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Introduction

Banks play a very useful and dynamic role in the economic life of the country. Bank is very old institution that is contributing toward the development of any economy and it’s treated as an important service industry in modern world. Banks are the pivot of the modern commerce. Industrial innovations and business expansions become possible through finance provided by banks. Capital is the main factor of modern production and entrepreneurs are help without adequate funds. Banks help them. Today’s banks are not just financial institutions but much more than that they are serving as catalysts in the development process of the country. They are sources of new dimensions of economics and trade. The last decade has seen many positive developments in the Indian banking sector. India’s banking industry must strengthen itself significantly if it has to support the modern and vibrant economy.

The financial sector reforms in India are now about seventeen years old an appropriate time to make a medium term appraisal. Moreover having initiated fundamental changes, the financial sector, particularly the banking sector is now under an obligation to demonstrate the efficiency of the reforms undertaken so far. Especially banking sector gives a new vision to Indian economy. Banking industry is a part of the changing business paradigms across the globe. In a market driven banking sector, competition is the most dynamic elements. Due to market competition in Indian banking industry, the pattern of banking business is changing phenomenally. Moreover banks have to provide a world class services to the customer to their door. Due to this type of quality services and facilities, income is increasing day to day.

Nowadays the function of bank is not limited to within the same geographical limit of any country. It is an important source of financing for most businesses. The common assumption, which underpins much of the financial performance research and discussions, is that increasing financial performance will lead to improved functions and activities of the organizations. So measurement the performance of banks is an interesting area for the researcher.

Title of the Problem

The title of the problem selected for the study is “A STUDY OF FINANCIAL PERFORMANCE OF SELECTED PRIVATE SECTOR AND PUBLIC SECTOR BANKS OF INDIA” [2009-10 TO 2013-14]
Data Collection

The data collection is very important task for the researcher for the research study. The study is mainly based on secondary data obtained from the annual report of various banks. The secondary data shall be collected from the records, documents, related subject matter and related websites. Besides, the researcher shall collect and analyze published data as per the requirement.

As such the universe of this research study is restricted with the reference to selected banks, which are providing services in India. So, researcher has selected 10 public sector banks and 10 private sector banks. The data regarding selected banks have been obtained and collected from the annual report of the banks and related websites.

Scope of the Study

The scope of this research study is as under.

Functional Scope:

Functional scope of this study is to analyze financial performance of Indian banking industry.

Geographical Scope:

In this study researcher selected 20 banks, which are providing services in India. So, whole India is geographical criteria for this research study.

Research Design

According to Kerlinger, “Research in the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance.” According to Green and Tull, “A research design is the specification of methods and procedures for acquiring the information needed. It is the over-all operational pattern or framework of the project that stipulates what information is to be collected from which source by what procedures.”

When constructing a building there is no point ordering materials or setting critical dates for completion of project stages until we know what sort of building is being constructed. The first decision is whether we need a high rise office building, a factory for manufacturing machinery, a school, a residential home or an apartment block. Until this is done we cannot sketch a plan, obtain permits, work out a work
schedule or order materials. In other words, decisions regarding what, where, when, how much, by what means concerning an inquiry or a research study constitute a research design.

Research design is important as it prepares proper framework within which the research work will be actually carried out. Research design acts as a blue print for the conduct of the whole.

Sample Design

The researcher has selected 10 public sector banks and 10 private sector banks are listed in Indian stock exchanges.

**Public Sector Banks**
- State Bank of India
- Central Bank of India
- Bank of India
- Indian Bank
- IDBI Bank
- Dena Bank
- Bank of Baroda
- Corporation Bank
- Allahabad Bank
- Punjab National Bank

**Private Sector Banks**
- ICICI Bank
- HDFC Bank
- Axis Bank
- Kotak Mahindra Bank
- IndusInd Bank
- Yes Bank
- Jammu and Kashmir Bank
- South Indian Bank
- DCB Bank
- ING Vysya Bank
Objectives of the Study

Objective is a base for any work. The objectives determine the future and outcome of the research. No one work is started without any objectives. The present research work has also some objectives.

1. To examine the financial performance of public sector banks and private sector banks under study.
2. To examine the overall profitability of public sector banks and private sector banks under study.
3. To evaluate the efficiency of public sector banks and private sector banks under study.
4. To evaluate the liquidity position of public sector banks and private sector banks under study.
5. To determine average compound growth of various performance indicators of public sector banks and private sector banks under study.
6. To evaluate the best bank regarding financial performance of public sector banks and private sector banks under study.
7. To suggest an appropriate strategy of public sector banks and private sector banks under study.

Hypothesis of the Study

In present study a study of financial performance of selected public sector and private sector banks of India is based on some of the hypothesis which is explained as below.

Null Hypothesis:

1. There is no significant difference between the Return on Equity Ratio of the units under study.
2. There is no significant difference between the Interest Spread Ratio of the units under study.
3. There is no significant difference between the Net Profit Margin Ratio of the units under study.
4. There is no significant difference between the Return on Long Term Fund Ratio of the units under study.
5. There is no significant difference between the Return on Assets Ratio of the units under study.
6. There is no significant difference between the Interest Income to Total Fund Ratio of the units under study.
7. There is no significant difference between the Net Profit to Total Fund Ratio of the units under study.
8. There is no significant difference between the Return on Capital Employed Ratio of the units under study.
9. There is no significant difference between the Earning per Share Ratio of the units under study.
10. There is no significant difference between the Dividend Payout Ratio of the units under study.
11. There is no significant difference between the Credit Deposit Ratio of the units under study.
12. There is no significant difference between the Total Debt to Owners Fund Ratio of the units under study.
13. There is no significant difference between the Quick Ratio of the units under study.
14. There is no significant difference between the Capital Adequacy Ratio of the units under study.
15. There is no significant difference between the Operating Expense to Total Income Ratio of the units under study.

**Alternative Hypothesis**
1. There is significant difference between the Return on Equity Ratio of the units under study.
2. There is significant difference between the Interest Spread Ratio of the units under study.
3. There is significant difference between the Net Profit Margin Ratio of the units under study.
4. There is significant difference between the Return on Long Term Fund Ratio of the units under study.
5. There is significant difference between the Return on Assets Ratio of the units under study.
6. There is significant difference between the Interest Income to Total Fund Ratio of the units under study.
7. There is significant difference between the Net Profit to Total Fund Ratio of the units under study.
8. There is significant difference between the Return on Capital Employed Ratio of the units under study.
9. There is significant difference between the Earning Per Share Ratio of the units under study.
10. There is significant difference between the Dividend Payout Ratio of the units under study.
11. There is significant difference between the Credit Deposit Ratio of the units under study.
12. There is significant difference between the Total Debt to Owners Fund Ratio of the units under study.
13. There is significant difference between the Quick Ratio of the units under study.
14. There is significant difference between the Capital Adequacy Ratio of the units under study.
15. There is significant difference between the Operating Expense to Total Income Ratio of the units under study.

**Period of the Study**

This research study covered the data of last five years of the functioning of the selected banks. A longer period could have been still better but due to time and resource constraints, the last five years not very short period has been taken for analyzing the data of research program. The study period is 5 years, starting from year 2009-10 to 2013-14.

**Significance of the Study**

Significance of this study is as under.

**Contribution to the knowledge**

1. Through this research study the knowledge of researcher particularly regarding statistical tools and technique and statistical test will improve
2. The knowledge regarding profitability and financial performance will be improved.

**Contribution to the Society**

1. Through this research study society will able to know the real situation of profitability and financial performance of the banking sector.
2. Through this study creditors and other parties can take proper decision.
3. Employees will be able to take proper decision regarding job.

**Contribution to the Industry**

1. Banking industry may be able to know the financial efficiency with the help of appropriate analysis of financial performance.
2. Banking industry will try to improve their financial performance.

**Statistical Techniques**

The main base of the study is to analyzed financial performance of the selected banks. Verifying and testing this hypothesis, some techniques have been used. Here, mainly applied test or techniques are as under.

**Average/Mean**

The most commonly used average is the arithmetic mean, briefly referred to as the mean. The mean can be found by adding all the variables and dividing it by total number of the years taken. It gives a brief picture of a large group which is represents and gives a basic of comparison with other groups.

**The Standard Deviation:**

The Standard deviation concept was introduced by Karl Pearson in 1823. It is by far the most important and widely used measure of studying dispersion. Standard deviation is also known as root mean square deviation for the reason that it is the square root of the mean of the square deviation from arithmetic mean.
F-test OR ANOVA (Analysis of Variances)

F-test is also known as ANOVA, means analysis of variances. Where the sample is subdivided amongst more than two groups at that time ANOVA used.

\[ F = \frac{MSB}{MSW} \]

- **MSB** = Mean Square between Groups
- **MSW** = Mean Square within Groups

The concept of financial performance and research into its measurement is well advanced within finance and management fields. Recently a well-judged technique named ANOVA Test is widely used for evaluating performance of financial institutions, especially to banks. Financial Performance of the banking sector under ANOVA Test involves analysis and evaluation of various dimensions of banking operations. Thus ANOVA consists of a set of performance measures that give a comprehensive view of the banks.

**Limitations of the Study**

Each study cannot be free from limitations. Some limitations likewise, the limitation of time, areas, economic, efforts, scope as well as the method of the study. Some limitations for present research work are as under.

1. There are many different approaches to analyze financial performance and experts are not unanimous regarding the approach.
2. This study is mainly based on ratio analysis, which has its own limitations.
3. Scope of this study is wider but sample size is limited to only 20 banks. From the 20 banks, 10 are Public sector and 10 are Private sector banks are covered under study.
4. This research study based on secondary data collected from annual reports of various banks and related websites. The limitation of the secondary data and its findings depend entirely on the accuracy of such data.
5. The data, which is used for his study is based on annual report of the bank and secondary data collected from published reports from time to time. Therefore the quality of this research depends on quality and reliability of data published in annual reports.
6. This study provide glimpse of the past performance and the future conclusion may not be correct since several other factors may affect the future operations.
7. This study based on external analyses only, being outsider inside views may not be duly considered.

8. Results of this research are confined and limited to the selected banks.

9. The study is limited to five years (2009-10 to 2013-14) only.

10. In this research only selected public and private sector banks are covered. Co-operative banks and foreign banks are working in India could not covered. So, it is very difficult to come proper conclusion regarding whole banking sector.

11. Researcher has tried best to remain faithful and kin. But after all being a human, physical constrains may affect the result and as such the result of the analysis may not be cent percent correct to be relied upon.

**Plan of the Study**

The entire research study will be present in six chapters.

1. **Banking System in India**

   In this chapter, Introduction, Origin of the World ‘Bank’, Meaning and Definition of Bank, History of Banking in India, Evolution of Banks in India, Banking Sector Reforms in India, Banking Structure in India, Reserve Bank of India, Current Developments in the Banking Sector, RBI’s EFFORTS, Challenges and Opportunities with Financial inclusion Drive, Financial Inclusion & Priority Sector, Guidelines on the Base Rate, Indian Banking at a Glance are included.

2. **Conceptual Framework of Financial Performance Analysis**


3. **Research Methodology and Review of literature**

   In this chapter, Introduction and profile of the researcher briefly mentioned previous research conducted by them.
4. **Profile of Sample Bank**
   
   In this chapter, brief profiles of 20 sampled banks are described. From the 20 banks, 10 are Public Sector Banks and 10 are Private Sector Banks.

5. **Analysis and Interpretation of Financial Performance**
   
   As the title state, this chapter covers the analysis of the results obtained with the started research methodology. Various statistical tools and techniques are used. Comparison, Analysis and deep study has been done and at last result should be received. This chapter also covers the broader hypothesis testing and the conclusion drawn on the basis of the analysis.

6. **Summary, Findings and Suggestions**
   
   This chapter covers summary, major findings and suggestions regarding financial performance. So, we can say that this chapter provides solid and useful information to the banking industry.

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**Review of Literature**
R.C. Bhatia (1978) studied the economic performance of the Indian Banking System. In his study profitability of banking system measured the ratio of profit as a percentage of capital and profit as a percentage of assets. The major findings of the study were: (I) The profit performance of the Indian banks during the period 1950 to 1960 showed an upward trend (II) Number of bank offices and the deposit concentration ratio showed an insignificant effect on its performance during 1950 to 1968. (III) There was significant difference in the levels of intermediation of different banking sectors in India during the period under review. (IV) None of the sector showed any significant profitability differences (V) Output performance of the Indian banking system can be improved by the suggestion, that the banking rules in India should not emphasis on direct regulation of the rate of return as much as the regulation of the asset portfolio of banks.¹

Makrand (1979) studied the performance of public sector banks. He selected six quantitative indicators for performance index. Which were branch expansion priority sector lending, deposit mobilization export credit net profit to working funds and wages and cost of business development? The main recommendations of his study were (i) counseling and expert opinion to the priority sector lending on diversified activities is needed. (ii) The lower level staff should also actively be involved in priority sector lending activities. (iii) Necessary lending power should be vested with the branch managers.²

Nayan Kamal (1982) recommended a model for evaluation of performance of commercial banks. He suggested the basis of all the important quantifiable parameters of performance and an integrated performance index needs to be developed, which will act as a model for evaluating the performance of commercial banks.³

Angadi and Devraj (1983) measured productivity of Indian banks for the period 1970-80. They took total working funds (deposits and credits) as output indicator while establishment expenses as input indicator. They calculated return per rupee of establishment expenses. The results indicated that the productivity of the banking system as a whole witnessed a considerable decline during the years 1970-75. Between the years 1975 and 1978, the productivity improved but again in the year 1979 it declined. Among the bank-groups, the productivity of public sector banks,
which declined to 45.5 per cent in 1975 from 53.3 per cent in 1970 improved in 1977. However, it showed a sharp decline in 1980. The productivity of private sector banks, which had been mostly lower than that of other bank groups, showed an improvement in 1979. In the case of foreign banks, the productivity was always higher than other bank-groups. They concluded that the rapid expansion in rural and semi-urban commercial banks in the initial period of nationalization, without corresponding growth in business of these offices, contributed to the deceleration in productivity of this banks.4

Verghese (1983) evaluated the profits and profitability of Indian commercial banks during the period 1970 to 1979. He measured the profitability of commercial banks in terms of gross profit, net profit and operating margin, gross yield on assets, spread and spread ratios. Trends of productivity in terms of average deposits per employee, salaries and wages per unit of deposits and advances, share of establishment expenses in total current operating expenses and net income per employee has also been calculated. The study revealed that gross profits and net profits have shown an increasing trend while spread and spread related ratios declined over the study period. Average assets per employee, average deposits, advances per employee, salaries and wages per employee, and net income per employee have shown an increasing trend while share of establishment expenses in the current operating expenses declined during the study period. The study analyzed an overall improvement in employees’ productivity but it varied from year to year basis. The study found that the monetary policy measures like interest rate changes, credit reserve ratios and statutory liquidity ratios have an impact on the profits and profitability of banks.5

A.K.Vashist (1987) in his study titled “Performance appraisal of commercial banks in India” evaluated the performance of public sector commercial banks with regard to six key indicators i.e. branch expansion, deposits, credit, priority sector, advances, DRI advances and net profit. He developed the composite weighted growth index, which is used for ranking the banks. For improving the performance of commercial banks, he suggested (I) the developing of marketing strategy for deposit mobilization (II) profit planning and strength, weaknesses, opportunities and threat analysis in commercial banks.6
Singh (1990) examined the trends and changes in productivity in Indian banking industry in relation to employee productivity and branch productivity. The researcher used 17 indicators to analyze productivity trends and these indicators were divided into three categories – per employee indicators (labor productivity), per branch indicators (branch productivity), and Financial ratios measuring productivity. The study period (1969-85) was divided into four sub periods. Cross-sectional and inter-temporal analysis has been done on the basis of various productivity indicators, and compound annual growth rate has also been calculated. In addition to the comparison of growth rates of various indicators assessment of relative position performance has been made on the basis of average T- scores and ranking based on it. Indian Bank and Indian Overseas Bank made the most significant improvement. The bank which recorded the maximum deterioration was United Commercial Bank, in terms of employee productivity. There was a notable slide down in the positions of Allahabad Bank, Bank of Maharashtra and State Bank of Patiala. The researcher recommended that the role played by the structure of subsidiaries of State Bank of India in their relative poor performance needed to be examined.7

Kaur (1991) studied the profits and profitability of 20 Public Sector Banks during the period 1976 to 1985. The researcher employed trend analysis, ratio analysis and regression analysis for the study purpose taking 11 variables, which reflected different dimensions of banks’ operations, and hence, affected the banks’ profitability. The study was primarily based on the secondary data. The researcher was of the view that spread and burden were the two main factors, which influenced the profitability of a bank. The other factors determining bank’s profitability were credit policy, priority sector lending, massive geographical expansion, increasing establishment expenses, low non-fund income, deposit mobilization, etc. Further, she recommended that nationalized banks need to focus attention on the management of spread, burden, establishment expenses, ancillary income, deposit composition and diversification into wide range of financial services.8

M.R. Vyas (1991) studied financial performance of regional rural banks in Rajasthan. He analyzed the financial performance with the help of quick ratio, credit deposit ratio, and profit to proprietor’s capital ratio and working capital analysis. He
concluded that regional rural banks had a bright future as an effective instrument in the economic growth and up-liftment of down trodden sections of Indian society particularly in rural area.\(^9\)

**M.N. Mishra (1992)** in his paper evaluated the profitability of scheduled commercial banks taking into account the interest and non-interest income and interest expenditure, manpower expenses and other expenses. The Author has identified that the growing pre-emption of funds in the form of statutory liquidity ratio, cash reserve ratio, faster increase of expenses as compared to the income, advances, and total investment than interest income and few more factors have contributed to the declining profitability of Indian commercial banks.\(^10\)

**Nayar (1992)** studied the profitability and profit planning of nationalized banks for the years 1970 to 1986. Growth and trends in performance and profitability were analyzed in terms of three main ratios, i.e., return on investment, deposit mobilization and profit margins. The study evaluated that in terms of deposits, advances to priority sector and number of branches, Central Bank of India ranked first followed by Bank of India and Bank of Baroda. The maximum compounded annual growth rate in terms of deposits was confined to the period 1976 to 1981 by all the banks except Central Bank of India. Indian Overseas Bank recorded maximum return on investment followed by Central Bank and Bank of Baroda. Finally, she suggested the various measures to improve the profitability of commercial banks which included acceleration of recovery process, mixture of credit portfolio, control over volume, deposit mobilization, diversification of activities into non-traditional banking business such as merchant banking and mutual funds.\(^11\)

**Kaur (1993)** studied the trends in profitability in commercial banks and examined the factors responsible for the erosion of bank profitability. She employed trend analysis and ratio analysis for this purpose. She observed that the banks needed to focus attention on the management of spread, burden, establishment expenditure, ancillary income and deposit mobilization for improving their profitability. Her results contradicted the traditional belief that in the post-nationalization period, the profitability of Indian commercial banks declined mainly due to priority sector lending and rural banking. According to her, the social obligations of banks were not
a major drag on the banks’ profitability. Rather, a default lied somewhere else, may be in the organizational structure, funds management or overall efficiency of banking operations.12

Subramanian and Swami (1994) in their paper, “Comparative performance of public sector banks in India” Prjanan, have analyzed and compared the efficiency in six public sector banks, four private sector and three foreign banks for the year 1996-97. Operational efficiency is calculated in terms of total business and salary expenditure per employee. The analysis revealed that higher per employee salary level need not result in poor efficiency and business per employee efficiency co-efficient was also calculated. Among the PSBs, Bank of Baroda registered the high efficiency and operating profit per employee. Among the private sector banks Indus Bank followed by Citibank Registered highest and second highest operating profit per employee respectively. However, among the Nationalized Banks there existed wide variations in efficiency.13

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.14

Sarkar and Das (1997) examined the inter-bank performance differences in the efficiency of the banking sector with respect to various indicators of profitability, productivity and financial management for the year 1994-95. For each of the performance criteria, the area-specific efficiency index was worked out based on 15 indicators using the principal component analysis. Fifteen indicators used were: net
profit as percentage of total income, return on assets, return on equity, net profits as percentage to deposits, net profits as percentage to spread, advances per employee, deposits per employee, income per employee, spread per employee, number of accounts per employee, yield on assets, yield on advances, yield on investment, spread as percentage to establishment expenses, spread as percentage to total assets. The results showed that out of the top 25 banks, 22 banks were the foreign banks and remaining 3 banks belonged to the private sector bank group. Among the nationalized banks, the Oriental Bank of Commerce showed a relatively better performance as compared to the other nationalized banks. They concluded that there were wide differences in efficiency among banks with different ownership patterns. The performance of public sector banks was relatively poor as compared to other categories of banks. This was due to their typical organizational culture, technological development, employment pattern, managerial skills, and etc.\textsuperscript{15}

**Zacharias Thomas (1997)** studied on “Performance effectiveness of Nationalized Bank- a Case Study of Syndicate Bank” Thesis studied the performance effectiveness of Nationalized Bank by taking Syndicate Bank as case study in his Ph.D. thesis. Thomas has examined various aspects like growth and development of banking industry, achievements of Syndicate Bank in relation to capital adequacy, quality of assets, Profitability, Social Banking, Growth, Productivity, Customer Service and also made a comparative analysis of the performance effectiveness of Syndicate Bank in relation to Nationalized bank. A period of ten years from 1984 to 1993-94 is taken for the study. This study is undertaken to review and analyze the performance effectiveness of Syndicate Bank and other Nationalized banks in India using an Economic Managerial- Efficiency Evaluation Model (EMEE Model) developed by researcher. Thomas in this study found that Syndicate Bank got 5th Position in Capital adequacy and quality of assets, 15th in Profitability, 14th Position in Social Banking, 8th in Growth, 7th in Productivity and 15th position in Customer Service among the nationalized banks. Further, he found that five nationalized banks showed low health performance, seven low priority performance and eleven low efficiency performance in comparison with Syndicate Bank.\textsuperscript{16}

**Chen and Yeh (1998)** measured 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, and 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 labor, effective resource mobilization, and proper use of available capital could help inefficient banks to improve their performance.\textsuperscript{17}

\textbf{V.K. Bhatasana (1999)} studied the appraisal of financial performance of State Bank of India (1980 – 1995) particularly productivity and profitability of State Bank of India during the study period, he observed adequacy of capital fund, growth in deposits, branch expansion in rural area and less borrowing from Reserve Bank of India in this study period of State Bank of India improved the productivity & profitability of State Bank of India among public sector banks.\textsuperscript{18}

\textbf{D. K. Dash (2000)} attempted to evaluate the financial performance of Nawanagar co-operative bank by wing operational ratios, profitability ratios, productivity ratios and solvency ratio. He concluded that despite satisfactory financial performance, there are certain grey areas which need immediate attention. Effective steps are required to improve profitability and capital base activities.\textsuperscript{19}

\textbf{Prashanta Athma (2000)} “Performance of Public Sector Banks – A Case Study of State Bank of Hyderabad” made an attempt to evaluate the performance of Public Sector Commercial Banks with special emphasis on State Bank of Hyderabad. The period of the study for evaluation of performance is from 1980 to 1993-94, a little more than a decade. In this study, Athma outlined the Growth and Progress of Commercial Banking in India and analyzed the trends in deposits, various components of profits of SBH, examined the trends in Asset structure, evaluated the level of customer satisfaction and compared the performance of SBH with other PSBs, Associate Banks of SBI and SBI. Statistical techniques like Ratios, Percentages, Compound Annual rate of growth and averages are computed for the purpose of meaningful comparison and analysis. The major findings of this study are
that since nationalization, the progress of banking in India has been very impressive. All three types of Deposits have continuously grown during the study period, though the rate of growth was highest in fixed deposits. A comparison of SBH performance in respect of resource mobilization with other banks showed that the average growth of deposits of SBH is higher than any other bank group. Profits of SBH showed an increasing trend indicating a more than proportionate increase in spread than in burden. Finally, majority of the customers have given a very positive opinion about the various statements relating to counter service offered by SBH.20

**SBI Research Department (2000)** “Performance analysis of 27 Public sector banks” Economic Research Department of State Bank of India is to analyze the Performance of the 27 Public Sector Banks for the year 1999-2000 vis-a-vis the preceding year. Selecting four different categories of indicators-Business Performance, Efficiency, Vulnerability and labor productivity indicators, carried out the analysis. Altogether, 39 indicators were selected for this purpose. For the purpose of analysis, 27 PSBs disaggregated into four groups, namely, the SBI, ABs (7), the SBGs (8), the NBs (19). During 1999-2000, the PSBs exhibited better show in terms of several parameters studied above. Nevertheless, the problems of NPAs and capital adequacy remain to be taken care of. Researchers in this paper opinioned that greater operational flexibility and functional autonomy should be given to PSBs especially to strengthen their capital base. Further, they felt that since net interest margin will continue to remain compressed in a deregulated interest rate regime, a lot of effect would have to be made to mitigate this through generation of non-interest income. As far as NPAs are concerned, they believe‘ that, the outdated laws and regulations that pose hindrance to banks in getting back their dues need to be suitably amended.21

**Chandan and Rajput (2002)** evaluated the performance of banks on the basis of profitability analysis. The researchers analyzed the factors determining the profitability of banks in India with the help of multiple regression technique. They found that spread, i.e., net interest income is the major source of income for banks. The study found public sector banks at weaker position in relation to foreign banks and private sector banks. The authors suggested that public sector banks should concentrate on non-performing asset management and also make investment in
technology upgradation for better data management and quicker flow of information.\textsuperscript{22}

Cheema and Agarwal (2002) analyzed the productivity of commercial banks in India and compared the performance of public sector banks, private sector banks and foreign banks in India. Public sector banks were divided into two categories, i.e., State bank group and nationalized banks. The input variables like owned funds, deposits, borrowings and wage bills were used. The output variables like spread, non-interest income were used. The mean productivity scores of all public sector banks were found to be the same. Among public sector banks, State Bank of Patiala and Allahabad Bank were found to be most efficient banks in their bank groups, and Jammu & Kashmir Bank in private sector bank group. ING Bank was on the top among foreign banks group. The study revealed that the inefficiency among public sector banks was found due to excessive amount of owned funds, and inefficiency among foreign banks was due to excessive borrowings. The researchers suggested that concentration should be put on the proper utilization of deposits and borrowings and on the diversification of their activities in order to improve the efficiency of banks.\textsuperscript{23}

Sangmi, M. (2002) analyzed the profitability of ten selected commercial banks in India. Five best performing banks were taken in Class-1 and five poor performing banks were taken in Class-2 categories. The period of study was from 1991-92 to 1997-98. The profitability ratios like spread, burden, interest revenue, non-interest revenue, interest cost, manpower cost and facility cost have been calculated. The study revealed that operating cost was higher in the case of Class-2 banks and in these banks the profitability was affected due to low level of spread. These banks required more scientific attempts for the investment of funds. The researcher suggested that the position of operating cost can be improved with the introduction of high level technology as well as by improving the per employee productivity.\textsuperscript{24}

T. Radha (2002), in her Ph D Thesis, titled, “Impact of banking sector reforms on the performance of commercial banks in India”, in Andhra University, Visakhapatnam, was to critically evaluate the impact of Banking Sector Reforms on the performance of Commercial Banks in India. In this Study, Radha analysis the magnitude of deposits and borrowings, and trends in branch expansion, advances and
48 investments, trends income and expenditure and also studied the magnitude of achievements in priority sector advances, capital adequacy, CD ratio, staff position in different bank groups and individual banks within the group. This study covered the period 1989-90 to 1998-99. Simple statistical techniques like percentages and growth rates were used in this study. Major findings of the study are...: (i) Total Deposits of all Commercial Banks put together may be divided as SBI (21.5 per cent), Associate Banks (6.6 per cent), Nationalized Banks (58.6 per cent), Private Banks (6.9 per cent) and Foreign Banks (6.3 per cent) respectively, (ii) In the total borrowings of SCBs, Nationalized banks, on an average, accounted for 39.42 per cent followed with 22.77 per cent by Foreign Banks, 23.54 per cent by SBI, 7.76 per cent by Private Banks and 3.47 percent by associate banks, (iii) In Branch expansion, Indian Private Sector Banks, registered 21.36 per cent growth rate which is highest amongst SCBs, during the study period, followed by Foreign Banks with 16.96 per cent, Associate Banks with 12.77 per cent, Nationalized Banks with 11.36 per cent, SBI with 6.23 per cent, (iv) Total investments of Commercial Banks in India increased to Rs. 346271 Crore in 1998-99 from Rs. 97,199 Crore in 1989-90, (v) Priority Sector advances as proportion of net bank credit after exceeding the target of 40 percent in 1991 has been continuously falling short of target up to 1999, (vi) Foreign Banks in India as a group achieved highest capital adequacy ratio among all groups of SCBs, (vii) Among all Indian banking groups, Indian private sector banks recorded highest CD ratio with 67.06 'per cent.\textsuperscript{25}

Kumari (2003) studied the profitability and productivity of both public and private sector banks in India. The study primarily based on the secondary data covering the time period from 1980 to 1999 by taking into account the 50% of total public and private sector banks in India. Various indicators relating to employee and branch productivity as well as ratios relating to financial productivity and profitability of commercial banks have been employed for the purpose of study. The researcher found that in terms of deposit mobilization, branch expansion, credit deployment and employment generation both public and private sector banks have shown increasing trend. Bank-wise analysis revealed that private sector banks have shown higher growth as compared to public sector banks. The researcher suggested that public sector banks should improve their profitability and productivity performance by adopting innovative modern technological changes, opening up of new branches,
adopting aggressive marketing strategies and by fixing responsibility of officers for recovery, etc.\textsuperscript{26}

\textbf{Qamar (2003)} examined 100 scheduled commercial banks including 42 foreign banks, 8 new private sector banks, 23 old private sector banks and 27 public sector banks in terms of endowment factors, risk factors, revenue diversification, profitability and efficiency parameters. Data relating to financial year 2000-01 has been used from the annual accounts of the banks. Banks for the study purpose were categorized into public sector banks, old private sector banks, new private sector banks and foreign sector banks. The study indicated that all the selected scheduled commercial banks were found to be different in terms of total assets, share capital, capitalization ratio and efficiency factors. Much difference in the profitability performance of banks was found due to human resources efficiency as measured in terms of business per employee.\textsuperscript{27}

\textbf{Ram Mohan TT (2003)} “Long run performance of public and private sector bank stocks” has made an attempt to compare the three categories of banks—Public, Private and Foreign—using Physical quantities of inputs and outputs, and comparing the revenue maximization efficiency of banks during 1992-2000. The findings show that PSBs performed significantly better than private sector banks but not differently from foreign banks. The conclusion points to a convergence in performance between public and private sector banks in the post-reform era, using financial measures of performance.\textsuperscript{28}

\textbf{George et al. (2004)} used Camel Model to evaluate the performance of private sector banks like Bank of Punjab, Centurion Bank, Development Credit Bank, HDFC Bank, ICICI Bank, IDBI Bank, IndusInd Bank, Kotak Mahindra Bank, UTI Bank and Yes Bank of India from the year of their inception. In this study, researchers used 20 variables in total for capital adequacy, asset quality, management quality, earnings and liquidity parameters. The study brought out that the performance of Kotak Mahindra Bank was the most excellent during all the years under study, followed by HDFC Bank and IndusInd Bank.\textsuperscript{29}

\textbf{Kumar (2004)} analyzed the efficiency of Indian Banking Sector comprising of four groups, i.e., SBI and its associates, nationalized banks, Indian Private Sector
banks, New Private Sector banks and foreign banks for the period 1992-93 to 2002-03 by using various indicators. The study was primarily based on secondary data; and data envelopment analysis has been employed on various financial parameters to compute the productivity and efficiency of bank groups. The researcher found that public sector banks outperformed in case of total income, total expenditure, net profits, number of branches, return on equity, return on assets, spread as per cent of total income and volume of business, while private sector banks and foreign banks were better in terms of net profit as per cent to spread, per employee and per branch productivity. It was found that private sector banks and foreign banks have branches mainly in metropolitan cities, while public sector banks are having small sized bank branches covering small masses. The study suggested the scope of further improvement for public sector banks by following appropriate marketing practices.  

**Kumar S. (2004)** studied the impact of liberalization on productivity and profitability of 27 public sector banks for the period extending 1991 to 2002. He used the statistical tools like trend analysis, ratio analysis and concentration indices on various indicators based on secondary data for the purpose of study. He analyzed that in terms of productivity, Oriental Bank of Commerce registered continuous improvement, while Central Bank, Bank of India and Bank of Baroda performed well in branch productivity. The researcher suggested that public sector banks should improve their appraisal system, operational efficiency, non-performing assets management and management information system.  

**Sooden and Bali (2004)** made an attempt to find out the major determinants of profitability in banks. With a view to make a comparison in the profitability trend in all 27 public sector banks different indicators of profitability have been formulated. A rising value of the indicators had taken as a positive sign in the sense that profits were increasing directly or indirectly with only exception of establishment expenses to total expenses. The analysis revealed that in later years of 1990s the economic profitability of public sector banks appeared to be improving. But at the same time, the falling priority sector lending had the chances to erode the social profitability linked with public sector banks in coming years.  

**Debasish and Mishra (2005)** evaluated the performance of public sector banks (Nationalized banks and State Bank of India). The study was confined to 9
years from 1993 to 2001. The data for the study purpose has been collected from both primary as well as secondary sources. The researchers analyzed the financial performance, profitability and productivity of public sector banks by employing various statistical tools like ratio analysis, correlation and regression analysis, factor analysis etc. The study found that spread as percentage to working funds has a positive effect and burden as percentage to working funds has a negative effect on the profitability of nationalized banks and State Bank of India. Satisfaction level among customers regarding performance of banks has also been studied through a questionnaire. The study concluded that nationalized banks in India need to adopt specific improvement in order to survive in present day world of stiff competition.33

Debasish and Mishra (2005) tried to develop a discriminant function for bank profitability by using ratio analysis and measured the extent to which such ratios influenced the bank profitability. The study was confined to 78 banks including 27 public sector banks, 23 private sector banks and 28 foreign sector banks. The data related to the year 1999-2000 has been analyzed. The ratios relating to liquidity, return performance, expense parameters and operational efficiency have been calculated. In total 13 ratios have been employed. Step-wise discriminant analysis has been used for developing the discriminant function. Discriminant analysis identified that out of calculated 13 ratios, only 5 of the ratios proved to be significant discriminators of banks’ profitability. The study found that classification accuracy was 75% in the case of foreign banks, 54% in private sector banks and 60% in public sector banks.34

Samwel Kakuku Lopoyetum (2005) in his article elaborated that the profitability performance of the UCBs can be improved by strengthening the magnitude of burden ratio. The spread ratio can be increased by increasing the interest receipts faster than the interest payments. The burden ratio can be lowered by decreasing the manpower expenses, other expenses and increasing other incomes.35

Singla and Arora (2005) measured the financial performance of two nationalized banks, i.e., Canara Bank and Indian Bank; and the comparison has been made about the performance of selected banks. The data used for the study pertained to four years, from 2000-01 to 2003-04. The data for the study purpose mainly related
The study revealed that both Canara Bank and Indian Bank have improved their financial performance. The growth of Deposits, Advances, Average Working Funds of Canara Bank was better than Indian Bank. But the ratio of Net Non-Performing Assets to Net Advances has decreased in the case of both the banks under study, i.e., Canara Bank and Indian Bank. However, the performance comparison of both the banks in terms of Growth Rate showed Indian Bank in a better position than Canara Bank. The analysis revealed that when productivity Ratios like Business per employee, per Branch and operating Profit per employee, per Branch were compared then both Canara Bank and Indian Bank showed an increasing trend but it remained higher in the case of Canara Bank.

**Arora and Kaur (2006)** reviewed the financial performance of Indian banks during post-reform era. For the analysis banks were categorized on the basis of ownership, i.e., Foreign Sector Banks, Private Sector Banks, Nationalized Banks, and State Bank of India and its seven associates. Secondary data pertaining to the period 1996-97 to 2004-05 has been used for the study purpose. Financial Performance of banks was analyzed on the basis of Return on Assets, Capital Asset Risk Weighted, and Non – Performing Assets to Net Advances, Business per Employee, Net Profitability Ratio, Non Performing Assets level and Off Balance-Sheet Operations. The researchers recommended that for enhancing financial viability of public sector banks, efforts should be made to reduce the Non-Performing Assets and to upgrade the technology. For enhancing business per employee, continuous and compulsory Training and Development Programmes should be introduced in the banks.

**Bodla and Verma (2006)**, in their paper, evaluated and compared the performance of two banks in India, one from the public sector, i.e., State Bank of India and the other from the private sector, i.e., ICICI Bank. The analysis was done on the basis of CAMEL Model. The study covered the time period from 2000-01 to 2004-05. The results showed that both the banks have maintained higher level of capital adequacy ratios than the level prescribed by Reserve Bank of India. Assets quality ratios of both the banks have been improved. State Bank of India has an edge over ICICI Bank in terms of liquidity ratios and ICICI Bank has outperformed SBI.
Bank in terms of ratios of operating profit to average working funds and net profits to average assets. On the whole, ICICI Bank has performed better than SBI Bank.\textsuperscript{38}

**Kohli and Chawla (2006)** made an attempt to analyze the emerging trends in profits and profitability. The study related to four banks, two each from the public sector and private sector banks. The study covered a time period of ten years from 1995-96 to 2003-04, and data relating to variables like interest income, interest expenditure, non-interest income, non-interest expenditure, total assets, operating expenditure, deposits and advances have been utilized. Trend analysis and ratio analysis have been employed to measure the profitability and efficiency in banking operations. The study revealed that the performance of selected private sector banks (ICICI Bank and Bank of Punjab) has been better than the selected public sector banks (SBI Group and Punjab National Bank). The researchers recommended that the use of Information Technology should be expanded in public sector banks as in the changing scenario volume of business, growth and profitability of banks would be determined by the technology.\textsuperscript{39}

**Maji and Day (2006)** examined the productivity and profitability of the banks in India, selecting five banks each from the public and private sector banks. The Banks have been selected on the basis of quantum of deposit mobilization. The data covered the time period from 1996-97 to 2003-04. The study revealed the productivity index of greater than 1 has been found for all the selected banks except few banks. In case of achieving the target level of profitability State Bank of India and Punjab National Bank were found to be more successful and the performance of Jammu & Kashmir Bank, Canara Bank and Bank of India was found to be poor. The authors pointed out that in their opinion Interest Spread has been an important influencing role in determining the profitability of Banks. The authors suggested that Bank of India and Jammu & Kashmir Bank should take necessary steps to utilize their available resources for enhancing their profitability.\textsuperscript{40}

**Sharma (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
primarily based on the secondary data. The researcher employed various statistical tools for analysis purpose like arithmetic mean, standard deviation, coefficient of variation, correlation coefficient, simple growth rate and trend growth rate. 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 researcher further suggested that the Public Sector Banks should improve their communication system, customer relationship in rural market and suitable marketing strategies.41

Puneet Verma and Nitin Kumar (2007) had investigated the comparative analysis of the Credit Deposit (CD) ratio of Scheduled Commercial Banks of the three major states of the western part of India, viz., Rajasthan, Gujarat and Maharashtra, and India as a whole as well as in consideration with a number of banks and per capita income of those states over the last 29 years (1977-2005). It is found that the behavior of CD ratio among all the three states is significantly different for the period of study. Maharashtra which is the backbone of growth and progress of Indian economy has been more volatile but performing well in terms of CD ratio, whereas Rajasthan and Gujarat are stable at lower level. There exists a lot of scope for branch expansion and improvement of service quality by the banks in Gujarat and Rajasthan.42

Rajkumar (2007) examined the performance of 28 Private Sector Banks during the period 2005-06. The author used the data relating to income, expenditure and profits. He calculated the ratios relating to interest, expenditure, and income and operating profit. The ratios showed that there was more increase in interest income in the year 2005-06 as compared to 2004-05, but operating expenses among total expenditure decreased. The profitability ratios of all the 28 Private Sector Banks showed a positive trend. During the period ICICI Bank ranked No. 1 with highest amount of profits followed by HDFC Bank, UTI Bank and Federal Bank respectively; whereas Development Credit Bank Ltd. and United Western Bank Ltd. incurred losses.43

Ramkrishna Vyas and Aruna Dhade (2007) in these study Commercial banks, especially the dominant public sector banks, have been exposed to competition
from the new banks set up in the private sector with the latest technology. This has created a need for the public sector banks to improve their business efficiency and volume, which is a good sign of competitive effectiveness. Induced stiff competition in the banking sector certainly raises some issues relating to the functioning of domestic banks. The study mainly focuses on the State Bank of India (SBI), the premier bank in the Indian banking sector, as to what extent it has been affected by the entry of new private sector banks. The study applies the t-test for finding the significant difference in the performance of SBI before and after the entry of private sector banks, with the help of financial ratios selected as the parameters for ascertaining the changes in the business of SBI. The results indicate that the presence of new private sector banks does not pose any threat to SBI at the moment; however, the same cannot be said in the future. The SBI has a strong network as compared to these new banks, and its presence has been for more than hundreds of years in the region. These facts certainly have a major impact on the results of the study.44

**Uppal and Kaur (2007)** made an attempt to study the trends in costs and profits of partially and fully IT-oriented bank groups and to analyze the correlation between the variables. The data relating to five bank groups, i.e., nationalized banks, State Bank of India and its associates, old private sector banks, new private sector banks and foreign banks has been used from 1999-00 to 2005-06. Further, these banks have been divided into two categories, i.e., partially IT-oriented banks and fully IT-oriented banks. Parameters like net profit and operating expenses ratios to total assets and per employee expenditure have been used. Averages, standard deviation, coefficient of variation and T-test have been applied. A decreasing trend has been observed in per employee expenditure, and an increasing trend in net profits to total assets. The study revealed that cost should be properly managed to improve the profitability of banks because the net profits were affected by the increase or decrease in operating cost.45

**Ved Pal and N S Malik (2007)** This study investigates the differences in the financial characteristics of public sector banks, private sector banks and foreign banks in India based on factors, such as profitability, liquidity, risk, and efficiency. To identify the differences, the multinomial regression analysis was used on the sample of 74 Indian commercial banks comprising 27 public sector banks, 24 private sector
banks and 23 foreign banks for the period 2000-05. The findings suggest that foreign banks were better performers, as compared with the other two categories of banks, in general and in terms of utilization of resources in particular during the period chosen for the study.46

Wu et al. (2007) made an attempt to empirically examine the operational performance of Chinese banks. The study pertained to the period 1996-97 to 2004-05. Pooled Cross Section and Time Series Data were used for the empirical results. The data relating to fourteen Chinese banks has been used for the years 1997-2005. The researchers studied the factors which have an impact on the operational performance of banks like age of the bank, ratio of non-interest income to total income, size of banks in terms of assets and per capita. The study found that more control could result into better Return on Assets and performance of banks. The study evidenced that the Chinese banks were facing intense competition from foreign sector banks and suggested various steps to improve the operational performance like upgrading corporate governance mechanism, speeding the process of stock market listings. To improve the quality of personnel and to reduce the operating cost system, human resource management system should be established.47

Arora and Kaur (2008) made an attempt to study the determinants of diversification of banks in India and also analyzed the financial performance of banks in India. Bank group-wise data has been used for nationalized banks, SBI Group, new private sector banks and foreign banks for the period 2000-05. Profitability ratios like return on assets, interest income to total income, non-interest income to total income and capital ratios have been used to examine the financial performance of banks. Along with those ratios correlation technique has also been used to find out the degree of association between interest income and non-interest income among different bank groups. The researchers evaluated that continuous decline in interest margin pushed the banks to generate income from various alternative sources of revenues other than interest income. They found that public sector banks relied heavily on interest income while private sector banks and foreign banks relied more on generating income from non-traditional sources of income.48

Goyal and Kaur (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 ANOVAs have been applied. The researchers calculated various ratios relating to capital adequacy, asset quality, employee productivity, earning quality and liquidity of banks. 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.49

**H.K. Singla (2008)** “financial performance of banks in India” has examined that how financial management plays a crucial role in the growth of banking. It is concerned with examining the profitability position of the selected sixteen banks of banker index for a period of six years (2001-06). The study reveals that the profitability position was reasonable during the period of study when compared with the previous years. Strong capital position and balance sheet place, Banks in better position to deal with and absorb the economic constant over a period of time.50

**Amit Basak (2009)** examined the case study on “Performance Appraisal of Urban Cooperative Banks: A Case Study” figured that though some UCBs have performed creditably in the recent years, a large number of them have shown discernible signs of weakness. The operational efficiency is unsatisfactory and characterized by low profitability, ever-growing Non-Performing Assets (NPAs) and relatively low capital base. In this context, this paper makes an attempt to examine the working and financial performance of the UCBs. To make the analysis, the author takes up the Contai Co-operative Bank Ltd., one of the leading UCBs in West Bengal for a case study. The objective of the study is to identify and analyze the trend, progress and problems of this bank, to throw light on the problems of swelling NPAs and to offer some meaningful suggestions for improving the efficiency and effectiveness of this bank. Relevant data have been collected for the period from 1995-96 to 2006-07. This data have been analyzed with the help of statistical tools like ratios, percentages, averages and trend analysis, chi-square test, and multiple
regression analysis.\textsuperscript{51}

**Bansal (2010)** studied the impact of liberalization on productivity and profitability of public sector banks in India. The study has been conducted on the basis of primary as well as secondary data for the period 1996-07. The study concluded that the ability of banks to face competition was dependent on their determined efforts at technological upgradation and improvement in operational and managerial efficiency, improvement in customer service, internal control and augmenting productivity and profitability. The study found that public sector banks have to pay great attention to strategic management, strategic planning and to greater specialization in the technical aspect of lending and credit evaluation. It was recommended that public sector banks should strengthen their project appraisal capabilities. In order to raise their productivity and profitability, public sector banks should spell turnover strategies, income-oriented and cost oriented strategies from time to time.\textsuperscript{52}

**Dangwal and Kapoor (2010)** evaluated the financial performance of nationalized banks in India and assessed the growth index value of various parameters through overall profitability indices. The data for 19 nationalized banks, for the post-reform period from 2002-03 to 2006-07, was used to calculate the index of spread ratios, burden ratios, and profitability ratios. They found that while four banks had excellent performance, five achieved good performance, four attained fair performance, and six had poor performance.\textsuperscript{53}

**Jha and Sarangi (2011)** analyzed the performance of seven public sector and private sector banks for the year 2009-10. They used three sets of ratios, operating performance ratios, financial ratios, and efficiency ratios. In all eleven ratios were used. They found that Axis Bank took the first position, followed ICICI Bank, BOI, PNB, SBI, IDBI, and HDFC, in that order.\textsuperscript{54}

**Prasad and Ravinder (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, while 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.55

Scott and Arias (2011) developed an appropriate econometric model whereby the primary determinants of profitability of the top five bank holding companies in the United States could be examined and understood. The econometric model was based on internal aspects of the banking organizations as they relate to their return on assets and external aspects of the environment in which they compete as measured by growth in GDP was developed based on guidance provided by economists and industry experts to determine the impact of the external national economy of these five leading banks according to their size as measured by total assets. The results show that profitability determinants for the banking industry include positive relationship between the return on equity and capital to asset ratio as well as the annual percentage changes in the external per capita income.56

References


Chapter 4
Profile of Sample Bank