CHAPTER 3
# CHAPTER 3

## SURVEY OF LITERATURE

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3.1 INTRODUCTION

Some of the studies conducted in context with the financial efficiency or profitability or productivity of Banks are being reviewed as below. Various articles have been reviewed in this chapter so as to analyze the research made in this field and their outcomes obtained. Here a study of different articles, research papers and even Ph.D. is made and their brief summary is provided which gives the wide knowledge of researches conducted as regards financial performance of banking sector.

3.2 LITERATURE REVIEW ABSTRACTS

- **Subramanian and Swami (1994)** in their paper, Comparative performance of public sector banks in India” Prjanan, Vol. XXII, have analysed 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 the 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 much variation in efficiency. Frequent changes are order of the day for the topics of this nature. Therefore, one should rely on latest information. Some organizations like, RBI, IBA, SBI and ICRA have carried out several research studies on various issues relating to banking and exclusive banking journal /periodicals like Bank Quest, The Bankers, RBI occasional papers, RBI bulletins and general magazines like Business Today, Business India, Finance India, have been publishing papers on various
aspects like NPAs, capital adequacy, branch expansion, credit dispensation, deposit mobilization, service quality, technology, performance evaluation, etc.


- **SBI Research Department in 2000,** through its paper “Performance analysis of 27 Public sector banks” published in SBI monthly review performance, Vol XXXIX, was prepared by 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. In all, 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), and the NBs (19). During 1999-2000, the PSBs exhibited better show in terms of several parameters studied above. Although, the problems of NPAs and capital adequacy remains to be studied. Researchers in this paper concluded 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 amended from time to time.

- **Prashanta Athma (2000)**, in his Ph D research submitted at Usmania University Hyderabad, “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 reference to State Bank of Hyderabad. The period of the study for evaluation of performance is from 1980-81 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 calculated 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. Also, majority of the customers have given a very positive opinion about the various statements relating to counter service offered by SBH.

- **Reddy and Yuvaraja (2001)** in their research article had suggested that the adoption of international capital adequacy standards, deregulation of interest rates and entry of private and foreign banks underlined that the speed and sequencing of the financial sector reforms should be as per the requirements of the Indian economy.
Rao (2002) concluded that the international regulations are forcing the Indian banks to adopt better operational strategies and upgrade the skills. The system requires new technologies, well-guarded risk and credit appraisal system, treasury management, product diversification, internal control, external regulation as well as skilled human resources to achieve the international excellence and to face the global challenges.

Singh R (2003), in his paper Profitability management in banks under deregulate environment, IBA bulletin, No25, has analyzed profitability management of banks under the deregulated environment with some financial parameters of the major four bank groups i.e. public sector banks, old private sector banks, new private sector banks and foreign banks, profitability has declined in the deregulated environment. He emphasized to make the banking sector competitive in the deregulated environment. They should give importance to non-interest income sources.

Petya Koeva (July 2003), in his study on The Performance of Indian Banks during Financial Liberalization had studied new empirical evidence on the impact of financial liberalization on the performance of Indian commercial banks. The analysis focuses on examining the behavior and determinants of bank intermediation costs and profitability during the liberalization period. The empirical results suggest that ownership type has a significant effect on performance indicators and had observed that the increase in competition during financial liberalization has been associated with lower intermediation costs and profitability of the Indian banks.

Muniappan (2003) focused on two areas - firstly, challenges faced by the Indian banks and secondly, the management of these challenges. Every aspect of the banking industry, whether it is profitability, NPA management, customer service. Risk management, HRD etc., has to undergo the process of transformation of aligning with the international best practices. He concluded that the future of Indian banking system needs a long-term strategy, which should cover various areas like structural aspects, business strategies, prudential control systems, integration of markets, technology issues, credit delivery mechanism and information sharing.

Ram Mohan TT(2003) , in his paper ‘Long run performance of public and private sector bank stocks” Vol 37, has made an attempt to compare the three
categories of banks—Public, Private and Foreign banks using Physical quantities of inputs and outputs, and comparing the revenue maximization efficiency of banks during 1991-92 to 1999-2000. 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.

- **In a paper published in the Financial Express in 2004**, titled “India’s Best Banks” has been doing for several years through its annual exercise to evaluate and rate Indian banks. They claim that this survey is a comprehensive one, which evaluates the performance of private, public, Indian, and foreign Banks operating in India. With the objective of making the comparison more meaningful, banks were categorized into Public Sector Banks, New Private Sector Banks and Foreign Banks. Financial information for the year ending March 31st, 2002 and March 31, 2003 relating to each of the banks falling into the aforesaid categories was collected from the data available from RBI. Five major criteria were identified against which the banks were ranked. These criteria are (i) Strength and soundness (ii) Growth, (iii) Profitability, (iv) Efficiency/Productivity, and (v) Credit quality. Considering the current banking, industrial and over-all economic scenario, pertinent weights were assigned to each of the major criteria. In the first category of "State-Run" or Public Sector Banks, State Bank of Patiala and Andhra Bank is the top two. In the category of best old private sector banks, the magazine ranks the Jammu and Kashmir Bank and Karur Vysya Bank as the first best and second best. In the category of 'New' Private Banks, HDFC as number one and ICICI Bank at number two. Finally, in the category of Foreign Banks, the magazine ranks Standard Chartered Bank and Citi Bank at the top two slots.

- With an intention to honor excellence, **Outlook Money (2004)**, titled “The best in the business cover story”, (March 2004), has announcing annual awards for the best performers in the personal finance universe. In the best bank award category, the magazine selected Corporation Bank among public sector banks and HDFC Bank among private sector banks and presented outlook money award 2004 to these two banks. A rigorous selection process was devised in consultation with Earnest and Young. The short listed contenders were mailed questionnaires...
seeking information on operational aspects like Number of Branches, Number of ATMs, Deposits, NPAs, CAR, Return on Assets. They have taken two categories of Banks Public and Private Sector. All Public Sector Banks (except SB!, nominated for Hall of Fame Award), and Private Banks with deposit base of more than Rs.2,000 Cr as on 31 March 2003 were selected. The jury - A.K. Purwar, Anu Aga, Shitin Desai, Uma Shashikanth and Sandipan Debo-assigned weights to various parameters and choose the winner for 2004.

- **Ghosh and Das (2005)** highlighted the ways how market forces may motivate banks to select high capital adequacy ratios as a means of lowering their borrowing costs. If the effect of competition among banks is strong, then it may overcome the tendency for bank capitalization. If systemic effects are strong, regulation is required. Empirical tests for the Indian public sector banks during the 1990s demonstrated that better capitalized banks experienced lower borrowing costs.

- **Baral (2005)** study the performance of joint ventures banks in Nepal by applying the CAMEL Model. His study was based on secondary data drawn from the annual reports published by joint venture banks. His report analyzed the financial health of joint ventures banks in the CAMEL parameters. His findings of the study revealed that the financial health of joint ventures is more effective than that of commercial banks. Also, the components of CAMEL model showed that the financial health of joint venture banks was not difficult to manage the possible impact to their balance sheet on a large scale basis without any constraints inflicted to the financial health.

- **Bodla & Verma (2006)** examined the performance of SBI and ICICI through the CAMEL model. Data set for the period of 2000-01 to 2004-05 were studied for the purpose of the study. With the reference to the Capital Adequacy, it concluded that SBI has an advantage over ICICI. Regarding to assets quality, earning quality and management quality, it can be said that ICICI has an edge upon SBI. Therefore the liquidity position of both banks was sound and did not differ much.

- **Mohan (2006)** focused on the changes in efficiency and productivity in Indian banking and stated that the patterns of efficiency and technological change witnessed in Indian banking can be viewed as consistent with expectations in an industry undergoing rapid change in response to the forces of deregulation. In reaction to the evolving market prospects a few
pioneering banks might adjust quickly to seize the emerging opportunities, while others may respond slowly and cautiously.

- **Vradi, Vijay, Mauluri, Nagarjuna (2006)**, in his study on’ Measurement of efficiency of bank in India concluded that in modern world performance of banking is more important to stable the economy. In order to see the efficiency of Indian banks we have seen four indicators i.e. profitability, productivity, assets quality and financial management for all banks includes public sector, private sector banks in India for the period 1999-2000 to 2002-2003. For measuring efficiency of banks yhey have adopted development envelopment analysis and found that public sectors banks are more efficient then other banks in India

- **Brijesh K. Saho, Anandeep Singh (2007)**, in this paper attempts to examine, the performance trends of the Indian commercial banks for the period: 1997-98 to 2004-05. Our broad empirical findings are indicative in many ways. First, the increasing average annual trends in technical efficiency for all ownership groups indicate an affirmative gesture about the effect of the reform process on the performance of the Indian banking sector. Secondly, the higher cost efficiency accrual of private banks over nationalized banks indicate that nationalized banks, though old, do not reflect their learning experience in their cost minimizing behavior due to X-inefficiency factors arising from government ownership. This finding also highlights the possible stronger disciplinary role played by the capital market indicating a strong link between market for corporate control and efficiency of private enterprise assumed by property right hypothesis. Finally, concerning the scale elasticity behavior, the technology and market-based results differ significantly supporting the empirical distinction between returns to scale and economies of scale, often used interchangeably in the literature.

- **Sharma and Nikadio (2007)** presented an analytical review of the capital adequacy regime of the banking sector in India and concluded that in the regime of Basel I, Indian banking system performed reasonably well, with an average CAR of about 12 per cent, which was higher than the internationally accepted level of 8 per cent as well as India's own minimum regulatory requirement of 9 per cent. Thus concluding that capital adequacy of Indian banks is reasonably satisfactory.
• **Pal and Malik (2007)** investigated the differences in the financial characteristics of 74 (public, private and foreign) banks in India based on factors, such as profitability, liquidity, risk and efficiency. It is suggested that foreign banks were better performers, as compared to other two categories of banks, in general and in terms of utilization of resources in particular.

• **Campbell (2007)** focused on the relationship between nonperforming loans (NPLs) and bank failure and argued for an effective bank insolvency law for the prevention and control of NPLs for developing and transitional economies as these have been suffering severe problems due to NPLs.

• **Singla (2008)** emphasized on financial management and examined the financial position of sixteen banks by considering profitability, capital adequacy, debt-equity and NPA. In his study he concluded that there has been a significant difference in the level of profitability among private and public sector banks. The level of NPAs in public sector banks was higher than private sector banks.

• **Dutta and Basak (2008)** suggested that Cooperative banks should improve their recovery performance, adopt new system of computerized monitoring of loans, implement proper prudential norms and organize regular workshops to sustain in the competitive banking environment.

• **Gupta and Kaur (2008)** conducted a research with the sole aim of examining the performance of Indian private Sector banks by using CAMEL model and by assigning rating to the top five and bottom five banks. They rated 20 old and 10 new private sector banks based on CAMEL framework. The study covered financial data for the period of 5 years i.e. from 2003-07. The research as determined by CAMEL Model revealed that HDFC was at its higher position of all private sectors banks in India succeeded by the Karur Vyasa and the Tamilnad Mercantile Bank. However the Global Trust Bank and the Nedungradi Banks was considered as bad management the findings summarized that new private sector of banks have attained the higher position due to core banking, aggressive marketing strategies and high level of technology. To attain perfection banks should always concentrate on new financial assets, excellent service and customer loyalty.

• **Wirnkar and Tanko (2008)** analyzed the adequacy of CAMEL in evaluating the performance of bank. This empirical research was implemented to find out the ampleness of CAMEL in examining the overall performance of bank, to find out the
importance of each component in CAMEL and finally to look out for best ratios that bank regulators can adopt in assessing the efficiency of banks. The analysis was performed on the basis of a sample of eleven commercial banks operating in Nigeria. The study covered data from annual reports over a period of nine years (1997-2005). The analysis disclosed the inability of each component in CAMEL to congregate the full performance of a bank. Moreover the best ratios in each CAMEL parameter were determined.

- **Cinko & Avci (2008)** noticed that globally all the banking supervisory authorities are using CAMEL rating system for many years. In this synthesis financial ratios were applied to calculate components of CAMEL ratings for the period of 1996-2000. The financial ratios were also employed to anticipate the delegation of commercial banks in 2001 to the SDIF by adopting discriminate analysis, logistic regression and neural network models. However the conclusion revealed that it was quite not possible to predict the transfer of a bank to SDIF using CAMEL ratios.

- **Singla HK (2008),** in his paper,’ financial performance of banks in India,’ in ICFAI Journal of Bank Management No 7, has examined as to 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 a better position to deal with and absorb the economic constant over a period of time.

- The focal point of the study made by **Das and Udaykumar Lal (2002),** in his book Banking Reforms in Lead Bank Scheme, (Deep and Deep Publication, new Delhi) was the critical evaluation of the lead bank scheme in the light of banking sector reforms. Das observed that high level of NPAs, large number of un-remunerative branches, low productivity, overstaff and archaic methods of operations have affected the profitability of public sector banks. Das is of the opinion that the whole banking sector in India is to be revolutionized to cope with the changing dimensions of the satellite one world. Further, he felt that the backward areas should be given more funds for investment in priority sectors and more people should be brought under its coverage and the procedures of extending credit should be simplified and there should be least hassle cost.
• **Roma Mitra, Shankar Ravi (2008),** A stable and efficient banking sector is an essential precondition to increase the economic level of a country. This research paper tries to model and evaluate the efficiency of 50 Indian banks. The inefficiency can be analyzed and quantified for every evaluated unit. The aim of this paper is to estimate and compare efficiency of the banking sector in India. The analysis is supposed to verify or reject the hypothesis whether the banking sector fulfils its intermediation function sufficiently to compete with the global players. The results are insightful to the financial policy planner as it identifies priority areas for different banks, which can improve the performance. This paper evaluates the performance of Banking Sectors in India.

• **B.Satish Kumar (2008),** in his article on an evaluation of the financial performance of Indian private sector banks wrote that private sector banks play an important role in development of Indian economy. After liberalization the banking industry underwent major changes. The economic reforms totally have changed the banking sector. RBI permitted new banks to be established in the private sector as per the recommendation of Narashimaha committee. The Indian banking industry was dominated by public sector banks. But now the situations have changed new generation banks with used of technology and professional management has gained a reasonable position in the banking industry.

• **Hays, Lurgio & Arthur (2009) have made use of CAMEL model to examine the performance of low efficiency vs. high efficiency community banks in conjunction with the logistical regression analysis.** The analysis used data which are based on quarterly reports by commercial banks. The discriminate model derived from the CAMEL parameters is tested among data for 2006, 2007, 2008. The results concluded that the model accuracy floats from approximately 88% to 96% for both original and cross-validations data sets.

• **Fred, Stephen and Arthur (2009) used a multivariate discriminate model to differentiate between low efficiency and high efficiency community banks (less than $1 billion in total assets) based upon the efficiency ratio, a commonly used financial performance measure that relates non-interest expenses to total operating income. The discriminate model was applied using data for 2006-2008 and also included the periods of high performance as well as the deteriorating industry conditions associated with the current financial**
crisis. The model's classification accuracy ranges approximately from 88-96 per cent for both original and cross-validation data sets.

- **Dash & Das (2009)** have analyzed the Indian Banking Industry under CAMELS framework. The thesis compares the performance of public sector banks with that of private/foreign banks. The analysis was performed from a sample of 58 banks operating in India of which 29 were public sector banks and 29 were private/foreign sector. The data used were from the audited financial statement for the financial years 2003-2008. The findings concluded that private/foreign banks have an edge over the public sector banks. Two factors of the CAMEL parameters that contribute to the best performance of the private banking/foreign were the Management Soundness and Earnings and profitability.

- **John O.S Wilson, Barbara Casu, Claudia Girardone & Philip Molyneux (2009)** In their research paper “Emerging Themes in Banking: Recent Literature and Directions for Future Research”. This paper presents a review of the recent literature in banking around the core themes of performance, risk and governance of financial institutions. We write this review against the backdrop of the recent financial crisis and the major changes it caused to banking sectors in many countries. There are several themes emerging from this review, but the overarching issue relates to the need to better understand bank risk taking incentives and the implications for systemic stability. There is a need for more work on the role of safety net subsidies and how these are linked to systemic risk; financial innovation and the adoption of new products and processes and the linkage to risk-taking, market returns. There is even a need to better understand the relationship between competition and risk, and understand the interconnections between capital, profitability, liquidity and risk.

- **Agarwal & Sihna (2010)** have analyzed the financial performance and thereby the sustainability of micro finances institutions (MFIs) in India by employing the CAMEL model. The paper has used CAMEL model to bring out the loopholes of micro finance institutions and has also suggested various measures from improvement as regards profitability, capital adequacy and management efficiency.

- **Chander and Chandel (2010)** analyzed the financial efficiency and viability of HARCO Bank and found the poor performance of the bank on capital adequacy, liquidity, earning quality and the management efficiency parameters. Centric to the ratio analysis, these studies have customized and blended financial
ratios in a model form to examine and predict the financial health. Similarly, comparative performance, recovery performance, cost reduction, productivity and efficiency are vital areas which have been considered by various analysts. With inquisitiveness the present study has been undertaken with specific objectives as envisaged in the next section.

- **Kaur (2010)** have made an analysis of commercial banks operating in India with reference to CAMEL approach. In his article he has categorized the banks into Public sector Bank, Private sector Banks and Foreign Banks. He used the CAMEL analysis technique with the purpose of ranking the banks. Each component of CAMEL has been interpreted using two ratios and a final composite index has been established. The data tools which were used was a sample of 28 public sector, 26 private sector and 28 Foreign banks and the data used was in secondary nature which was collected from statistical tables related to the Banks in India in the financial year 200-01 to 2006-07. The experiment revealed that the best bank from the public sector has been awarded to Andhra Bank and State Bank of Patiala. In the category of private sector banks, Jammu and Kashmir Bank has been assigned the first rank succeeded by HDFC Bank. Among the foreign sector banks, Antwerp has bagged the first rank followed by JP Morgan Chase Bank.

- **Sangmi & Nazir (2010)** has evaluated the financial performance of two top major banks in the northern India representing the biggest nationalized bank (i.e. Punjab national Bank, PNB) and the biggest private sector bank (i.e. Jamuna and Kashmir Bank, JKB). These two banks were selected in view their role and involvement in shaping the economic conditions of the northern India, specifically in terms of advances, deposits, man power employment, branch network etc. The research was mainly conducted on secondary data from annual reports of the respective banks. And the data used is related to five financial years (i.e. 2000-01 to 2004-2005). The results concluded that the position of the banks under study is sound and satisfactory as far as their capital adequacy, asset quality management and liquidity is concerned.

- **Dwivedi and Charyulu (2011)** analyzed the impact of various market and regulatory initiatives on efficiency improvements of Indian banks with the help of Data Envelopment Analysis (DEA) and found that national banks, new private banks and foreign banks have showed high efficiency over a period of time than the remaining banks.
• **Uppal (2011)** analyzed the performance of major banks in terms of productivity and profitability in the pre and post e-banking period. He concluded that performance of all the banks under study is much better in post e-banking period and further foreign banks are at the top position, while the performance of the public sector banks is comparatively very poor.

• **Ghosb and Gbosh (2011)** emphasized on management of non-performing assets in the perspective of the public sector banks in India under strict asset classification norms. Use of latest technological platform, recovery procedures and other bank specific indicators in the context of stringent regulatory framework of the Reserve Bank of India and concluded that the reduction of non-performing asset is necessary for improving the profitability of banks and to comply with the capital adequacy norms as per the Basel Accord(s).

• **Thiagarajan, Ayyappan and Ramachandran (2011)** An Empirical Analysis and Comparative Study of Credit Risk Ratios between Public and Private Sector Commercial Banks in India. analysed the role of market discipline on the behaviour of commercial banks with respect to their capital adequacy and concluded that the commercial banks are well capitalized and the ratio is well over the regulatory minimum requirement. The private sector banks show a higher percentage of tier-I capital over the public sector banks. However the public sector banks show a higher level of tier-II capital. The study also indicated that market forces influenced the banks’ behavior to keep their capital adequacy well above the regulatory norms. The NPAs influenced the cost of deposits for both public and private sector banks in a significant manner. The return on equity had a significant positive influence on the cost of deposits for private sector banks. The public sector banks can reduce the cost of deposits by increasing their Tier-I capital. Induced by the forgoing revelations, an attempt is made to analyze the performance of selected public and private banks in India on the basis of parameters recommended in CAMEL Model, i.e. C-capital adequacy, A- asset quality, M-management efficiency, E-earnings quality and L-liquidity. Which is divided into four sections. First section includes a brief review of some of the earlier studies. Second section covers the scope, objectives, hypotheses and research methodology of the study. third, fourth, fifth, sixth and seventh section, an attempt is made to analyze the capital adequacy, asset
quality, management efficiency, earnings quality and liquidity of six banks in all selecting 3 banks from each category i.e. State Bank of India (SBI), Punjab National Bank (PNB) and Bank of Baroda (BOB) from public sector and ICICI, HDFC and AXIS from private sector banks in India.

- **RIMPI KAUR (December 2012)** in her research titled on “An Impact of IT on Branch Productivity of Indian Banking in the Era of Transformation”. It can research on banking all over the world witnessed changes during last decade, which perhaps it did not see during its entire history. The changes are not only confined to developed countries, banking in developing countries like ours has also witnessed drastic changes. It is due to liberalization of economies and related policies, globalization of world markets especially because of increasing interdependence of different developed and developing countries. In this context of changing environment, the new financial services have been provided with the support of Information Technology such as transfer of funds across and beyond the national boundaries. Financial institutions, including banks, all over the world are, therefore, crucially dependent on information technology and consequently, it has become imperative to evaluate the performance of banking industry. The present paper analyzes the impact of IT on branch productivity and concludes that IT along with other factors, improving the productivity at an excellent rate and fully IT-oriented banks are the most beneficiaries whereas partially IT-oriented banks though proved increase in productivity in the post-e banking period but still not harmonized with fully IT-oriented banks. The paper also suggests some measures to improve the branch performance along with better utilization of IT.