CHAPTER 1
INTRODUCTORY BACKGROUND AND OBJECTIVES OF THE STUDY

1.0 Introduction

Efficient financial Institutions play a major role in pooling up community savings and converting them into investments through proper channelization of funds to different sectors of economy. Of all the financial institutions, banks play a pivotal role. Banks influence the level and growth of the economy through the identification and funding of productive investment. Banks also promote efficient allocation of capital and faster growth. They can also monitor the efficiency and productivity of projects much more efficiently. Further, banks gather information and process it which helps to distinguish between a good and a bad borrower. Therefore in recent years the progress of banks is attributed more to their information gathering capacity than to their ability to mobilize savings and channeling them into investments.

There are two major functions of banks namely, (a) Financial intermediation and (b) money creations. Variations in bank credit are an important channel of monetary policy transmission even for central banks that rely on interest rates to convey their policy stance. Modulations in policy interest rates by the central banks influence credit market conditions which reinforce the effect of the traditional interest rate channel of monetary transmission. Banks are also special as their operations have systemic implications. Banks accept and deploy large amounts of un-collateralized public funds in fiduciary capacity. They also leverage such funds through credit creation. In developing economies due to lack of substitutes to extend finance bank credit becomes extremely important not only to the industry but also to agriculture and related activities. In addition to this there
are large numbers of small and medium enterprises in both industrial and service sectors which require credit. Thus banks have to play a major role in the development process of emerging market economies.

1.1 Banking System in India since Independence:

Banking in India has a long history and evolved over the years passing through various phases. At the time of independence the entire banking system was in the hands of private sector and the credit requirements of agriculture and other needy sectors were ignored. To align the banking system to the needs of planning and economic policy, fourteen (14) banks were nationalized in 1969 which was a major turning point. With the nationalization of banks (14 in 1969 and again 6 in 1980), the major segment of the banking sector came under the control of the government. Massive expansion of branch network that followed the nationalization of banks resulted in large mobilization of deposits by banks which helped in stepping up the overall savings rate of the economy. With nationalization the country was able to build up a financial infrastructure geographically wide and financially diverse.

Branch expansion gained momentum after the nationalization of major commercial banks and the introduction of the Lead Bank scheme. Over a period of 33 years after bank nationalization, there was about 800 per cent increase in the number of branches but the most spectacular progress was in rural branches--- increase was from about 1860 to nearly 30600 bank offices. Bank nationalization gave a great fillip to deposit mobilization, due partly to the expansion of a network of bank branches and partly to the incentives given to savers. Banks also meet the credit requirements of industry, trade and agriculture on a much larger scale than before. Just as bank deposits have expanded,
bank credit too has expanded tremendously particularly since July 1969 from about Rs.1,16,300 crores in 1990-91 to Rs.27,70,012 crores during 2008-09.

Soon after nationalization, commercial banks were asked to be especially concerned with the financing of priority sector -- agriculture, small and medium enterprises. In course of time, other priority sectors were also added, such as retail trade, professional and self employed persons, education, housing loans for weaker sections and consumption loans. However, during this period, a major portion of banks resources were preempted at below market rates by way of directed credit and directed investments. Profitability of banking sector was therefore affected. Banks were also saddled with large non-performing assets. Their capital base also became weak. The deposits and lending rate structures became very complex. Various controls combined with absence of adequate competition resulted in decline in the productivity and efficiency of banks.

1.1.1 Narasimham Committee (1991) on the Banking System in India:

At the time of announcement of the new economic policy, several public sector banks and financial institutions had become weak and some public sector banks had been incurring losses year after year. Their customer service was poor, their work technology outmoded and they were unable to meet the challenges of a competitive environment. It was under these circumstances that the government of India set up a high level committee with Mr. M.Narasimham, a former Governor of Reserve Bank of India as Chairman to examine all aspects relating to the structure, organization, functions and procedures of the financial system. This committee on the financial system submitted its report in November 1991. The Narasimham Committee recommendations were aimed at ensuring a degree of operational flexibility, internal autonomy for the public sector banks in their decision making process, and achieving greater measure of professionalism in banking operations.
1.1.1.1 Banking Sector Reforms:

With a view to overcome several weaknesses that had crept into the system over the years and with a view to create a strong competitive and vibrant banking system, several measures were initiated beginning early 1990s. The reform period can be divided into two phases namely, the first phase from 1991-98, and the second phase from 1998 onwards.

1.1.1.1.1 First Phase of Reforms

A) Financial Health and Soundness.

With a view to improve the health of the banking sector, internationally accepted prudential norms relating to income recognition, asset classification and provisioning and capital adequacy were introduced in April 1992 in a phased manner. To strengthen the capital base of the banks, capital to risk weighted assets ratio was introduced. Indian banks were required to achieve a capital adequacy ratio of 8 percent as early as possible and in any case by March 31, 1994. To ensure financial soundness of banks the government of India embarked on a recapitalization programme of nationalized banks beginning from the financial year 1993-94. The total capital contribution by the govt. to nationalized banks upto March 1998 aggregated to Rs.20,046 crores. Besides, the govt. provided a sum of Rs.1,532 crores during the year ending March 1997 to write off the losses of two banks against their capital to cleanse their balance sheets so that they could make early public issues. Since capital infusion by the govt. was inadequate, to enable banks to fulfill further provisioning norms and to take care of additional capital needs as capital adequacy guidelines were fully implemented, the govt. decided to allow public sector banks to approach the capital market directly to mobilize equity funds from the
public by amending the relevant acts. To control the mounting NPAs, debt recovery tribunals were established for expeditious adjudication and recovery of debts.

B) Removal of External Constraints on Banks, Rationalisation of Interest Structure and Creation of Competitive Environment.

A phased reduction in CRR and SLR was undertaken; SLR was progressively brought down from the peak rate of 38.5% in 1992 to 25% in 1997. CRR was also brought down in phases from 15% to 9.5% in 1997. Banks were given the freedom to fix their deposit and lending rates. Interest rate structures was first rationalized and then deregulated. Banks were allowed to determine their own deposit rates depending on commercial judgments subject to the approval of their boards. One of the major objectives of reforms was to bring in greater efficiency by permitting entry of new private sector banks and foreign banks.

C) Strengthening of Institutions.

To ensure effective implementation of prudential regulations, due to the blurring of the traditional distinctions among the financial intermediaries and increased risks faced by banks in a liberalized environment, there was a need for a strong system of supervision. Subsequently a board for financial supervision (BFS) was set up within the Reserve Bank to look after exclusively the supervisory functions. This board was set up to have an effective oversight on banks, financial institutions, and non banking financial companies. Subsequently, its scope was enlarged to include UCBs, RRBs, and primary dealers.

D) Improving the Rural Credit Delivery.

The activities eligible for priority sector lending were enlarged, interest rates deregulated and alternative avenues of investment were permitted, thereby making the priority sector
lending more flexible than before. The rural infrastructure development fund was set up to provide loans to the state governments for financing rural infrastructure projects.

1.1.1.2 Second Phase of Reforms: 1998 Onwards.

Strengthening of Prudential Norms, and NPA Management and Competition Intensified

Steps were taken to strengthen prudential norms to meet international best practices. In October 1998, the stipulated minimum capital to risk-weighted assets ratio (CRAR) of scheduled commercial banks was raised by one percentage point to nine (9) percent from the year ended March 31, 2000. Income recognition, asset classification and provisioning norms were also tightened. The union budget 2000-01 announced the establishment of a credit information bureau (India) Ltd (CIBL) with a view to strengthening the legal mechanism and facilitating credit information bureau to collect, process and share credit information on borrowers. Competition began to intensify in the early 2000s which was reflected in the increased mergers and acquisitions activity. In this phase two large development finance institutions (DFIs) merged/converted into banks. The number of banks gradually declined beginning from 100 at the end of March 2000 to 82 by the end of March 2007 reflecting the increased competitive pressures.

Diversification and Emergence of Universal Banks / Financial Conglomerates

Increased competition within the banking sector and also from non-banking financial institutions and the capital market, made banks to seek new sources of income by offering a variety of services either within the organization or by setting up subsidiaries. Although banks had started diversifying in the mid 1980s after the necessary enabling provisions were incorporated in the banking regulation act, 1949, diversification gained momentum.
in the late 1990s. Apart from offering merchant banking activities and services connected with the activity of primary issue, banks started rendering project appraisal, capital structure, fund raising and loan syndication services under one roof. Banks also started rendering advisory services to corporates on mergers and acquisitions, and custodial and depository services for both domestic and foreign customers. Banks were also allowed to undertake insurance business.

**Credit Delivery - SMEs**

Several measures like identification of new clusters and adopting cluster based approach for financing the small and medium enterprises (SMEs) sector, sponsoring specific projects as well as widely publicizing the successful working models of NGOs, sanctioning higher working capital limit to SSIs in the north eastern region for maintaining higher levels of inventory, and exploring new instruments for promoting rural industry, were undertaken to improve the credit delivery to the SME sector.

**Improving Credit Delivery-Rural Sector**

The measures suggested include, debt restructuring and provision of fresh loans to farmers affected by natural calamities, one time settlement for small and marginal farmers, fresh finance for farmers whose earlier debts were settled through compromise or write-offs and relief measures for farmers indebted to non institutional lenders.

**Financial Inclusion**

There were concerns that banks had not been able to include vast segments of the population, especially the under-privileged sections of the society into the fold of basic banking services. The formal credit system was not able to adequately penetrate into the informal financial markets. The RBI, therefore advised the banks in November, 2005 to
make available a basic banking “no-frills” account either with “nil” or very low minimum balance as well as charges that would make such accounts accessible to vast sections of population. In 2007, 12.6 million ‘no-frills’ accounts were opened.

Customer Service and Financial Literacy

The RBI initiated various measures to improve the customer service from time to time. A major policy initiated in this regard was the setting up of banking ombudsman at various offices of the RBI. Recognizing the institutional gap in measuring the performance of the banks against the codes and standards based on established best practices, the RBI announced the setting up of the banking codes and standard board of India (BCSBI) in 2005-06. The RBI apart from safeguarding the interests of the bank depositors also wanted to ensure that the borrowing community too got fair deal from the bankers. Accordingly RBI formulated a fair practices code for lenders, to protect the rightful interests of the borrowers and guard against undue harassment by the lenders. The need was felt to provide a mechanism for improving the financial literacy and level of financial education among the consumers of banking services. Credit counseling, by providing sound advice to arrest the deterioration of incomes and to restructure their debt, could offer a meaningful solution for the borrowers and could enable them to gradually overcome their debt burden and improve their money management skills. Timely counseling could have a positive impact on the asset quality of banks.

Technology

The computerization of banks operations began in a big way in the early 1990s. The pace of internal computerization of branches of banks and their inter connectivity, providing for core banking systems was expedited. By end March 07 about 86% branches were fully computerized. The number of onsite and offsite ATMs increased. To reduce risk in
the electronic payment systems, national electronic fund transfer (NEFT) was introduced. Technology helped the banks to innovate in terms of developing new products and services such as phone banking and internet banking.

1.2. Issues in Banking Development in India.

The Indian banking is presently passing through a critical phase. In view of macro economic and financial sector developments, both domestic and global, the banking sector is facing new challenges. The major issues of banking sector are discussed as under.

1.2.1 Banking and Economic growth:

The Indian economy has moved on to a high growth trajectory with the average growth rate being around 8 per cent which was facilitated by a significant increase in the investment rate. The saving rate also improved to support the investment needs of high growth. In order to maintain the growth momentum there is a need to accelerate the saving rate. This would depend on efficient intermediation between savers and investors. Conversion of the unproductive physical savings into financial savings and mobilization of the untapped savings of rural and semi urban areas requires innovative and cost effective products assumes great importance. Keeping in mind the outreach of banks and also special features i.e. safety and liquidity, banks indeed are in a better position to perform this role compared to the other constituents of the financial system.

1.2.2 Role of Foreign Banks:

In recognition of the emergence of foreign banks as key vehicles in the international integration of the financial system, a liberalized policy towards foreign banks entry has become a high priority in policy maker’s agenda in various countries in recent years. To
improve competition and to facilitate better and cheaper financial intermediation, liberalization of financial services by allowing foreign financial institutions to participate in the domestic market becomes essential. Some of the benefits of entry of foreign banks include increasing efficiency through infusion of technology and skill management, introduction of superior risk management practices and stronger capital base.

Entry of foreign banks also brings to the fore several concerns. The increased foreign banks presence can expose a country to external shocks. Opening the domestic financial system to foreign financial services providers without any restrictions also raises the possibility of domestic financial institutions being taken over by foreign banks. In the Indian context various issues associated with increased presence of foreign banks such as impact on the domestic banks, supervisory and regulatory challenges in view of their sophisticated operations and their involvement in complex and sophisticated products, financial inclusions, credit to agriculture and SMEs, coordination between home and host countries regulators pose challenges.

1.2.3 Capital Account Convertibility

Liberalization of capital account transactions is expected to result in a larger two ways flows of capital in and out of the country. In a regime of fuller capital account convertibility, banks have to undertake transactions in multiple currencies when they receive deposits and raise borrowings from both residents and non-residents. Likewise non-resident banks and financial institutions and non-financial entities having links with the banking system would also conduct transactions in multiple currencies. In this scenario banks will be exposed to various risks such as currency risk, counter party credit risk, transfer risk and legal risk etc.. This will require efficient risk management capabilities in the banking system. In the context of liberalized environment, banks own
exposures to exchange rate risk, coupled with their exposures to corporates which are exposed to similar risks, across national jurisdictions add to the multiplicity of risks which brings to the fore the issue of close monitoring and prudential management.

1.2.4 Financial Conglomerates and the Regulatory Structure:

In recent years the distinction between the banks and non-banking financial intermediaries has become blurred. A number of financial conglomerates have emerged that undertakes various financial activities under the same corporate structure. These have challenged institution based regulation as it fails to take into account the gaps and overlaps in regulations. In India also some (several) financial conglomerates have emerged. Devising a mechanism for effective monitoring of these entities in collaboration with other regulators is a major challenge.

1.2.5 Complex Products

In the recent years financial products such as asset backed securities, derivatives, credit default swaps(CDSs) and collateralized debt obligations (CDOs) became highly popular with banks and financial institutions as they allowed them to hedge their risks and manage their regulatory and economic capital more efficiently. Although various structured products have enable the transfer of risks and enhanced the liquidity instruments, the recent financial crisis and consequently the global economic meltdown have brought to the fore the risks posed by these instruments. With the increased use of innovative credit instruments the risk taker or investor became progressively remote from the ultimate borrowers where the actual risks resided. The use of these complex financial instruments poses several regulatory and supervisory challenges.

1.2.6 Financial Inclusions
In India a significant segment of the population predominantly in rural areas, is excluded from the formal financial system. There are large number of people, potential entrepreneurs, small enterprises and others, who are excluded from the financial sector, which leads to their marginalization and denial of opportunity for them to grow and prosper. There is a need to mobilize the small savings of large number of households. There is significant degree of financial exclusion in urban areas also. The cost of financial exclusion is enormous for the society and individual. The inability to realize full potential due to financial constraints is a major impediment for economic growth. Therefore, financial inclusion of various sectors into the formal financial system by providing them access to financial services is by itself a challenge.

1.3 Problem Statement

A well functioning financial sector facilitates efficient intermediation of financial resources. The more efficient a financial system is in resource generation and allocation, the greater is its contribution to economic growth. An efficient system of financial intermediation also contributes to the risk mitigation process in the economy. For instance, enhanced efficiency in banking can result in greater and more appropriate innovations, improved profitability as well as greater safety and soundness when the improvement in productivity is channeled towards strengthening capital buffers that absorb risk. Moreover, efficiency or productivity measures could act as leading indicators for evolving strengths or weaknesses of the banking system and could enable preemptive steps by the regulator when necessary. Therefore investigation and measurement of efficiency and productivity in the banking sector assumes greater significance.

Since the initiation of deregulation process of the financial sector in 1992, significant policy changes have been introduced to strengthen the banking sector. These changes are
expected to have important implications on the efficiency of the banking system. Therefore, from the point of view of both managerial and policy interests, it is extremely important to know the efficiency levels of banks and their temporal behavior so as to understand how the banking industry has been reacting to the reform measures and the subsequent emerging challenges. It is also of interest to know which banks have performed better than others in the post reform period.

In the light of these observations mentioned above, there is a need to undertake a comprehensive analysis of the issue of efficiency of Indian commercial banks since 1991. Though there are a few studies already available in the Indian context, they have not covered the recent years. Further, the existing studies have relied on one or the other approaches such as the ration analysis, parametric methods or non parametric methods. In the present study we intend to employ all these approaches to get a comprehensive picture concerning the nature of efficiency among the Indian commercial banks.

1.4 Objectives and Hypotheses of the Study

In the light of the preceding discussion and keeping in view the recent developments in Indian banking after reforms, the specific objectives of the study are set as follows:

1. To present a brief history of commercial banks in India since independence.
2. To examine the banking sector reforms initiated from 1991 onwards.
3. To have a critical insight into the efficiency of Indian commercial banks using accounting measures. (ratio analysis).
4. To estimate the technical efficiency of Indian commercial banks from 1991 to 2009 to look into the possible factors contributing to variations in technical efficiency, and also to examine the temporal behaviour of the efficiency
5. To estimate the relative technical efficiency of banks using the nonparametric data envelopment analysis (DEA).

1.4.1 Hypotheses

In this study the following hypotheses are formulated.

i. The SBI group is relatively more efficient compared to the other public sector banks.

ii. The private sector banks are technically more efficient compared to the public sector banks, SBI group included.

iii. The foreign banks are more efficient compared to the private as well as public sector banks.

iv. Technical efficiency of banks is not time invariant especially in the light of the financial sector reforms.

1.5. Scope and Limitations of the Study

The present study covers the post reform period i.e. 1991-2009. The data on various inputs and outputs that have been used to calculate efficiency of commercial banks in India, have been compiled from the “Statistical Tables Related to Banks in India” published by the RBI. Both parametric (stochastic frontier approach, SFA) and a non parametric (data envelopment analysis, DEA) approaches have been used to estimate efficiency. In SFA four measures of outputs namely, net interest margin (total interest earned less total interest expended), other income (income from commission, brokerage etc.), credit and investment have been used. The study has also used two broader
measures of outputs reflecting the profit earning and the growth and safety of banking sector. The profit earning measure is obtained by adding net interest margin and other income. Another variable has been constructed by adding credit and investment reflecting banking growth. Deposits, borrowings, fixed assets and labor have been used as inputs. The study estimates technical efficiency. In SFA the technical efficiency scores have been presented for different combinations of outputs and inputs. The banks have also been divided into different groups namely, public sector, private sector and foreign banks, based on the three ownership criterion.

To estimate technical efficiency using DEA, two alternative combinations of inputs and outputs have been used. The inputs considered are number of employees, establishment expenditure, non-establishment expenditure, interest expenditure, non-interest expenditure and fixed assets. The outputs considered are deposits, advances, investments, net interest margin, total income and other income.

The technical efficiency under constant returns to scale (CRS), variable returns to scale (VRS), and scale efficiency, has been estimated for different groups of banks and the entire banking sector.

The main limitation of the study is that only technical efficiency measures are calculated. Allocative, cost or profit efficiencies have not been estimated in view of non-availability of consistent price data.

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