methodology and sources of data of the study. The scheme of the research report and concepts and definitions of the study are also incorporated in the introductory chapter.

The second chapter “Review of Literature” highlights the available literature related to the problem under investigation.

The third chapter “Profile of Nationalised Banks in India” reviews the history of the nationalised banks. The vision and mission, branches and business, product and services of growth and development of the nationalised banks are also outlined.

The fourth chapter “Growth and Development of Public Sector Banks in India” presents the growth of Indian banking sector, nationalisation of commercial banks, objective of nationalisation, role of commercial banks, development of commercial banks after nationalisation, technological development in Indian public sector banks, challenges for public sector banks in India, management of non-performing assets of nationalised banks.

The fifth chapter “Financial Performance of Nationalized Banks: - A Comparative Analysis” analyses the financial performance of the nationalised banks in India. It consists of theoretical and analytical part of the analysis.

The sixth and final chapter “Summary of Findings, Suggestions and Conclusion” deals with the summary of findings and the various suggestions based on the research of the study.

CHAPTER II
2.1 Introduction

The review of earlier studies on this topic and related topic are essential to have a clear view on the areas already studied. In this part of the thesis, the researcher has presented the various studies done in the field of banking and financial management.

2.2 Review of Literature
Mahesh and Rajeev (2009) concluded in their work that public sector banks have been found to be doing better than their private counterparts. Contrary to aforementioned studies, there are a few studies on Indian banking industry which concluded that private sector banks are relatively best-performers.\(^9\)

Siva Reddy Kalluru and Sham Bhat K. (2009) in their study titled “Determinants of Cost Efficiency of Commercial Banks in India” employed the stochastic frontier cost function to examine the cost efficiency of commercial banks in India. The empirical results of the study, in general revealed that cost efficiency of commercial banks in India decreased during the study period. Among the three ownership groups in India, foreign banks seem to be relatively efficient followed by private domestic banks, due to the former’s technological advantages, urban and non-interested income oriented operations. The study also revealed that big bank, in term of assets, are relatively less efficient. The frontier model results also revealed that cost in efficiency of Indian Banks will increase in the future too. Further, the Tobit regression results showed that earning capacity of banks is the main factor for determining cost efficiency, followed by diversified and strategic non-interest income activities. The study also found that efficiency is negatively related to non-performing loans, assets and paid-up capital to assets, and positively related to branch network. The empirical results also found an ownership performance relationship in the Indian Banking Industry.\(^10\)

Hugar and Nancy (2009) in their study entitled “Indian Public Sector Bank in the Widening Horizon: A study vis-A-Vis their Performance Indicators” used key performance indicators as bench marks to evaluate the performance of any organization.

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These are financial and non-financial metrics that gauge the performance of business organizations and they differ depending on the nature and strategy of a business concern. The acronym SMART (Specific, Measurable, Achievable, Result Oriented, Time Based) is generally applied while selecting the performance indicators for evaluation. Such data need to be consistent and correct and should be timely available. The financial performance of any bank is evaluated by working out a number of ratios depending on the type of data needed at any given time. The ratio makes the data comparable ever the various players present in the Industry. This study has made use of the five financial parameters i.e., capital to Risk-Weighted Asset Ratio (CRAR), Return on Assets (ROA), Net Interest Margin (NIM), Net Non-Performing Asset (NPA) and Profit Per Employee (PPE) as those are the generally accepted performance of all the Indian Public Sector Banks with regard to profitability indicators is very lean compared to the foreign banks due to a number of reasons, i.e., the technology, the products, Management Polices, Investment avenues, Management of portfolio, orientation towards profitability and social responsibility and the most important, the mediocre workforce. If these are narrowed down to three most important ones – inferior technology, the workforce and the customer oriented strategies can be fair by isolated. Corporation bank, which stands out among the PEBs, is the most technology savvy among them and is the first to migrate fully to care Banking”.

Selvakumar and Kathiravan (2009) in their study titled “A Study of Profitability Performance of Public Sector Banks in India” urged to generate sufficient revenue to meet the rising cost of funds. Profitability is a key result area where performance and results directly and virtually affect the survival. Therefore, this study analyses the profitability performance of public sector commercial banks in India. From this analysis,

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one can easily understand that the functions of the PSCBS are efficient and profitability is good.\textsuperscript{12}

Ahmed Arif Almazari (2009) in his study on “Banking competition. An empirical study on the Jordanian commercial Bank” presents an empirical analysis of the impact of banking competition, investigating the competitive factors and obstacles facing this industry and proposing some solutions which can be a source of help to the bankers in Jordan. To achieve the main purpose of this study, some questions were raised. Does increased competition affect the banks’ interest rates, risks and loans? Does increased competition lead banks to lower costs and increase capital? Does the entry of foreign bank influence the domestic banks? How do the economic environment and concentration influence banking competition? The methodology follows a descriptive and analytical approach based on a disproportionate stratified random sample of 13 Jordanian Commercial Banks. The finding of this study indicate that increased competition provides incentives for banks to hold more capital as against default, that competition exposes the Jordanian banks to take more risk that foreign competition reduce the quality of domestic loans portfolio but still grant loans after screening but some banks issue loans to less credit worth borrowers due to intense competition, that Jordan banks have a sound network base, that they also have good investment opportunities but they are not fully utilized due to lack of capital, that under all economic circumstances banking competition still exists in that market and that, as reported by the respondents the recent global financial crisis has its impact on the Jordanian Banks’ performance. It was suggested by the researcher that the Jordanian Banks must be more effective to have more power on the market, strengthening their capital base, avoiding

risks by following good measured of screening, expanding and diversifying their business to enable them to meet financial and economic shocks.¹³

Richa Verma Basaj (2009) in his study on “Capital Adequacy Regime in Scheduled Commercial Banks. A Case of India” analyses the capital adequacy ratios of Indian Banks as worked out on the lines of the CAMEL model. It is found from the analysis that majority of scheduled commercial banks in India are maintaining capital adequacy ratio above 9 percent irrespective of their ownership pattern. While in terms of CAR, Foreign Banks (FBs) have the edge, the Public Sector Banks (PSBs) enjoy the same in terms of ratio of Government securities to the total investment. The Debt/Equity ratio is found the lowest in the case of Private Sector Banks (PBs). Advance to Asset Ratio has increased significantly in the case of the domestic banks during the past five years. On the whole, the banks operating in India have shown appreciable improvement in each of four ratios used to measure capital adequacy according to the CAMEL model. Based on the results of this study, interestingly, it is obvious that most of the banks in India are capable of absorbing additional requirement of capital under based regime.¹⁴

Rachita Gulati and Sunil Kumar (2009) in their study titled “Efficiency – Profitability Relationship in Indina Domestic Banks. A Disaggregate Analysis” investigate the relationship between the efficiency and profitability at the bank – level in Indian domestic banking industry. The exploration of efficiency – profitability relationship is indispensable because an accurate performance appraisal of an organisation must be craned out from the dimensions of operational efficiency and profitability simultaneously, and ignoring, the any one of these may be misleading and


may cause errors in decision making process. The main aim of this paper is to examine the efficiency and profitability relationship among individual public and private sector banks operating in India. This study also reports a weak ownership effect on the efficiency of banks, since the efficiency difference between public and private sector banks are not statistically significant as indicated by hypotheses testing exercise using analysis of variance (ANOVA), Wilcoxon Mann-Whitney test, Kruskal – Wallis test and Kologorov – Simrnov test. A change in the orientation of the PSBs from social objective towards an ascent on profitability may be the main cause of observed weak ownership effect. The relationship between efficiency and profitability measures reveals that the resources utilization process banks is not functioning well and featuring the presence of considerable wastage of the inputs, these banks fall in the sleeper and question mark quadrants these banks have potential for profitability increase through an improvement in the operating efficiency.15

Prakash Tiwari and Hemraj Varma (2009) in their study on “A Fundamental Analysis of Public Sector Banks in India” say that the Public Sector Banks (PSBs), which are the foundation of the Indian Banking System account for more than 78 percent of the total Banking industry assets. Unfortunately, they are burdened with excessive Non-Performing Assets (NPAs), massive manpower and lack of modern technology. The private sector and foreign banks in India are witnessing immense progress. They are the leaders in internet banking, mobile banking, phone banking, ATM and the like. The fundamental analysis, which aims at developing an insight into the economic performance of the business, is of paramount importance from the viewpoint of investment decision. The present study has been conducted to examine the economic sustainability of the five major banks in the Indian banking sector, the SBI, the PNB, the

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BOI, the BOB and the CB. The study reveals that SBI has performed better in terms of Earning per share and price earning ratio than the PNB, the BOI, the BOB and the CB.16

Joshipura (2009) in his research analysis “Measuring Performance of banks” covers importance of bank earnings. Bank earnings provide for internal capital formation, and they are needed to attract new investor capital, which is essential if the institution is to grow. Healthy profits are needed to absorb loan losses and to build adequate provisions. A consistent earnings performance builds public confidence in the bank. Many bankers believe that public confidence in their institutions is their most valuable banking assets. Consistently healthy earnings are essential to the sustainability and viability of banking institutions. A strong bank may prudently maintain a tighter liquidity position than a weaker bank. A strong bank may even be able to ensure that all deposit claims are routinely met while it is technically illiquid, and by doing so maximise its income from maturity transformation using a static liquidity measure to judge the comparative strength of peer banks can be misleading. A bank’s capital forms the safety net or cushion that allow sit to remain solvent and to continue operating despite unexpected macroeconomic or institutional difficulties. A major portion of the analysis of a banking institution involves evaluating, the quality of assets and the adequacy of reserves, since any over valuation of assets or inadequacy in loan loss reserves will overstate capital measures of profitability, efficiency, stuff productivity, spread, non-interest income and cost of intermediation. The gross and the net NPA level would be a

perfect barometer for the quality of assets; one has to watch the level of restructured
assets, which would put a stress on its quality.\textsuperscript{17}

Central bank sometimes faced with economic blow down, puts cut on various rates
like redo rate, cash reserve ratio and the like. If the banks were not positioned for a quick
transmission of this rate cut in loan books, it would put pressure on their margins.
Evaluation of banks could be done on the basis this would ensure the bank’s ability to
absorb asserts quality risk which would be reflected in higher return on equity and upper
in higher return on equity and upper valuation of the stock”.

Dangwal, et.al., (2009) in their article entitled “Performance Appraisal of Public
Sector Banks” has been analysed through three sets of ratios, such as spread ratios,
Burden ratios and profitability ratios. Indian Banking system has historically evolved
under the impetus of economic, social institutional forces uniform to various banks. The
overall operational efficiency of the banking system depends on the relative efficiency of
each unit of the banking system. The spread and profitability ratios have increased in the
PSBs in India during the period of study, which indicates that the performance of the
public sector banks has excelled in the post-reform period.\textsuperscript{18}

Ved Pal and Parveen Chauhan (2009) in their study titled “Performance Appraisal
of Commercial banks through Camel Framework” covers the performance of the
commercial banks through all the components of the CAMEL frame work. Foreign
banks showed their dominant position in the performance based on the CAMEL
framework, followed by the new private sector banks. The public sector banks, which
recorded relatively moderate performance, need to enhance the managerial efficiency. It

\textsuperscript{17}Joshipura, J.P. “Measuring Performance of Banks” \textit{The Indian Banker} Published by

\textsuperscript{18}Dangwal R.C., Narinder Kaur and Reetu Kapoor “Performance appraisal of Public
demands management autonomy to these banks. The government being the major shareholder of these banks wields tremendous influence on the bank management. The old private banks are found to have relatively poor performance. A majority of these banks are smaller in size. The new financial environment is characterised by intense competition, new technology deregulation, and globalisation. In order to survive and thrive in business, these banks require drastic steps in restructuring their existing system, and introduce the managerial practices similar to those adopted in new private banks and some leading foreign banks. The recent global financial crisis and the south-east Asian financial crisis during the late 1990s have highlighted the importance of financial soundness and stability of the financial sector. It calls for an effective risk-management system measuring the performance of banks in term of the CAMEL, which forms part of the Basel Accord, can provide useful information for risk measurement and can enhance management capability of the banks.19

Chandrasekhar and Sonar (2008) in their study titled “Impact of Information Technology on the Efficiency and Total Factor Productivity of Indian Banks” indicated that private sector banks especially de novo private banks have edge over the SBI and its associates followed by other public sector units.20

Singh et al. (2008) in their study titled “Would its Past Reflect its Future Performance: Indian Banks?” found that foreign banks are more efficient and showed an

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efficiency improvement during the study period while nationalized banks observed a fall in efficiency.\textsuperscript{21}

Srinivas Nippani, et al., (2008) in their study on “Bank Size and Corporate Governance Structure” examines the importance of corporate governance structures for the banking industry. It finds that there exist significant differences between the governance structures for the banking industry. It finds that there exist significant differences between the governance structures of banks based on their size and that bank’s stock market returns are significantly influenced by board composition. It also finds that other governance mechanisms such as audit committee structure, take over defence and executive compensation have no bearing on the returns to the banks’ stockholders. The results also show that banks of different size have differing corporate governance characteristics. Banking industry is unique in having more regulators than most other industries.\textsuperscript{22}

Mahesh and Meenakshi Rajee (2007) in their study titled “Productivity of Indian Commercial Banks in the Pre-and Post-Liberalization Periods” studied total factor productivity measurement of Indian Commercial Banks using mulmquist productivity index. The results show that, on an average, there is productivity growth of the total banking sector over the study period. However, the extent of growth differs across bank groups. Foreign banks register the highest productivity growth and the SBI register negative productivity growth. A comparison of productivity growth between pre-and post-liberalization periods shows that the average productivity growth in the post-liberalization growth is greater than the pre-liberalization period. The total factor


productivity growth is mainly due to technological change than efficiency change. Thus the study shows that in Indian commercial banks there is improvement in efficiency as well as technology which has helped to improve the total factor productivity (TFP) growth.\(^{23}\)

Gourav Vallabh et al., (2007), in their study entitled “Non-Performing Assets of Indian Public, Private and Foreign Sector Banks: An Empirical Assessment” gives the picture that the growth and financial stability of a country depends on the financial soundness of its banking system. One of the parameters that is used to judge the banking sector’s financial health is the level of Non-Performing Loans or Assets (NPAs). Non-performing loans is an important criterion because it reflects the asset quality, credit risk, and efficiency in the allocation of resources to productive sectors. The high level of NPAs in banks and financial institutions has been a matter of grave concern to the public as bank credit is the catalyst to the economic growth of the country, and any bottleneck in the smooth flow of credit – one cause for which is the mounting NPAs – is bound to create adverse repercussion in the economy.\(^{24}\)

Ved Pal and Malik (2007) in their study titled “A Multivariate Analysis of the Financial Characteristics of Commercial Banks in India” 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. The present


study is based on the multivariate analysis for identifying the financial characteristics to make demarcation of the Indian commercial banks. The financial characteristics of the banks are defined in terms of financial ratios, which are used for evaluating the financial conditions and performance of a bank. The results of the study reveal that the foreign banks come up with a dominating performance in India over the public banks and the private banks during the period chosen for the study. The foreign banks proved to be the high performer in generating business with a given level of resources in terms of assets and manpower thereby implying that they are better equipped with managerial practices and have an edge in terms of skills and technology for utilizing the given resources in comparison to the other two groups of banks. Foreign banks were also found to be more consistent with Market System as reflected in terms of net interest margin. The public banks emerged as the next best performer after the foreign banks. These banks were characterized by a higher return on equity in comparison to the foreign and the private banks. During the course of the study it was observed that the public sector banks were high performers in terms of economizing their expenses as reflected in terms of expenses ratio and efficiency ratio. The private sector banks emerged with a better performance in utilization of resources as compared to the public sector banks. 

Adolphus (2007) in his study titled “CAMEL Analysis, Prudential Regulation and Banking System Soundness in Nigeria” shows that the Nigerian Banks’ preference for improved liquidity does not actually enhance the loan-to-deposit ratio. The study observes a preference for highly profitable money and capital market instruments and thereby curtailing credit to the economy. The weak and insignificant correlation between the ratio of loan-to-total assets and bank profitability measures confirm the declining impact of the bank loans portfolio. Although positive and significant relationship

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between capital adequacy and bank solvency justifies current regulatory intervention in the form of increased capital requirement.\textsuperscript{26}

Manish and Aruna (2007) in their study on “Profitability and Productivity in Indian Banks: A Comparative Study” shows that banking sector has undergone major transformation. The underlying objectives of the reforms were to make the banking system more competitive, productive and profitable. As per the IBA report “Banking Industry Vision 2010” there would be greater presence of international players in the Indian Financial System and some of the Indian Banks worked become international players in the coming years. The key to success in the competitive environment is increased productivity and profitability. Indian banks especially the public sector banks and the old private sector banks are lagging far behind their competitors in terms of both productivity and profitability and profitability with the exception of the state bank of India and its associates. The other public sector banks and old private sector banks need to go for the major transformation programme for increase in their productivity and profitability.\textsuperscript{27}

Sarma and Nikaido (2007) presented an analytical review of the capital adequacy regime and the present state of capital to risk-weighted asset ratio (CRAR) of the banking sector in India. The authors found in their study that in the current regime of Basel I, Indian banking system is performing reasonably well, with an average CRAR of about 12 per cent, which is higher than the internationally accepted level of 8 per cent as well as India's own minimum regulatory requirement of 9 per cent.\textsuperscript{28}


\textsuperscript{27}Manish Mittal and Aruna Dhade “Profitability and Productivity in Indian Banks: A Comparative Study”, \textit{AIMS International}, Vol.1, No.2, pp.137-152.

Bodia and Verma (2006) made an attempt to study the performance of the SBI and the ICICI through the CAMEL Model from the period from 2000-01 to 2004-05. Compound Annual Growth Rate (CAGR) is used to calculate the growth of each ratio. The author concluded that SBI has an edge over its counterpart ICICI in terms of Capital Adequacy. However, the vice-versa is true regarding assets quality, earning quality and management quality. The liquidity position of both the banks is sound and does not differ significantly.²⁹

Khalid (2006) investigated the effects of privatisation and liberalisation on the performance of the banking sector in Pakistan in the light of the CAMEL framework and found that there was little evidence of improvement in most of the indicators of financial health as a result of the privatisation and liberalisation policies pursued so far in the banking sector of the country.³⁰

Baral (2005) sought to investigate the financial health of joint-venture banks in the CAMEL framework. He found that the health of joint-venture banks was better than that of the other commercial banks. He also analysed the financial position of Indian banks and assessed the relationship between the CAMEL ratings and the bank's stock performance. They found that the Off-site Supervisory Examination Model, CAMEL, was related to the banks' stock performance in the capital market. Moreover, the private supervisory information gathered by banks' examiners in the form of the CAMEL ratings


does filter into the financial markets, in spite of the fact that they were confidential and not disclosed to the public.\textsuperscript{31}

Chatterjee and Sinha (2006) observed that the private sector banks exhibit higher mean cost efficiency than the public sector banks. Further, the public sector banks lagged behind the private sector banks both in terms of technical and allocative efficiency.\textsuperscript{32}

Das and Ghosh (2006) in their study found that the medium-sized public sector banks performed reasonably well and are more likely to operate at higher levels of technical efficiency. Further, banks with public ownership are more efficient than their private counterparts including foreign banks.\textsuperscript{33}

Chakrabarti and Chawla (2005) in their work found that the PSBs have, in comparison, lagged behind their private counterparts in terms of performance in both value and quantity basis.\textsuperscript{34}


\begin{itemize}
  \item \textsuperscript{34}Chakrabarti, R. and Chawla, G. (2005), "Banking efficiency in India since the reforms: an assessment". \textit{Money and Finance}, Vol. 9, No.2, pp. 31-47.
\end{itemize}
used correlation analysis, multiple regression analysis, factor analysis and concentration indices to study the overall profitability along with productivity.\textsuperscript{35}

Satish, et al., (2005) adopted the CAMEL model to assess the performance of Indian banks. The authors analyze the performance of 55 banks for the year 2004-05 by using the CAMEL Model. They conclude that the banks Initial Public Offer will be hitting the market to increase their capital and gearing up for the Basel II norms.\textsuperscript{36}

Karn (2004) identified that the gross NPA, as a proportion of gross advances, had been declining steadily and distinctly over the years. Since, the RBI introduced the objective criteria for identification of the NPAs. Since the assets of the Public Sector Banks constitute nearly three fourths of the total assets of the banking system, this declining trend of the NPAs, manifested an overall positive impact of reform measured.\textsuperscript{37}

Shanmuga Sundaram and Palaniswamy (2004) in their study state that the reduction of non-performing assets was one of the steps in increase the return on net worth of commercial banks. They also mentioned that there was a growing awareness to bring down the NPAs as they had an adverse impact on their profitability due to recognition of interest as well as requirement of heavy loan loss provision on such assets.\textsuperscript{38}

\textsuperscript{35}Debasish, Sathya Swaroop; and Mishra, Bishnupriya (2005), \textit{Indian Banking System (Development Performance & Services)}, Mahamaya Publishing House, New Delhi, pp.12-65.


Kapoor (2004) in her book titled "Commercial Banking" analysed the performance of domestic banks and foreign banks in India from 1981-1982 to 1999-2000, and revealed that financial deregulation in the economy has affected the absolute and relative performance of these banks. She took comprehensive study of pre-reform and post-reform period by taking thirty one indicators of these banks in India.39

Choudhari and Tripathy (2004) in their article "Measuring Bank Performance: An Application of DEA" evaluated the relative performance of public sector banks in India through five indicators - Profitability, Financial Management, Growth, Productivity and Liquidity with the help of the DEA. In all, thirty input and output variables were used. The CCR output-oriented model was utilized to evaluate the data.40

Gasbarro, et al., (2004) examined the changing financial soundness of Indonesian banks during the South-east Asian financial crisis. The study revealed that during the stable economic periods, four of the five traditional CAMEL components provided insights into the financial soundness of the Indonesian banks. However, during the crisis period, the relationships between financial characteristics and the CAMEL ratings deteriorated and only one of the traditional the CAMEL components - earnings - objectively discriminated among the ratings.41

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Ram Mohan and Ray (2004) in their study observed that the PSBs perform significantly better than the private banks but not differently from the foreign banks. Further, the superior performance of the PSBs is due to their higher technical efficiency.\(^{42}\)

Shanmugam and Das (2004) observed in their study a progress in terms of efficiency of raising non-interest income investments, and credits in Indian banking industry during the deregulation period.\(^{43}\)

Ataullah et al. (2004) observed in their work that overall technical efficiency of the banking industry of India and Pakistan has improved following the financial liberalization.\(^{44}\)

Reddy (2004) found an upturn in the overall technical efficiency of Indian banks during the deregulatory period. He concluded that the efficiency of Indian banks in general and of the bigger banks in particular has improved during the post-reforms period.\(^{45}\)

Prasuna (2004) analyzed the performance of Indian banks by adopting the CAMEL Model. The performance of 65 banks was studied for the period 2003-04. The


author concluded that the coming fiscal will prove to be a transition phase for Indian banks, as they will have to align their strategic focus to increasing interest rates.  

Veni (2004) studied the capital adequacy requirement of banks and the measures adopted by them to strengthen their capital ratios. The author highlighted that the rating agencies give prominence to Capital Adequacy Ratios of banks while rating the bank’s certificate of deposits, fixed deposits and bonds. They normally adopt the CAMEL Model for rating banks. Thus Capital Adequacy is considered as key element of bank rating.

Vinod Sharma (2004) revealed that the decline in Gross NPA is public sector banks can be attributed to improved risk management techniques and greater recovery efforts of the PSBs. Most of the PSBs are left for behind their new generation counter parts in setting up modern delivery channels. Private Sector and Foreign Banks have adopted and are using sophisticated channels to deliver their products. Technology will help to reduce the transaction cost and provide new channels of delivery.

Bousaid and Saucier (2003) used the CAMEL rating on Japanese banks for the period 1993-1999 and found that the CAMEL framework had the capacity to predict and explain the distress. The study revealed that the major problem of failed banks was not of

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the inefficiency of management, but the below-standard capital adequacy and considerable problems in their assets quality.\textsuperscript{49}

Ruchi Trehan and Niti Soni (2003) used the data envelopment analysis technique to generate the technical efficiency scores of Individual Public Sector Banks. The banks affiliated to State Bank of India group were more efficient than Nationalized Banks. The relationship between profitability and efficiency revealed that profitability significantly influenced the operating efficiency in the Indian Public Sector Banking Industry.\textsuperscript{50}

Sathye (2003) found that the efficiency of private banks is paradoxically lower than that of the PSBs and the foreign banks.\textsuperscript{51}

Mukherjee et al. (2002) noticed that the PSBs are more efficient than both private and foreign banks. Also, the performance of the PSBs improved during the period 1996-1999.\textsuperscript{52}

Reddy (2002) observed that the magnitude of the problem of the NPA was severe, affecting the depositors, borrowers, shareholders, the economy and the public particularly


\textsuperscript{50}Ruchi Trehan and Niti Soni, (2003), “Efficiency and Profitability in Indian Public Sector Banks”, \textit{The ICFAI Journal of Bank Management}, 2(4), November, pp.73-81.


tax payers. Accumulated NPAs, fluctuations and narrow activity in the market were some of the major issues which derailed the major economic activities.53

Souza (2002) in his article "How Well Have Public Sector Banks Done? A Note" evaluated the performance of public sector, private sector and foreign banks during the period from 1991 to 2000. The efficiency of the banking system was measured in terms of spread/working funds ratio and turnover/employees ratio. The analysis revealed that the profitability of the public sector banks in late nineties improved relatively to that of private and foreign banks.54

Das (2002) in his paper, "An Objective Method for Ranking Nationalized Banks" developed a model to rank the NBs during 1999-2001. The study covered 17 NBs in its review. He studied four aspects of bank's performance, i.e., (a) Business performance, (b) Efficiency, (c) Safety and Soundness, and (d) Labour Productivity. In all 40 indicators were used.55

Ganesan (2001) examined the determinants of profitability of public sector banks in India by an empirical estimation of profit function function model which showed that interest cost, interest income, deposit per branch, credit total assets proportion of priority sector advances and interest. Income loss were the significant determinants of profits and profitability of Indian Public Sector Banks.56


Ommen (2001) in his study on "Financial Sector, Alternative Economic Survey" reviewed the highlights of reforms under two broad heads, banking and financial markets. It was noted that despite the reduction in SLR in 1990s still a large percentage of deposits is deployed in government securities.57

The RBI (2000) in its "Report on Trends and Progress of Banking in India, 1999-2000" studied how deregulation has affected the banks' performance. The RBI's study covered all categories of banks. Capital adequacy and asset quality have both improved over the period from 1995-96 to 1999-2000.58

Hanson and Kathuria (1999) analyzed the capital adequacy status of the public sector banks. The authors commented that the capital adequacy ratio of the public sector banks has improved in the post-reform period.59

Hirtle and Lopez (1999) examined the utility of past CAMEL ratings in assessing the banks' current conditions. The study found that subject to condition on current public information, the private supervisory information contained in the past CAMEL ratings provided further insight into bank current conditions, as summarised by the current CAMEL ratings.60


Cole and Gunther (1998) found that new (less than 6-months old) CAMEL ratings more accurately predicted the bank financial distress than what the financial ratios can, but that financial ratios were better predictors than the older (more than 6-months old) CAMEL ratings.  

DeYoung, et al. (1998) examined whether private supervisory information would be useful in pricing the sub-ordinated debt of large bank-holding companies (BHCs). They used an econometric technique that estimated the private information component of the CAMEL ratings for the BHCs' lead banks and regressed it on to sub-ordinated bond prices. They concluded that this aspect of CAMEL ratings added significant explanatory power to the regression after controlling for publicly-available financial information.

Narasimham Committee (1998) made several important recommendations like introduction of internationally accepted prudential norms relating to income recognition, assets classification, provisioning and capital adequacy. Accordingly, a framework for the evaluation of the current strength of the system and of the operations and performance of banks has been provided by the Reserve Bank's measuring rod of "CAMEL"s".

Rao and Datta (1998) made an attempt to derive rating based on the CAMEL. In their study, based on these five groups (C-A-M-E-L), in all 21 parameters were developed. After deriving separate rating for each parameter a combined rating was

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derived for all nationalized banks (19) for the year 1998. The study found that the Corporation Bank has the best rating followed by the Oriental Bank of Commerce, the Bank of Baroda, the Dena Banks and the Punjab National Bank etc. And the worst rating was found to be of Indian Bank preceded by the UCO Bank, United Bank of India, Syndicate Banks and Vijaya Bank.64

Bhattacharyya et al. (1997) in their study found that the PSBs had the highest efficiency followed by foreign banks. The private banks were observed to be least efficient.65

Barr and Siems (1996) tried to predict bank failures in the US, using the data from December 1984 to June 1987 using the CAMEL Model. They used technical efficiency measure using the DEA in their prediction model. Along with their DEA results, which represent CAMEL rating, they used financial ratios representing soundness of Capital, Asset Quality, Earnings and Liquidity. They found that using the DEA Efficiency Score in the regression increased the accuracy of the classification results from 89% to 92.4% and the new model was superior to the earlier early-warning models.66

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Godse (1996) examined the application of new model CAMELS i.e. "Capital Adequacy, Assets Quality, Management, Earning Quality, Liquidity, Systems and Control" for evaluating the performance of banks.67

Padmanabhan Working Group (1995), on On-Site Supervision in its report recommended for supervisory interventions a rating methodology for banks on the lines of the CAMEL (Capital Adequacy, Assets Quality, Management, Earnings and Liquidity) model with appropriate modifications to suit Indian conditions. These ratings would enable the Reserve Bank to identify the banks whose condition warrants special supervisory attention. They recommended capital adequacy of CAMEL, as an important measure to judge the performance and soundness of banks.68

Swindle (1995) used the capital adequacy component of the CAMEL rating system to assess whether regulators in the 1980s influenced the inadequately capitalised banks to improve their capital. Using a measure of regulatory pressure that is based on publicly-available information, the study found that inadequately capitalized banks responded to the regulators' demands for greater capital adequacy.69

Keshari and Paul (1994) observed that foreign banks as a group have been found to be less efficient than domestic banks and the standard deviation of technical efficiency of foreign banks was slightly higher than that of domestic banks. However, the efficiency differences were not significant. A few studies also appear in the literature which


conclude that the banks with public ownership are more efficient than their private counterparts.\textsuperscript{70}

Amandeep (1991) in her study on "Profits and Profitability of Indian Nationalized Banks" considered eleven factors, which reflected different dimensions of banks' operations and hence affected the banks' profitability. According to her, the profitability of banks was determined and affected mainly by two factors, viz. spread and burden.\textsuperscript{71}

The literature discussed above is completely related with various studies in the field of banks in India and abroad. But none of the study is connected with comparative analysis of the various nationalised banks in India. Though there are many banks providing services to the development of country, the roles played by the nationalised banks are very important especially in the rural areas. Therefore it is highly necessary to study the various aspects of the financial background of the nationalised banks in India and hence this study.

\textbf{2.3 Summary}

In this chapter, the researcher has presented various literature connected with banking in general and financial management in particular. It also covers studies related to both Indian and foreign banks.

\textbf{CHAPTER III
 PROFILE OF THE NATIONALIZED BANKS IN INDIA}


\textsuperscript{71}Amandeep (1991), "\textit{Profits and Profitability of Indian Nationalized Banks}", Thesis submitted to UBS, Punjab University, Chandigarh, pp. 43-53.