking services which is provided by respective banks. Statistical
methods like tabulation and classification, Percentile and Chi-square statistics to test the hypotheses are applied. The study concluded that customers prefer e-channels because of time and cost utility and it is an efficient service to customers. Future outlook of e-delivery channels in Indian banks is bright; the need is only to change the mind-set of vision. The study focuses on E-banking service via ATM, Internet and Mobile provided by Nationalized and private sector banks in Sangli District.

**Birla Institute of Scientific Research (1983)** conducted a study to evaluate the performance of nationalised banks in comparison with that of bank in private sector. The emphasis of the study was on the objective of nationalisation and their achievements, relative performance of private sector banks and nationalised banks since 1569 and the effect of nationalisation on rest of the banking sector. The study reveals that the growth and development in banking nationalisation was not just because of transfer of ownership. It was rather because of various incentives and punitive measures that were implemented with more vigilance and core after 1969 by the government and the RBI to make bank fulfil their social responsibilities. The concluded that post nationalisation period performance of nationalised banks was noteworthy and showed growth in deposits, advances and branches etc.

**Chaudhuri Saumitra (2002)** studied some of the issues of growth and profitability of Indian PSBs taking into account the financial contours in 1990-91 and 2000-01. The study revealed that in spite of the reforms and entry of private sector banks PSBs continued to dominate albeit to a diminished degree. The PSBs share which accounted for 91 percent came down to slightly less than 80 per cent after a period of 10 years. The corresponding change for private banks was from 3 per cent to 12 percent and for
foreign banks from 6 per cent to 8 per cent. The study revealed that in 1995-96, PSBs
together reported a net loss of 0.07 per cent of total assets. In 1997-98 the average
ROA for PSBs had risen to 0.77 per cent but ever since then there had been steady
erosion of profitability and ROA came down to 0.42 per cent in 2000-01. The ROE
also showed a significant slippage in profitability to a region of 8-12 per cent for most
of the stronger PSB’s was serious except PNB with 20 per cent. The leverage
(borrowed capital to equity) of Indian PSBs was particularly higher and in the range
of 20-25 times and hence the weak ROAs nevertheless translate into very bad ROEs.

**Chen (2004)** made an attempt to analyze the cost, technical and allocative efficiencies
of public owned and private owned banks in Taiwan during the Asian financial crisis
by employing the Data Envelopment Analysis. The study used data of 44 banks was
collected from the official reports of Department of Finance, Central Bank, and the
ROC Commission on National Corporations of the Ministry of Economic Affairs for
the year 1994-2000. The analysis revealed that the Asian financial crisis depreciated
cost, allocative and technical efficiencies in Taiwanese banks.

**Chen T.Y. and Yeh T.L. (1998)** measures the operating efficiency of Taiwan’s
commercial banks for the year 1996. Data relating to seven Public Sector Banks and
twenty-seven Private Sector Banks has been analyzed. Data Envelopment Analysis
model has been used to measure the operating efficiency of Taiwan’s Banks. Most
efficient Decision Making Unit (DMU), i.e., Bank was considered the standard for
comparison for all other Banks. Efficiency and profitability has been calculated by
using correlation coefficient. The results revealed that fifteen commercial banks were
relatively more efficient than other selected banks. Public Sector Banks were found to
be inefficient as compared to Private Sector Banks because they lack in managing
their resources. The authors suggested that better handling of labour, effective resource mobilization, proper use of available capital could help inefficient banks to improve their performance. The analysis techniques employed include ratios, percentages, averages, Kruskal-Wallis test, Pearson correlation, and Spearman rank correlation. The outputs of the study were computed using STATA version 10 and MINTAB version 16 software packages, DEA Frontier version 2011, and multiple regression analysis. The banks’ overall technical efficiency and scale efficiency are found to have no significance difference over the period 1999-00 to 2010-11, indicating no significant change in overall technical efficiency and scale efficiency of the banks over the study period. The yearly average cost efficiency of the banks ranges between 65.70 percent in 1999-00 and 68.88 percent in 2010-11. On average, the cost efficiency of the banks during the period 1999-00 to 2010-11 is found to be 71.64 percent, indicating that an average commercial bank has incurred 28.36 percent more costs than required to produce the given level of output over the period under study.

D’Sousa Errol (2002) in his study evaluated the performance of public, private and foreign banks during the period 1991-92 to 1999-2000. The efficiency of the banking system was measured in terms of Spread/Working funds ratio and Turnover/ Employees ratio. With reference to Spread/Working funds ratio, the efficiency of commercial banks as a whole has declined in the post reform period. The public sector banks were responsible for the decline in efficiency, as the efficiency of private and foreign banks improved over the course of 1990’s. Though the turnover/employees ratio has risen in PSBs, it was doubled in other banks during the decade. However, the analysis revealed that the profitability of PSBs in late nineties improved relatively to that of private and foreign banks.
Dash M. And Charles C.(2012) investigated the technical efficiency of Indian banks, segmented in terms of ownership. The data for the study pertained to a sample of 49 banks operating in India of which 20 were public sector banks, 19 were private banks and 10 were foreign banks. The secondary data was obtained from the financial statement of the sample banks for the period of five year i.e.2003-08. The researcher used DEA technique to assess the efficiency of production units. The present study adopted an intermediation approach. Five input variables viz. borrowings, deposits, fixed assets, net worth and operating expenses and four output variables viz. advances and loans, investments, net interest income were used to built DEA model. The results of the study show that foreign banks were slightly more efficient than public and private bank. The sample size considered for the study and period was the limitations which can be identified.

Drake (2001) investigated the efficiency and productivity change in UK banking by using Data Envelopment Analysis and Malmiquist productivity index. A panel data set consists of 9 UK banks for analysis has been obtained from the annual reports of the respective banks and statistics published by the British Banks Association for the period 1984-1995. The analysis revealed that increasing returns to scale were evident for smaller banks while decreasing returns to scale for large-scale throughout the sample period. Malmiquist productivity indices suggested that UK banks have exhibited positive productivity growth over the period. All U.K banks have been experienced with positive technical change due to increasing competition and product diversity.
Dwivedi Amit Kumar and Kumar D. (2011) determined the impact of various market and regulatory initiatives on efficiency improvements of Indian banks. Data Envelopment Analysis (DEA) has been used to identify banks that are on the output frontier given the various inputs at their disposal. The present study is 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. Inputs vary from purely financial such as interest and non-interest expenses to purely physical like number of branches and employees. Outputs are either income related interest or non-interest income or product/service related – loans, investments and non-interest income. 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. 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

Goyal R. and Kaur R. (2008) analyzed the performance of seven new private sector banks for the years 2001-07. The various statistical tools like mean, standard deviation, annual compound growth rate and one-way anova have been applied. The various ratios relating to capital adequacy, asset quality, employee productivity, earning quality and liquidity of banks are calculated. The study evidenced that capital adequacy ratio of all the banks has been above 9 per cent, the prescribed limit of Reserve Bank of India. Average debt/equity ratio is found to be maximum in the case of Axis Bank. Kotak Mahindra Bank registered maximum percentage increase in
NPAs over the previous years. Ratio of advances to total assets has shown an increasing trend for all the banks under study which showed an increase in lending operations. The study witnessed significant differences among the mean ratios of all parameters except for liquid assets to total assets, liquid assets to total deposits, net profit to average assets and percentage change in NPAs.

**Huang and Wang (2001)** made an attempt to estimate the scale and scope economies for Taiwan’s banking industry by employing stochastic cost frontier with a specification of translog cost function. A panel data set consists of 22 Taiwan’s domestic banks, of which 11 were public banks, have been considered for the analysis for the period 1981-1992. The analysis identified that both scale and scope economies existed in Taiwan’s banking industry and any assumption of no-x inefficiencies in banking industry results in underestimating scope and scale economies.

**Kaushik (1995)** studied the social objectives and profitability of public and private sector banks during the period 1973 to 1991. He compared the public and private banks with the help of various profitability and productivity indicators through ratios, average, correlation, regression and factor analysis. He found that public sector banks were having lower profitability as compared to private sector banks. Further, he found that the various productivity indicators showed an increasing trend during the period of study for all the banks though the increase was much higher in the case of private sector banks. He concluded that the profitability of public sector banks showed a declining trend due to social objectives not because of cost inefficiency and low
productivity. He suggested that productivity could be increased with the help of innovative banking, improved technological and managerial knowledge, well educated and trained manpower and infrastructural facilities.

Kumbhakar and Sarkar (2004) estimated the cost efficiency of public and private sector banks in India by using the stochastic cost frontier model with specification of translog cost function. The study used data of 50 banks for the analysis and necessary information have been collected from the various issues of the annual reports published by the Indian Banks’ Association for the period 1986-2000. The empirical results revealed that deregulation not only increased the cost inefficiency but also affected the rate of fall in inefficiency of banks. During this period private banks were more efficient than the public sector banks.

Kumbhakar et al (2001) examined the impact of regulatory reform on the performance of Spanish savings banks by using flexible variable profit function. The data used in this study has been taken from the annual publication Anvaria de la Confederacion de Cajas de Ahorros. Due to the increased mergers and acquisitions during sample period (1986 to 1995) an unbalanced panel data has been constructed by retaining pre – merger savings banks as separate banks and treating the merged once as new banks. The study found that the overall mean technical progress (per year) ranged from 4.1 percent to 5.86 percent and revealed a positive relationship between ATMs per branch and technical inefficiency.
Kumbhar V.M. (2010) in his research work identified the factors affecting on the customers satisfaction by alternative banking and develop a specialized instrument to assess service quality and customer satisfaction in alternative banking how customers become satisfied with an alternative banking services and what are the problems in alternative banking which adversely affects on customer satisfaction. The study covered on a specific alternative banking products and services which have been mostly used by the most of the customers. e.g. Front office services, core banking, Electronic Fund Transfer including EFT, NEFT and RTGS, Service of the currency note Counting Machine, MICR cheque facilities, Credit card, Automated Teller Machine (ATM), Internet Banking and Mobile Banking. The researcher has examined customer satisfaction through the perceived service quality, brand perception and perceived value in alternative banking services. Primary survey of customers of public and private sector banks working in the Satara city was conducted. This survey dose not includes foreign and cooperative banks. This study comparatively examines the impact of alternative banking on customers’ satisfaction in public and private banks and presented facts of survey conducted by using appropriate statistical techniques and tools. This study is succeeded to find out main determinants of customers satisfaction and problems in it also. Additionally, it reveals that service quality of alternative banking and customer satisfaction is close related factors.

Kumar (2002) analyzed the impact of information technology on growth and performance of Indian banks in terms of profitability and productivity for the period ranging from 1995 to 2000. The researcher evaluated the perception of bank customers regarding the use of modern technological services provided by the banks. For the purpose of study, banks were divided into four groups. These groups are
classified as: Group-I comprised of three new fully computerized private sector banks providing online services (ICICI Bank, HDFC Bank and Centurion Bank of Punjab, Group-II consisted of three fully computerized private sector banks but providing partially online services (Bank of Punjab, IndusInd Bank and IDBI Bank), Group-III included Nationalized Banks partially computerized (Punjab National Bank, Oriental Bank of Commerce, and Punjab & Sind Bank), and Group-IV comprised of partially computerized State Bank of India and its subsidiaries (State Bank of India, State Bank of Patiala and State Bank of Bikaner & Jaipur). Ratio analysis has been used to calculate employee productivity, branch productivity and financial productivity. The study evaluated that almost on all accounts fully computerized banks with online service providing facilities banks performed relatively better. This has also been supported by the respondents who were found to be satisfied in the case of Group-I and Group-II category rather than Group-III and Group-IV categories. The researcher suggested that public sector banks should emphasize on providing computerization and IT related customer services, and extending information technology in rural and semi-urban sectors.

Lakew T.B. (2013) measures the overall technical efficiency (OTEF), pure technical efficiency (PTEF), and scale efficiency (SEF) of Ethiopian commercial banks. The study was carried out in Ethiopia. Ethiopia is one of the developing countries in Africa. For the purpose of the study, the data from secondary sources were collected and analyzed. The secondary sources of data included the records of National Bank of Ethiopia, Ministry of Finance and Economic Development of Ethiopia. The reports of individual banks were used for the study.
Mahajan P. And Bhatia A. (2012) empirically studied the returns of assets (ROA) performance of the public sector banks in India for the year 2005-06 and 2009-10. A sample of 27 banks was taken for the study. The Pearson product moment correlation (r) was computed to examine the correlation between the dependent and independent variables and with the dependent variables. A correlation matrix was constituted. Multivariable regression was run by taking into consideration all the independent variables afterwards, backward stepwise regression analysis was run. ROA was taken as the dependent variable while other variables like spread ratio, provision and contingencies, non-interest income, credit to deposit ratio, operating expense ratio, investment deposit ratio have been controlled in the study. The study reveals that spread, CD ratio, non performing assets, non interest income and provision and contingencies have the capacity of predicting the profitability of PSB’s India.

Makkar Anita and Singh Shveta (2012) evaluated the productivity and profitability of select public and private banks in India. The study is mainly based on the secondary data collected from annual reports of different public and private sector banks, statistical tables published by RBI. It covers a period of three years (2008-09 to 2010-11). The sample is taken of four major banks of Indian commercial banks for analysis- two from public sector banks (SBI and PNB) and two from private sector banks (ICICI and HDFC). The ratio analysis is used to measure productivity and profitability of public and private sector banks of India. There is significant difference of profitability of public and private banks. But public sector banks should reduce overstaffing and embrace to new technology to compete with private sector banks.
Murty (1996) has analyzed various factors that can be helpful to improve the profitability of public sector banks. The study examines the impact of monetary policy and market interest rates on the bank profitability. He calculated the profitability as well as efficiency of Indian banks with its global counter parts using DEA. The results showed that Indian banks have higher interest spread, higher operating cost. Higher risk provision levels than banks in foreign countries during the study period.

Patil U.D. (2011) studied the effectiveness of HRD practices of training and development, performance appraisal and career planning in Urban Co-operative. The researcher selected the Sangli District in order to conduct the research work. The HRD practices in the banks in were evaluated. The scope of the study is the total Sangli District with the ten talukas of the district. The classification according to ten talukas is taken into consideration. The survey conducted by the researcher was related with the bank employees including Branch Managers, Officers, Cashiers, Clerks, Peons, etc. while observing the human resource development in urban co-operative banks in Sangli District. The study concluded that there is the need to develop knowledge, skill and attitude for achieving the goals of both i.e. own and organizational and it can be done through training and development of bank employees.

Prasad K. V. N. and Ravinder G. (2011) analyzed the profitability of four major banks in India, i.e., State Bank of India, Punjab National Bank, ICICI Bank and HDFC Bank for the period 2005-06 to 2009-10. Statistical tools like arithmetic mean, one-way ANOVA, Tukey HSD Test have been employed for the purpose of study.
The profitability of these banks have been evaluated by using various parameters like Operating Profit Margin, Gross Profit Margin, Net Profit Margin, Earning per Share, Return on Equity, Return on Assets, Price Earnings Ratio and Dividend Payout Ratio. The study revealed that State Bank of India performed better in terms of earning per share and dividend payout ratio. Punjab National Bank performed better in terms of operating profit margin and return on equity. The study found that HDFC Bank outperformed in terms of gross profit margin, net profit margin, return on assets and price earnings ratio. The study evidenced that ICICI Bank paid highest portion of earning as dividends to shareholders. Analysis ranked HDFC Bank on the top position followed by Punjab National Bank, State Bank of India and ICICI Bank.

Rajan S. S. and Pandit V. (2011) attempted to examine technical efficiency and productivity performance of Indian scheduled commercial banks, for the period 1979-2008. Objectives of the study are to review, problems related to the measurement of inputs and outputs, to measure productivity growth in Indian scheduled commercial banks (excluding Regional Rural Banks RRB) and to undertake a comparison of efficiency gains across different groups of banks. The tool used is semi parametric PSS efficient frontier. Deposits treated as loanable fund input and Loans and investments are outputs. The Public Sector Banks (PSB) i.e. the Nationalized Banks (NB) and State Bank of India and its Associates (SBI&A) are more efficient compared to domestic private banks and foreign banks. However, the foreign banks have higher efficiency compared to the domestic private banks, due to their specialized activities.
Sanyal Paroma and Shankar Rashmi (2008) analyzed differences in productivity across bank types since the 1991 reforms. The paper attempts to address the question by carefully analyzing bank productivity and its relationship with bank ownership during the post-reform period. Dataset covers 106 banks over the decade immediately following the reforms. The main source of data is the Reserve Bank of India. There measure bank efficiency: data envelopment analysis (DEA) and the Malmquist index are used. The Indian private banks dominate the public and foreign banks, both in terms of productivity levels and productivity growth and that competition affects banks differently depending on ownership. Public banks productivity shows little growth over the post-reform period.

Sathye Milind (2003) compared the efficiency of Indian commercial banks with the efficiency of foreign banks by employing a nonparametric approach of Data Envelopment Analysis. Annual data consists of 27 public sector commercial banks, 33 private sector commercial banks and 34 foreign banks were considered for the analysis. The analysis revealed that public sector banks such as State Bank of India, and Bank of Baroda and Indus Ind private bank have been recorded with higher mean efficiency. But most of the Indian banks had lower mean efficiency as compared to the foreign banks. The study recommended that the bringing down non-performing assets and curtailing the establishment expenditure and rationalisation of rural branches could help Indian banks to improve their efficiency.
Satyamurthy B. (1988) stressed the imperative need for improving efficiency, productivity and customer service in banks to help them in accelerating their consolidation process. He used the technique of ratio analysis to evaluate the profit and profitability performance of banks. He made an attempt to bring out the factors generally affecting efficiency and productivity. He recognised that business per employee and relation of average business to establish expenses are the most popular indicators of productivity. The paper suggested that the performance of bank could be assessed in the different areas of business development in terms of profitability, income generated, cost involved and customer services.

Selva Kumar M. And Nagalaxmi M. (2012) studied the income and expenditure pattern of the various sectors of scheduled commercial banks in India. It also tried to analyze profitability and compare growth rate and earning quality ratios of different sectors of SCB’s in India. The study was based on the secondary data. Growth rate, Compound Growth Rate (CGR), trend analysis, ratio analysis, descriptive statistics have been used to analyze the earning quality of various sectors of SCB’s in India. The study reveals that the operations of SCB’s in India are satisfactory and have shown an appreciable improvement in their fee based income.

Sena Vania (2004) made an attempt to test to what extent firms under financial pressure may try to offset the negative impact of the finance constraints by improving technical efficiency. A stochastic production frontier approach with a specification of translog cost function has been adopted to test the objective. A total of 6,498 Italian manufacturing firms were considered for the analysis and the necessary information were obtained from the Mediocredito Central database for the year 1989-1994. The
study found that once a firm cannot have access to external financial resources, then it has an incentive to improve its technical efficiency over time.

Shanmugam and Das (2004) analyzed the technical efficiency of banks in four different ownership groups in India by using stochastic frontier approach with specification of Cobb-Douglas production function. The analytical results in general indicated that due to technical inefficiency actual output of Indian banks was less than potential output and the State Bank of India group and private foreign group performed better than their counterparts.

Sharma N. (2006) studied the performance of Punjab National Bank in comparison to other Public Sector Banks and all Commercial Banks (Public, Private and Regional Rural Banks) operating in rural, semi-urban and urban areas of Haryana state. The time period for the study has been taken from 1993 to 2004. The study is based on the secondary data and statistical tools like arithmetic mean, standard deviation, coefficient of variation, correlation coefficient, simple growth rate and trend growth rate were used. The study depicted that Punjab National Bank is having highest growth rate in terms of non-agricultural sector advances but minimum growth rate in agricultural advances. The study found that Punjab National Bank has introduced the fee based income approach to improve the profitability of bank and accelerated the economic growth of Haryana state. The research suggested that the Public Sector Banks should improve their communication system, customer relationship in rural market and suitable marketing strategies.
Shirai (2002) assessed the impact of reforms by examining the changes in the performance of banking sector. It found that the performance of public sector bank improved in the second half of the 1990’s. Profitability (measured by return on assets) of nationalised banks turned positive in 1977-2000 and that of SBI bank have steadily improved their cost efficiency over the reform period. Even though foreign banks and private sector banks generally performed better than the public sector banks in terms of profitability. Earning efficiency (measured by ratio of income to assets) and cost efficiency in the initial stages. Such differences have diminished as public sector banks have improved profitability and cost efficiency. The paper suggested that the banking sector reforms, since 1991 have exerted an increased pressure and, thus had a positive non-negligible impact on the performance of public sector bank.

Shollapur M. R. and Baligatti, Y. G. (2011) examines the cost of sources of funds, the return from deployment of funds and traces the pattern of utilization of deposits to examine the profitability of funds management. The study is based on the data drawn from the annual reports of the 12 selected Public Sector Banks (PSBs) in India. It covers a period of eight years from 1999-2000 to 2006-2007. The study has classified banks as High Profile Banks (HPBs), Medium Profile Banks (MPBs) and Low Profile Banks (LPBs), based on capital adequacy, coverage ratio, return on investment, net interest margin, ratio of operating profit to average working funds, ratio of cost to income. Ratios, percentages, arithmetic means, standard deviation (Std. Dev) and coefficient of variation (C.V.) are used. In terms of cost of deposits, as well as borrowings for the banking industry, as a whole, has maintained a decreasing trend. HPBs have relatively performed better than MPBs and LPBs in reducing both the costs. The selection of the banks is based on the Report of Working Group (1999)
constituted under the chairmanship of Shri M. S. Verma. This Group classified the banks on the basis of capital adequacy, coverage ratio, return on investment, net interest margin, ratio of operating profit to average working funds, ratio of cost to income, ratio of staff cost to the net interest income plus all other income. For the purpose of the present study the banks are reclassified as High Profile Banks (HPBs), Medium Profile Banks (MPBs) and Low Profile Banks (LPBs) based on their performance. In each category, four banks are randomly selected. They include Oriental Bank of Commerce, State Bank of Patiala, Punjab National Bank and Corporation Bank in the HPB segment. Andhra Bank, Bank of India, Bank of Maharashtra and State Bank of India in the MPB segment, and UCO Bank, United Bank of India, Indian Bank and Indian Overseas Bank in the LPB segment. The relevant data of these banks have been aggregated for the purpose of analysis. The data is presented through tables and analyzed with the help of ratios, percentages, arithmetic means, standard deviation (Std. Dev) and coefficient of variation (C.V.). The analysis of each point is done from the point of view of banking industry as a whole as well as the segments such as HPB, MPB and LPB. The study reveals that the overall cost of funds, in terms of cost of deposits, as well as borrowings for the banking industry, as a whole, has maintained a decreasing trend. HPBs have relatively performed better than MPBs and LPBs in reducing both the costs. This is attributed to HPBs ability to get funds in the call money market by exploiting the opportunities of soft interest rates. Similarly, the analysis of components of return on funds reveals that both the return on advances, as well as investments, has maintained a decreasing trend.
**Singh Doonger Kheechee (2011)** attempted to compare the profitability of different categories of banks and to find out the causes of difference in their profitability, so that a mechanism can be evolved for improving the profitability and productivity of commercial banks. In order to ascertain the return on funds to express the profitability of different groups and to have a comparative view of these parameters various ratios by using the different formulas have been calculated for the period from 2003-04 to 2009-10 and are shown in tables along with the mean value and value of standard deviation so that it can be inferred that which bank group is having highest rate of return. Analysis of parameters of profitability and cost of banking operations revealed that returns on funds are very high in private sector banks as well as in Foreign Banks and very low in public sector banks. The Return on Investment as a component on return on fund is very high in case of public sector banks as well as in foreign banks and very low in new private sector banks. It shows that the management of portfolio of securities is very efficient in public and foreign banks and is less efficient in private sector banks.

**Sinha P. R. (2006)** compared the cost efficiency position of Public and Private Sector Banks. The data related to thirty banks covering time period from 1998 to 2003. For the study purpose, 7 Public Sector Banks, 13 Nationalized Banks and 10 Private Sector Banks were selected. Data envelopment analysis has been used and means technical efficiency scores, mean allocative efficiency scores and mean cost efficiency scores have been calculated by taking the assumption of constant returns to scale. Numbers of Bank Branches and Amount of Borrowed Capital have been taken as Input and Non-Interest Income as Output to find out the ownership effect and size effect. The study evidenced that small banks exhibit higher cost and higher mean
technical efficiency scores as compared to large banks. It was found that Public Sector Banks were 73% as efficient as Private Sector Banks under technical efficiency scores and 93% under allocative efficiency scores.

Sowani S.V. (1999) tried to identify various factors affecting the bank’s profitability. As per the study, the nationalised banks profitability had always been quite low and recorded huge losses. As percentage of working funds, net profits of these banks were observed to be at a level 2.2 percent and 0.1 percent during 1996 and 1997 respectively. However, the profitability of foreign banks was always at a better level. Among the factors influencing the profitability of banks, the high level of NPA’s was registered as the major factor. High levels of CRR and SLR, a large proportion of bank deposits(41.0 percent) allocated to the priority sector and the high cost of operations of public sector banks were the other factors which negatively influenced the profitability of public sector banks.

Unal S. And Acikalin S.(2001) investigates the changes that the financial crisis of 2001 had brought about in the government and private commercial banks in Turkey. The data on selected financial indicators in the banking sector was acquired from the quarterly balance sheet and income statements. The study was limited to six commercial industry. Nine variables were used to examine whether there was difference in the means that belong to public and private banks. E. views econometric program was used to fix calculation. The finding of the study indicate that for all sample banks examined, the crisis has created a trend break only in net profit, ROA and ROE figures but not in the other six variables.
Varadi Vijay Kumar and Kumar Pradeep (2006) attempted to study the efficiency of commercial banks including public, private and foreign banks operating in India for the period 1999-2000 to 2002-2003 with four indicators i.e., productivity, profitability, financial management and asset quality. Data has been obtained from various issues of Reports on trends and progress on banks in India published by RBI and IBA Bulletins and adopting the DEA methodology. A variety of techniques have been used to study the efficiency of commercial banks. It is found that estimates of efficiency are sensitive to the choice of technique. It is also found that estimate different studies of commercial bank efficiency often reach contradictory findings. This may however be due to the fact that there are differences in the manner in which a banking institution is modelled. The efficiency is a broader concept; it involves optimally choosing the levels, and mixes of inputs and/or outputs. The overall bank efficiency can be decomposed into scale efficiency, scope efficiency, pure technical efficiency, and allocative efficiency. The bank has the scale efficiency when it operates in the range of constant returns to scale (CRS). Scope efficiency occurs when the bank operates in different diversified locations, when the bank maximizes the output from the given level of input, pure technical efficiency occurs. And when bank, chooses revenue maximizing mixes of output, allocative efficiency occurs. However, the technical efficiency is the major criteria for measuring efficacy of banks. From the above analysis it is clear that public sector banks are having high efficiency in terms of productivity, profitability, financial management and asset quality, whereas the private banks are having a very high inefficiency level during the sample period in the different indicators but foreign banks are more efficient than the private banks. Therefore, it is quite evident to say, from this study, that public sector banks have a wider scope to produce more and more output. Implementation of the reforms in
banking sector has given handy to public sector banks than the private and foreign banks as a result; one could conclude that public sector banks are in the forefront of beneficiaries list of reforms in the banking field.

Varde V.S. and Singh S.P. (1998) in a study of profitability of commercial banks over 15 years gave consideration to two types of factors. The affect interest rate levels (i.e. external factors like monetary policy, fiscal policy and interest rate policy etc.) and internal factors including operational and managerial efficiency of individual banks. They distinguished between effectiveness, efficiency and productivity and recommended that efficiency of banks could be classified into 4 categories i.e. manpower, operational, commercial and ancillary business efficiency. They studied all 4 categories and then concluded the performance of commercial banks during the study period was showing positive trend.

Verghese S.K. (1983) explores the profits and profitability of Indian Commercial Banks in the Seventies. He conducted a comprehensive study on banks profitability. It provides analysis of the income statements of Commercial banks during 1970-1979. The cost of usable funds, amount of establishment cost and other expenses are some of the parameters used to study the performance of the banks. Based on the absolute figures of the above parameters the author suggested that profit planning both at micro and macro level for the banking industry need to be taken up to overcome the declining trends in profitability.
Vashisht (1987) evaluated the performance of public sector banks on the basis of branch expansion, deposits, credit, priority sector advances, differential rate of interest (DRI) advances and net profit over the period pertaining to 1971-83. For the study purpose, the researcher ranked the banks as excellent, good, fair and poor by using composite weighted growth index. The study ranked Indian Overseas Bank on the top and Dena Bank on the bottom among the banks taken under study. The researcher suggested the development of marketing strategies for deposit mobilization, profit planning and SWOT analysis in order to improve the performance of public sector banks.

William and Gardener (2003) examined the efficiency and factors that determine variations in intra industry inefficiencies in European regional banks by using stochastic cost frontier approach. A total of 6,309 observations comprising savings banks from Denmark, France, Germany, Italy, Spain and U.K for the year 1990-1998 were considered for the analysis. The study used data have been obtained from Bank scope (2000), Buildings Societies Association (1990-1998), CECA (1990-97) and Danish Supervisory Authority (1990-1998). The analysis identified that determinants of inefficiency among regions are organizational structure, market competitiveness and financial conditions.

Yildirim (2002) analyzed the efficiency performance of Turkey commercial banks during deregulated period by adopting Data Envelopment Analyses. The data used in the study have been obtained from various issues of reports of the Banks Association of Turkey for the years 1988-1999. The analysis revealed that the banks suffered with decreasing returns to scale and pure technical efficiency and scale inefficiency were positively related to size. Besides, the analysis observed that state-owned banks performed better than the private and foreign banks.
Critical Review of Literature and Research Gap

Review of literature assumes importance in research in providing the research scholar better insights into the chosen research problem. Previous studies on the performance of commercial banks revealed that majority of the studies assessed the performance with regard to efficiency and factors determining efficiency, productivity and factors determining productivity, profits and profitability, cost efficiency, income and expenditure, etc. These studies were more of either single bank or select commercial banks in India and there were no state-wise research studies pertaining to commercial banks. There were no studies based on five year plan periods, growth of business, credit to deposit performance, customers perception towards the performance of commercial banks. The identified relevant research gaps are studied in the present study.

Conclusion

Review of literature is another important component in the research process. More than 45 studies relating to the present research problem were reviewed. This reviews have provided better insights into the research problem in terms of understanding of research objectives, type of hypothesis, period of the study, data source, different parameters that are used to assess the performance of commercial banks, sample size, selection of banks, methodological approach, questionnaire, analytical tools employed, contact methods, etc. the review of previous studies has really helped to understand the research gaps and the identified research gaps are studied in the present study.