CHAPTER I

INTRODUCTION

Financial sector forms a significant part of the infrastructure responsible for the development of a country. The importance of financial sector in economic growth has been recognized since long. Joseph Schumpeter (1912) observed that well-functioning banks facilitate technological innovation by identifying and funding the projects with the best chances of successfully implementing innovative products and production processes.

The process of financial intermediation undertaken by the banks helps the development of an economy in a number of ways. It provides savers with different varieties of financial assets to meet their diverse preferences, hence promoting greater savings on their part. Small and scattered savings are also pooled together and channelized into productive projects.

Banks also reduce the risk borne by savers. By pooling together a large number of independent risks associated with lending, the risk per rupee is greatly reduced. Thus the banks, in a way, pass on the benefits of portfolio management to the primary savers.

Furthermore, banks raise the productivity of aggregate investment by improving allocation of available resources. By efficiently sorting out and ranking different investment proposals according to the expected return from them, the financial intermediaries ensure that scarce resources are channelized into the most productive avenues.

SECTION I

1.1 INDIAN BANKING INDUSTRY

India has a large and varied financial system. This consists of Reserve Bank of India as the independent regulator at the top, commercial banks of different sizes and ownerships, co-operative and regional rural banks, specialized development banks for
industry and agriculture, other non-banking financial institutions and finally, vast and growing social security institutions such as insurance companies and pension funds etc.

Within this large and highly differentiated financial system, commercial banks take a position of prominence and control nearly two-third of assets of the organized financial sector (Reddy, 1999). Further, commercial banks in India can be divided into three categories based on their ownership: public sector banks, domestic private banks and foreign banks. Since the deregulation and entry of new banks, domestic private banks are often further classified into new and old private banks.

Public sector banks are sometimes classified into the State Bank of India group and 19 nationalised banks\(^1\). Besides, there are 196 regional rural banks. These were established with a view to increase credit delivery in the rural areas, in particular to agricultural labourers and small artisans etc. These are often treated separately in literature due to their much smaller area of operations compared with the commercial banks. In next few lines we will briefly review the history of Indian banking industry.

India has a long and rich history of banking services which can be traced long back to the Vedic civilization, to around the period of 2000BC. The classical treaty on political economy, Kautilya’s Arthashastra, which dates back to around 4th century BC, also contains references to creditors, lenders and rates of interest (Leeladhar, 2007; RBI, 2008). Another ancient Indian text, Laws of Manu, written around 200 AD, established specific rules regarding money lending activates.

Banking on the modern lines began in India with the arrival of English traders in the 17th century. Since these traders could not make much use of the local banking system due to various constraints like non-familiarity with the language and traditions, the English agency houses undertook the banking business as well. Hindusthan Bank was the first joint stock bank established by one of the agency houses in 1770. Over next few years more banks were established, like General Bank of India and Bengal Bank.

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\(^1\) A total of 20 banks were nationalized by 1980. However, New Bank of India was merged with Punjab National Bank in 1993, as a result of which, currently there are only 19 nationalised banks.
In the first half of eighteenth century, three presidency banks, Bank of Calcutta (1806), Bank of Bombay (1840) and Bank of Madras (1843) were established. These were governed by royal charters, which were revised from time to time. Each charter provided for a share capital, four-fifths of which were privately subscribed and the rest owned by the provincial government. The members of the board of directors, which managed the affairs of each bank, were mostly proprietary directors representing the large ‘European Managing Agency Houses’ in India. The rest were government nominees, invariably civil servants, one of whom was elected as the president of the board.

These three banks remained at the apex of modern banking in India till they were combined to form the Imperial Bank of India in 1921. The Imperial bank played the triple role of a commercial bank, a banker’s bank and a banker to the government until the creation of Reserve Bank (Leeladhar, 2007). Reserve Bank was established as a central bank for the country in 1935. However, the process of regulation and supervision was limited by the provisions of the Reserve Bank of India Act, 1934 and the Companies Act, 1913 (RBI, 2008).

At the eve of independence, Indian banking was entirely in the hands of the private sector. Even the Reserve Bank was not completely state owned until it was nationalised through the Reserve Bank of India (transfer to Public Ownership Act, 1948).

1.1.1 Nationalisation and Social Control of Banks

Independence brought substantial changes in many spheres of economic life and perhaps nowhere else more than in banking. Not only did the operating environment of banks change sharply, but also, government policies regarding the banking industry were focused towards objectives of socialist development in the country. With the launching of development planning in the 1950s, banks were expected to serve as the agents of social change through utilizing public savings.

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However, the early years of independence posed several challenges with an underdeveloped economy presenting the classic case of market failure in the rural sector, where information asymmetry limited the foray of banks. Further, the non-availability of adequate assets made it difficult for people to approach banks (RBI, 2008).

It was being increasingly felt by the government that it should control the vast banking system. The first nationalization in the banking industry came in the form of transformation of the Imperial Bank of India into a public bank- State Bank of India (SBI) - through the enactment of the State Bank of India Act, 1955, in order to channelize the banking funds into the areas that would serve the objective of rapid socioeconomic development. However, the ownership of SBI was vested with the RBI rather than government, so as to protect it from unnecessary political and administrative interference and to ensure that it continued to be managed by sound banking principles.

With the nationalization of SBI, nearly one-third of the banking system had come under the control of the government. However, in recognition of the important role of banks in socio-economic transformation that the country was aiming at, the need to nationalise other major banks was also felt. The argument became even stronger following the massive success of SBI in expanding into the under-banked and unbanked centers and spreading institutional credit into such regions. Ronald (2006) observes in this regard:

“Despite progress made in 1950s and 1960s, the creation of SBI was felt to be insufficient; the banking needs of small-scale industry and agriculture were still not covered adequately. This was partly due to the close ties commercial and industry houses maintained with the established commercial banks, which gave them an advantage in obtaining credit”.

As a result, the government imposed a policy of social control over banks and fourteen major banks conducting about 85 percent of the total banking business were nationalised under the “Banking Companies (Acquisition and Transfer of Undertaking) Act, 1969”. Six more banks were nationalised in 1980 under the same act, taking total
number of nationalised banks in the country to twenty and more than 90 percent of total deposits under the control of government.

During the next couple of decades following nationalization, the banking industry made rapid progress, both in terms of its reach and size. Number of bank offices increased many-fold from 8,262 to 60,294 between 1969 and 1990. Average population served per branch also declined sharply to 12,000 from 65,000 over the same period. Even more impressive was the spread of banking services in rural areas. Number of rural branches increased from merely 1,833 at the eve of nationalization to 34,940 in 1990. Percentage of rural branches shot up from 22 percent to 57 percent.

However, the tremendous growth in spread and size of banking achieved after nationalization did not come without its own share of problems. Operating efficiency as well as quality of services being provided by banks was very poor. Management became highly centralized leaving little autonomy with banks due to frequent government intervention. In this regard, Malhotra (1995) observes that:

“Though bank nationalization greatly succeeded in promoting the geographical spread in banking services, mobilisation of financial savings and financing of designated priority sectors, it has also been accompanied by sharply reduced interbank competition, erosion of individual identity of banks, inhibition of innovation and flexibility, inadequate autonomy and accountability of management, centralized practices for staff requirements and wage setting, and ineffectual system of incentives and disincentives, and considerable increase in restrictive practices including prolonged resistance to introduction of computerization in banking operations”

Banking sector had become a near monopoly of government characterised with typical inefficiencies associated with government ownership. Companies became dependent on government banks for short term loans and bank funded financial institutions for long term capital needs. In this way, the government monopolized the access of companies on private savings (Bhaumik, 1997).

The state of Indian banking industry after two decades of nationalisation can be aptly summed up in word of Joshi and Little (1997) as, “By 1990, the country had
erected unprofitable, inefficient and financially unsound banking system". It was becoming increasingly clear that the problems facing the banking sector had grown to unsustainable levels and needed immediate attention. The balance of payments crisis of 1990 forced the Indian government to embark upon a program of economic reforms, thus providing the much needed opportunity to address the problems that had crept into the banking industry since nationalisation.

1.1.2 Deregulation and Changing Landscape of Indian Banking

In August 1991, the government appointed a high level Committee on Financial System (GOI, 1991) (hereafter referred to as CFS) under the chairmanship of Shri M. Narasimham to look into the issues facing the banking industry and make suitable recommendations to bring about the requisite changes. The committee gave wide ranging suggestions, addressing a host of issues including interest rate deregulation, greater autonomy for banks, dismantling of entry barriers, strengthening of prudential norms etc. Most of the recommendations were accepted by the government and implemented in following years (Joshi and Little, 1997).

The deregulation drive launched by the government witnessed ground-breaking changes in the banking industry. The industry was opened once again to the private sector. Interest rates were deregulated and branching norms were relaxed gradually. Resource pre-emption was brought down with lowering of SLR and CRR.

With these developments, the operating environment as well as the market structure of the industry underwent substantial changes over the years. The share of public sector banks in total deposits and advances decreased from 91 percent and 92 percent in 1991 to 74 percent and 72 percent respectively in 2008. Thus, although the public sector banks have remained the biggest players in the industry, the substantial decrease in their share does indicate a sharp change in market structure.

Banks have also improved considerably on most indicators of operating efficiency as measured through various financial ratios. Non-performing assets of banks came down sharply, though with a lag of few years after the deregulation. Profitability
measures improved substantially while efficiency too showed significant improvements (See Mohan, 2005).

1.1.3 Consolidation in Indian Banking

Consolidation in Indian banking was one of the issues raised by the CFS that had not been addressed immediately. The issue had been addressed by some earlier committees as well; however, the CFS observed that no action had been taken on the recommendations of previous committees in light of perceived administrative difficulties. Nevertheless, the CFS did make a number of recommendations regarding the need to reorganize and restructure the banking industry. The committee particularly observed that there should be a substantial reduction in number of public sector banks through mergers and acquisitions and the target structure should have 3-4 large banks comparable with big international banks and 8-10 national level banks.

However, and perhaps aptly so, the government did not consider interfering with the structure of banking industry at that time due to administrative difficulties involved in the issue and volatile political atmosphere owing to already ongoing reforms. Nevertheless, after more than 15 years of reforms, it appears that the Indian banking industry has become mature and dynamic in which the issue of consolidation may be addressed appropriately.

As India opens up its financial system on a growing basis to foreign institutions, in line with commitments made at multilateral trade negotiations\(^3\) and general intentions of the government itself, it has been felt by various quarters\(^4\) that India should have larger domestic banks that can be comparable to global majors. Government of India (GOI, 2005), Indian Banking Association (IBA, 2003) and Reserve Bank of India (RBI, 2005\(^5\)).

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3 A commitment was made by India to extend 12 branch licenses to foreign banks in the Uruguay Round of WTO. However, the stance of RBI has been even more liberal and it has been allowing 18 new branch licenses to foreign banks to operate in India since financial year 2005-06.

4 RBI released a document named ‘Roadmap for Presence of Foreign Banks in India’ according to which presence of foreign banks in Indian banking industry will be allowed to increase in two phases. Under the first phase beginning March 2005, foreign banks were allowed to operate through wholly owned subsidiaries. More importantly, in the second phase, expected to begin from the Fiscal 2009-10, foreign banks may be allowed to own up to 74% stake in Indian banks and also enter in the process of merger and acquisition with Indian private banks, subject to the condition of minimum 26% stake to be owned by resident Indians (RBI 2005\(^5\)).
2005) all have from time to time favoured the formation of larger banks through the process of mergers and acquisitions (M&A), particularly in public sector banks. In a speech delivered in 2005, the then Finance Minister Mr. P. Chidambaram observed in this regard:

"With globalisation, the Indian public sector banks have to compete with new generation private banks and foreign banks. International trends suggest that consolidation has reduced the chances of credit risks. There is a near consensus on the issue that to attain global aspirations and provide greater banking services to rural and hitherto unbanked areas, banks have to consolidate”.

Various arguments have been put forth in literature regarding the benefits of consolidation in banking industry. These include economies of scale (large size) and scope (diversification), better risk management (Berger et al., 1999) etc. RBI (2008) observes in this regard:

"The logic for consolidation in India is based on two explicit or implicit assumptions. One, there are too many banks in India. Two, if the banking sector has to be assessed in the international context, size is the most important factor. It is argued that the size of a bank enhances its risk-bearing capacity, for which consolidation through orderly M&As may be necessary”.

The current stand of both the government and RBI is that consolidation should not be imposed on banks but should be directed by market forces. However, even if the final decision regarding mergers is left to market forces, the policy framework adopted by the regulator can certainly influence the degree and nature in which the market forces will influence consolidation in Indian banking in future. In this regard, the Committee on Fuller Capital Account Convertibility (FCAC) (RBI, 2006) observed that all public sector banks need not be of the same size as the ‘one-size-fits-all’ approach may not be conducive for the industry. The Committee recommended that the Reserve Bank should formulate its prudential policies in a manner which favours consolidation in the banking sector.

At this juncture, it becomes important to study how the potential changes in banking structure which will accompany the consolidation process will affect the
conduct and performance of individual banks. The next section will introduce the theoretical nature of the issue at hand.

SECTION II

1.2 STRUCTURE-CONDUCT-PERFORMANCE RELATION IN BANKING

A very important aspect that can have significant implications of the consolidation process is the relation between market structure, conduct and performance in the banking industry. Market structure of any industry is a key factor in determining the conduct of firms i.e. whether the individual units behave competitively or strategically i.e. non-competitively. Economic theory predicts different welfare implications of different market structures through price and non-price behaviour of individual units.

The enquiry into the conduct of individual units in this regard has led to development of two competing explanations of structure-performance relation viz. the traditional Structure-Conduct-Performance (SCP) paradigm and the efficient structure hypothesis. The traditional SCP contends that market power derived from either high concentration in industry or from large market share allows individual units in an industry to exploit monopoly rent and set prices which are generally unfavourable to consumers in order to achieve higher profits. The implication of such a relation is that greater concentration or higher market share of firms will result in loss of social welfare as represented in higher price charged from the consumers.

In contrast, the efficient structure hypothesis seeks to explain the structure-performance relation through efficiency, and contends that profitability of individual units is determined by efficiency rather than market power. More efficient units, according to this school of thought, earn higher profits and also gain higher market share, giving rise to a spurious positive profit-structure relation. However, it is the efficiency which plays a central role rather than market structure, as is the case with the traditional SCP hypothesis.
Although, both of these contending explanations originated in manufacturing, these have been extensively tested in banking as well. Whereas traditional SCP enjoyed tremendous support in manufacturing, the results have been by far mixed in banking (Gilbert 1984). However, this is very essential to test which of these explanations better describe the behaviour of banking industry in India. If the market power explanation is found to be evident, it would imply that regulatory policies should be aimed at increasing competition and anti-trust laws may be strengthened. On the other hand, if efficiency explanation holds good, it would suggest that the M&A activities may be driven by the forces of efficiency and therefore such activity may not be restricted or may even be encouraged. The knowledge of relation between market structure, conduct and performance of industry in terms of efficiency as well as profitability may thus help the policy makers to draw a suitable strategy towards the issues of consolidation facing the Indian banking industry. Berger (1995) observes that:

"The two theories, market power and efficient structure in this context have radically contrasting implications for mergers and antitrust policy. If the market power is found to be major determinant of profitability, mergers may be motivated by desire to set prices that are unfavorable to consumers, which would decrease total consumer plus producer surplus. To the extent the efficient structure hypothesis is correct; such mergers may be motivated by efficiency considerations that would increase total surplus"

Thus, the study of structure-performance relation becomes all the more important as it can have significant implications regarding the role of market forces to be played in consolidation and therefore for the regulator in so far as the policy stance on consolidation in concerned.

SECTION III

1.3 MOTIVATION FOR THE STUDY

Two distinct but closely related issues that emerge from the above discussion are (i) the extent of impact of the deregulation measures taken so far on the banking industry, reflecting to what extent the objectives laid down at the time of deregulation
have been fulfilled and (ii) what should be the stand of regulatory policy in future towards the issue of consolidation in the industry in light of changes that the Indian banking industry has already witnessed as a result of reforms.

As has been said above, one of the most important objectives of deregulation was enhancing the efficiency of the system through bringing changes in market structure of banks in order to bring in more competition. While the deregulation process has resulted in significant changes in market structure, as reflected in changing shares of public and private banks, it remains to be seen as to whether and to what extent these changes have actually materialised into promoting competition in the industry and decrease in market power exercised by the banks. Existing literature in India on the issue is rather scant. While there have been a few studies that have addressed the cause of measuring competition, these generally pertain to a smaller time period and have not been able to find any significant temporal pattern in banks' conduct (See e.g. Prasad and Ghosh. 2005). Further, no study has directly measured the degree of market power exercised by banks in India which can be used to see how the banks’ behavior changed in the post deregulation period.

Another related aspect is to what degree the deregulation measures and the resulting changes in market structure and competitive forces have affected the performance of banking industry as measured through efficiency and productivity growth. While there have been a number of studies on this issue, the results have been by far mixed. Further, most of these studies use data from only post reform period, thus pre-empting beforehand any potential of striking a direct comparison of performance in pre and post-reform period. Another deficiency in this literature is that while studies enquiring into efficiency have been growing, those measuring productivity growth, which encompasses both changes in efficiency and technological progress- have been rare. Therefore, through this study, we will try to fill some of the gaps that exist in evaluation of reforms with regard to changes in competition and efficiency in Indian banking industry.
The second issue that emerges from the above discussion concerns consolidation in the banking industry. The issue is closely related to the first one in that both competition among and efficiency of the banks can significantly impact how the structural changes accompanying the process of consolidation will influence the conduct of the banks. As mentioned in section 1.2, it is important to analyse the relation between market structure and conduct of individual units in order to develop a successful strategy to address the issue of consolidation in Indian banking.

SECTION IV

1.4 OBJECTIVES OF THE STUDY

In line with the above discussion, the study will aim at analysing the market structure of banking in India and its impact on conduct and performance of banks. An attempt will be made to investigate as to what extent the financial sector reforms have struck significant changes in market structure of banks and thereby have affected their conduct and performance. In particular, following will be the major objectives of the study:

1. To analyse market structure of banking industry in India before and after the financial liberalization.
2. To explore the degree of competition and market power enjoyed by the banks in light of deregulation measures.
3. To evaluate the impact of financial sector reforms in India in light of performance of commercial sector banks as reflected in efficiency and productivity changes of individual banks.
4. To test the relationship between market structure and performance of banks to determine how and to what extent the degree of market power and efficiency of individual banks affect their profitability.
SECTION V
1.5 STRUCTURE OF THE STUDY

The thesis is organized into 9 chapters addressing various issues concerning the deregulation and structure-conduct-performance of Indian banks.

Chapter I, the introduction, acquaints the reader with the Indian banking industry and the issues concerning it. After detailing a brief history of Indian banking, the chapter discusses some of the issues relating to deregulation as well as structural changes in the industry. Through this discussion, the chapter builds up the motivation for undertaking this research work and finally details the objectives there of.

Chapter II presents the theoretical background to the issues involved in structure-performance relationship and measurement of efficiency and productivity growth. The main objective of the chapter is to acquaint the reader with some of the technical concepts which will be used in rest of the thesis.

Chapter III reviews the existing literature with regard to the issues addressed in this thesis. The chapter is organized into two parts which discusses respectively, (i) the literature related to efficiency and productivity growth, and (II) literature enquiring into the SCP relation and competition in banking.

Chapter IV concerns with measurement of variables, selection of sample and sources of data. It details various approaches used to model a banking firm and builds a rationale for the approach used in the current study.

Chapter V discusses the process of deregulation in Indian banking, detailing the need for reforms and its course. In the second part of the chapter, the impact of reforms on various aspects of market structure and operating performance of banks is examined.

Chapter VI empirically determines efficiency and productivity change in banking industry. It also strikes comparison with regard to pace of productivity growth before
and after deregulation and visualises how the reform process has affected the performance of Indian banking across the various groups of banks based on ownership.

Chapter VII is aimed at testing the relationship between structure, conduct and performance of Indian banks and compares the results across the pre and post-reform periods.

Chapter VIII concerns with measuring the conduct of the banks as reflected in the degree of market power exercised by them in the post reform period in order to see how the changes in market structure have materially transformed into greater competition in banking industry. It also attempts to find out if the banks differ on the issue in accordance with their ownership and size.

Chapter IX concludes the study with a summary of the findings made in various chapters along with drawing some implications of such findings for the future policy making in Indian banking industry.