ARTHAVAAN
Volume 2, Issue 1, December 2017

http://www.bharaticollege.com

Banking Reforms and Competition: A Comparative Study of Public and Private Banking Industry in India – A Literature Review

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Abstract: The present paper provides the literature review carried out to conduct a doctoral research on the topic "Banking Reforms and Competition: A Comparative Study of Public and Private Banking Industry in India" submitted to University of Delhi. The study was based on a sound theoretical framework known as modified S-C-P paradigm. Hence, survey of literature comprises distinct studies under various heads: liberalization of banking, public sector banks, contrast of public banks and private banks, privatization, competition in banking and S-C-P paradigm. Literature review highlighted the importance of carrying out one more study on banking reforms and competition in Indian domestic banks in the light of a sound theoretical framework as performance of Indian banks had been contrasted many times previously as well through various studies but most of them were lacking in terms of a sound theoretical framework that had been taken care of in the proposed study based on this literature review.

Keywords: Banking Reforms, Competition in Indian Public and Private Sector Banks, Public Sector Banks, Privatization, S-C-P Paradigm.

1. INTRODUCTION

Review of literature is done to determine the significance of the proposed study in relation to the extent studies that have already been made in the context of the issue under analysis. As the present review of literature had been conducted to facilitate a doctoral thesis title "Banking Reforms and Competition: A Comparative Study of Public and Private Banking Industry in India", various studies related to the topic have been compiled under distinctive heads. Thereby review of literature in this paper includes studies examining the impact of liberalisation or financial sector reforms on banking industry, Studies comparing performance of public sector banks and private sector banks in India, studies related to Public Sector Banks specifically and studies discussing the issue of privatisation. Furthermore, studies highlighting the measure of competition in banking and studies based on S-C-P paradigm have also been involved to serve the purpose. Moreover, an attempt has been made to arrange the studies in chronological order under each head separately to facilitate the objective of reviewing literature in better manner.

In this backdrop, the remaining paper is divided into seven Sections. Section II presents the studies related to impact of banking reforms. Studies comparing public banking and private banking industry in India have been discussed in Section III whereas Section IV produces studies confined to public sector banks in India only. Issue of privatisation is covered in Section V. Studies related to competition in banking are given in Section VI. Section VII expounds the studies based on Structure-Conduct-Performance (S-C-P) approach. Finally, Section VIII yields conclusion.

2. IMPACT OF BANKING REFORMS

Financial sector reforms in India are aimed at improving efficiency, productivity and profitability of banks via increased competitiveness. Hence, an attempt has been made to examine various views as regards to the impact of liberalisation of Indian economy including banking reforms on the performance of banking industry as a whole in India.

Raje (2000) argues regulatory reform alone cannot deliver results unless the banks are restructured simultaneously. Bhide, Prasad and Ghosh (2002) emphasise that the traditional face of banking is undergoing a change–from one of mere intermediator to one of provider of quick, cost-effective, efficient and consumer-centric services. Ataullah et al. (2004) stated that overall technical efficiency of the banking industry of India and Pakistan showed progress as a result of the financial liberalisation. Mohan (2005) examined the performance of various segments of Indian financial sector in phase of financial reforms and found improvement in efficiency, competitiveness and health of all the segments including banking segment. Though, decline in the share of priority sector lending is noticed.

Mixed results have been noticed in terms of the impact of financial reforms on Indian banking industry. For example, Kumbhakar and Sarkar (2003) concluded that a significant TFP growth has not been observed in Indian banking sector during the deregulatory phase. Moreover, public sector banks have not responded well to the deregulatory measures. Galagedera and Edirisuriya (2005) concluded that reforms have brought no significant growth in the productivity of Indian banks. Sensarma (2005) pointed out that profit efficiency of Indian banks has displayed a declining trend during the period of deregulation.

Das and Ghosh (2006) suggested that the period after deregulation did not witness any significant increase in number of efficient banks and some banks have high degree of inefficiency during the period of reforms. However, Sensarma (2006) claimed that deregulation in Indian banking industry (particularly public sector banks) attained the goal of reduction in intermediation costs and improving TFP. Dobson (2006) concludes that India's financial system has all the moving parts required to become a modern financial system, but it continues to be held back by the inertia of state ownership and past regulatory and social practices.

3. COMPARING PUBLIC AND PRIVATE BANKING INDUSTRY

This Section highlights the research work already done in the direction of comparing performance of public and private banking industry in India:

Bhattacharyya and Kumbhakar (1997) examined the impact of the limited liberalisation started before the deregulation of the 1990s on the performance of different categories of banks, using data envelopment analysis. This study covered 70 banks in the period ranging 1986 to 1991. They formed one grand frontier for the total period and measured the technical efficiency of the banks. It was found that public sector banks had the highest efficiency among the three categories, with foreign and private banks having much lower efficiencies. Though, public sector banks started showing a decline in efficiency after 1987, private banks showed no change and foreign banks showed a sharp rise in efficiency. The main results were that in the nationalised era, public sector banks were successful in achieving deposit and loan expansion. Sarker and Das (1997) compare performance of public, private and foreign banks for 1994-95 by using profitability, productivity and financial management measures. They find public sector banks performing poorly in comparison of other two categories. Sathye (2001) evaluated the relative efficiency of Indian banks in the late 1990's and contrasted the efficiency of Indian banks with that of the banks in other countries. He found that the public sector banks have a higher mean efficiency score as compared to the private sector banks in India, but found mixed results when compared public sector banks and foreign commercial banks in India.

Ram Mohan and Ray (2004) attempted a comparison of performance among three categories of banks: public, private and foreign using physical quantities of outputs and comparing revenue maximization efficiency of banks during 1992-2000. They find that public sector banks performed significantly better than private sector banks but no differently from foreign banks on this measure. The superior performance of public sector banks is to be ascribed to higher technical efficiency rather than higher allocative efficiency. Arunkumar and Kotreshwar (2006) attempted to examine the performance of Indian public and private sector banks in terms of credit risk management in post liberalisation scenario. For the purpose, analysis of trend in non-performing assets, trend in credit risk portfolio diversification, relationship between diversified portfolio and NPAs, profiling of concentration risk, impact of New Basel Accord Norms and risk based supervision on credit risk management practices of Indian commercial banks (public vs. private) has been made with the help of primary and secondary information. The findings are as follows:

a) While NPAs level of public sector banks did register a clear decreasing trend during the post-liberalization period, NPAs level of private sector banks remained constant during this period.

b) The concentration risk profile of private sector banks is found to be higher than that of public sector banks.

c) In case of public sector banks, there exists a strong relationship between NPAs level and credit portfolio diversification as vindicated by higher co-efficient of correlation values. The decrease in NPAs level is caused by reduction in concentration risk. This relationship is however, not clearly pronounced in case of private sector banks.

d) Credit risk management performance of commercial banks in India is not satisfactory.

e) There exists no marked difference between public sector banks and private sector banks as regards their credit risk management performance.

Thus, the study is based on" a bank success lies in its ability to assume and aggregate risk within tolerable and manageable limits." Dash and Charles (2008) investigated the technical efficiency of Indian banks, distinguished on the basis of ownership criterion. the Data envelopment analysis (DEA) model was used with five input variables (borrowings, deposits, fixed assets, net worth, and operating expenses) and four output variables (advances & loans, investments, net interest income, and non-interest income), and the efficiency scores were calculated for a sample of forty-nine major banks operating in India. The foreign banks were found to be slightly more efficient than public and private banks, and that there was not much of a difference in the efficiency of public and private banks. Still, significant difference is observed in terms of under utilisation of inputs and under production of output. As net worth was found to be under-productive for efficient private and foreign banks, while it was properly utilized by public banks. Thus, profitability of private and foreign banks is expected to be lower than that of public banks, particularly in terms of return on net worth. Elango and Gudep (2008) carried out an analysis to examine the level of awareness among customers and to identify the best banking sector which provides qualitative service. It has been observed that the foreign and the new generation private sector banks are serving the customers better. Hence the paper suggests that the public sector commercial banks should make efforts to revamp their approach towards customers, so as to perform better and derive competitive advantage in the long run.

Thereby, number of studies have been made contrasting PSBs and private banks using different techniques but a sound theoretical framework is found to be missing in almost all of them.

4. PUBLIC SECTOR BANKS IN INDIA

Jagirdar (1996) observed that the average return on assets (ROA) of the Public Sector Banks (PSBs) in the second half of the 1980s was only about 0.15 percent which was abysmally low by all standards. Further, in 1992/93, non-performing assets (NPAs) of 27 PSBs amounted to 24 percent of total credit, only 15 PSBs achieved a net profit, and half of the PSBs faced negative net worth (Shirai, 2002). Thus, it becomes important to judge the various views prevailing as regards to the PSBs as they form the core of the banking system in India.

Das (1997) attempted to analyse overall efficiency (technical, allocative and scale) of PSBs. During 1990 to 1996. The study found a decrease in overall efficiency. This happened because there was a decline in technical efficiency, both pure and scale, which was not compensated by an increase in allocative efficiency. It was noted by the study that the decline in technical efficiency was mainly because of four nationalised banks. However, Bhattacharyya et al. (1997b) reported a positive impact of deregulation on the TFP growth of Indian public sector banks. Das (1999) contrasts performance among public sector banks for three years in the post-reform period: 1992, 1995 and 1998. He finds a certain convergence in performance. He also states that while there is a welcome increase in emphasis on non-interest income, banks have tended to show risk-averse behaviour by opting for risk-free investments over risky loans.

Das (2002) seeks to examine the interrelationships among risk, capital and productivity change of the public sector banks in India. The analysis reveals that capital adequacy has a negative and significant effect on asset quality when the PSBs are considered in totality. Secondly, it is observed that non-performing assets (NPAs) play a major role in influencing capital levels for the small banks as also for the PSBs as a whole, reiterating the mutually reinforcing relation between credit risk and financial leverage. Thirdly, as regards productivity change, it is observed that depending upon whether the objective of productivity is growth or growth with stability considerations, capital and NPAs remain crucial factors in influencing productivity. Finally, regulatory pressure, both with regard to capital and NPAs play a significant role in influencing the capital adequacy and asset quality of PSBs. Rajaraman and Vasishtha (2002) perform a panel regression on non-performing loans of the 27 public sector banks for a five-year period ending in 1999-2000. The exercise groups banks with higher than average NPAs into those explained by poor operating efficiency, and those where the operating indicator does not suffice to explain the high level of NPAs, and leaves an unexplained intercept shift. Two of the three weak banks identified by the Varma Committee, Indian Bank and United Bank of India, fall in this category. The paper concludes that recapitalisation of these banks with operational restructuring may therefore not be the solution, since there is clearly a residual problem even after controlling for operating efficiency.

Tripathy (2006) makes an attempt to analyze the factors that are essential in influencing the investment decision of the customers of the public sector banks. For this purpose, Factor Analysis, multivariate technique, has been used to identify the groups of determinants. Secondly, this study also suggests some measures to formulate marketing strategies to lure customers towards banks. Ram Mohan (2007) states that the public sector banks have shown a remarkable transformation in the post-reform period. Profitability is comparable to international banks, efficiency and stability have improved and there is a convergence between PSBs and private banks. But the PSBs will be severely tested as disintermediation proceeds apace on both the asset and liability sides.

Their survival depends on their ability to rise to the challenges ahead. Kumar and Gulati (2010) analysed the trends of cost efficiency and its components across Indian public sector banks (PSBs) during the post-deregulation period spanning from 1992/93 to 2007/08. The study also examines the issue of convergence in cost, technical and allocative efficiencies levels of Indian PSBs. The empirical results indicate that deregulation has had a positive impact on the cost efficiency levels of Indian public sector banking industry over the period of study. Further, technical efficiency of Indian public sector banking industry followed an upward trend, while allocative efficiency followed a path of deceleration. They note that, in Indian public sector banking industry, the cost inefficiency is mainly driven by technical inefficiency rather than allocative inefficiency. The convergence analysis reveals that the inefficient PSBs are not only catching-up but also moving ahead than the efficient ones, that is, the banks with low level of cost efficiency at the beginning of the period are growing more rapidly than the highly cost efficient banks.

In sum, the study confirms a strong presence of convergence in cost efficiency levels of Indian public sector banking industry.

5. PRIVATISATION OF BANKING

There is a discord amongst economists and researchers on the issue of privatisation of Indian Banking. Hence, distinctive views, either in favour or in against privatisation have been presented in this Section.

Sarkar et al (1998)[1] suggest with the help of their findings that a move towards privatization in developing countries should be accompanied by concerted efforts to strengthen the appropriate markets and institutions that create the necessary incentives for private firms. Under such circumstances, privatization is likely to be an effective policy for improving the performance of ailing public-sector enterprises in emerging economies like India. Ram Mohan (2001) had criticised the new Banking Bill based on bank privatisation on two grounds: (a) Privatisation led by disinvestment of the Government shareholding and compelling them to migrate to stock market when their share prices were already low would be of no help and (ii) Letting foreign banks to acquire PSBs was also not a good solution as they would not be able to take care of every section of the economy.

Mathur (2002) claims that arguments in favour of privatisation of PSBs are: (i) based on perceptions but not factual analysis, (ii) use of partial information and (iii) evidence on international experience which is not unambiguous. He notes that broadly, four main arguments are made by the proponents of privatisation of PSBs in India: (a) frequent re-capitalisation of state owned banks is a huge burden on the government budget; (b) state ownership of banks reduces competition and thus breeds inefficiency; (c) there is no evidence that state ownership lowers the probability of banking crisis; and (d) private and foreign banks stimulate efficiency, innovation and economic growth.

But with the help of sound reasoning and bringing full facts and figures into consideration, he is able to disclaim the aforesaid arguments. He concluded that the case for privatisation of PSBs in India is not strong enough. As he claims that it is not necessarily the case that wherever the banking segment is private sector dominated the probability of a banking crisis is lower. It needs to be recognised that private sector banking would have larger probability of crisis if the supporting legal and regulatory framework were not sound enough to insulate the systems from the adversaries of extraneous pressures. Therefore, he is of the opinion that it may be safer to maintain the public sector character of the banks till the conditions for privatisation are conducive enough for the same. The conditions precedent would include swift and smooth legal system, strong regulatory framework, reduced fiscal deficit, and a sharp reduction in controls on flow of foreign capital.

Singh (2002) criticises the aforesaid arguments of Mathur (2002). As Singh is of the opinion that Public Sector banks are not the only means to take care of the priority sector and tax and excise duties are the direct alternatives available in the hands of the Government for this purpose. In the name of priority sector lending, PSBs whose bank managements are weak and corrupt are giving rise to the problem of moral hazard. Further, he disclaims the argument of Mathur that economies with private sector banks faced bank crisis as with the help of the literature available, he is able to state that there was no clear relationship found in economies having private sector banks and bank crisis. Similarly, Singh also contradicts the idea of Mathur that instead of recapitalising PSBs by exchanging fresh bank equity with GOI securities, PSBs should have been allowed to raise funds from the capital market and they could have been given loans instead of investing in government securities. As he states that loans would have been risky for banks and there was a fear that equity could have been sold by banks at substantially lower price.

Finally, he concludes the discussion with a note that PSBs did well only in face of competition. Still, competition is not sufficient for them and hence, further privatisation is indeed needed. Supporting the views of Ram Mohan (2001) and Mathur (2002) that a more effective and appropriate regulatory regime needs to be put in place for privatisation to be useful. However, he cautions that there can be differences in the opinion what ideally constitute an effective and appropriate regulatory regime. There is a need for pragmatic approach. We may even need to rely on trial and error to some extent.

According to Ram Mohan (2011), it would have been advisable for the RBI to spell out the principal objective in licensing new banks. Is the principal objective greater competition or is it financial inclusion? If it is competition, then it would be alright to subject the new banks to the same branch licensing norms as the existing ones; if it is inclusion then they must be told to focus to a greater extent on unbanked centres. Unfortunately, the RBI has not thought it necessary to make the case for new entrants.

6. COMPETITION IN INDIAN BANKING

Commercial banks, especially the dominant public sector banks, have been exposed to competition from the new banks set up in the private sector with the latest technology. This has created a need for the public sector banks to improve their business efficiency and volume, which is a good sign of competitive effectiveness. Induced stiff competition in the banking sector certainly raises some issues relating to the functioning of domestic banks. Moreover, element of competition can be found not only in different banking segments, that is, SBI group, PSBs, old private banks, new private banks and foreign banks but also in the various banks within the one banking segment. This Section involves some studies especially designed to measure competition either amongst different

[1] *Findings of Sarkar et al are already given in this Chapter under heading "Comparing Public and Private Banking".*

banking segments or different banks within one individual banking segment. The objective is to highlight how techniques of measuring competition are varying in different studies.

Vyas and Dhade (2007) conducted a study mainly focusing on the State Bank of India (SBI), the premier bank in the Indian banking sector, as to what extent it has been affected by the entry of new private sector banks. The study applies the t-test for finding the significant difference in the performance of SBI before and after the entry of private sector banks, with the help of financial ratios selected as the parameters for ascertaining the changes in the business of SBI. The results indicate that the presence of new private sector banks does not pose any threat to SBI at the moment; however, the same cannot be said in the future. Prasad and Ghosh (2005) Using annual data on scheduled commercial banks for the period 1996–2004, evaluated the validity of the claim that competition in the Indian banking sector has increased since the inception of the financial sector reforms in 1992. The empirical evidence reveals that the Indian banking system operates under competitive conditions and earns revenues as if under monopolistic competition.

Most of the studies conducted in India examining Banking sector are very short focused. As some of them are limited in their scope comparing performance of PSBs and private banks in terms of financial indicators only while others ended evaluating the performances of the two banking segments on the basis of production function or frontier analysis or so forth and lacked a theoretical framework without which any study remains incomplete. Moreover, almost all the studies failed to measure competition between the two banking segments: public and private. This gap has been filled by Murthy and Deb (2008a) by providing a theoretical framework of competition that can be applied to banking also. Discussing the evolution of competition, it provides a methodology to arrive at a market form in banking industry through an analysis of all the aspects of basic conditions, structure, conduct and performance using modified S-C-P paradigm. This paper argues that sustained growth and dynamics of industry is not price led. Growth arises out of changing basic conditions and dynamics arises out of sharing the new market created by basic conditions. The prime mover of competition is rivalry among firms to control market share to internalize externalities rather than adjustments brought about the price mechanism.

Murthy and Deb (2008b) used modified Structure-Conduct-Performance (S-C-P) approach to analyse competition in private banking industry of India. The study suggests that sources that finance growth should be competitive. While there does not exist much possibility of competition for institutions providing finance for public investment, competition can occur among banks, which are conduit of monetary policy. It then provides the theoretical background of an alternative mechanism based on structure-conduct-performance paradigm, which apart from including traditional elements of S-C-P paradigm, entry, economy of scale, product differentiation and price cost margin, also incorporates basic conditions and strategic groups to analyse the process of market dynamics in the industry. The paper goes on to argue that competition goes beyond "conduct" and encompasses all the four elements of S-C-P paradigm: basic conditions, structure, conduct and performance. Accordingly, a three equation model simultaneous equation model is developed to ultimately estimate the equation of competition through Tobit technique.

The results indicate that variables related to basic conditions, structure, conduct and performance influence competition. The study has found evidence against the simplistic relationship between concentration and competition which remained implicit in the literature. The study also developed a methodology to arrive a market form from an analysis of all the three aspects of a market and concludes that private banking industry in India is characterised by monopolistic competition.

Murthy and Deb (2008c) critically examined the contention of treating the impact of entry on concentration and market structure mechanically and considering fall in concentration as a cause of competition. This paper is first of its kind to identify a distinct pattern of change in the concentration ratio and explain its determinants in terms of a cubic form equation.

Thus, a very few studies have been noticed measuring competition in Indian banking using S-C-P paradigm.

7. STRUCTURE-CONDUCT-PERFORMANCE (S-C-P) PARADIGM

An attempt has been made to compile various studies pertaining S-C-P paradigm in the present Section as the proposed study is based upon the theoretical framework of Modified S-C-P approach developed by Murthy and Deb (2008).

Heggestad and Rhoades (1976) undertook a study to test the market structure-stability relationship in commercial banking. Using measures of firm mobility and turnover between 1966 and 1972, an analysis based on 228 markets and over 2,000 firms was conducted to determine whether elements of market structure have a systematic influence on stability. Weiss (1979) discussed the relevance of the structure-conduct- performance approach to antitrust and demonstrate its practical utility in analyzing an important case. While Harris (1988) attempted to distinguish the two competing hypotheses in S-C-P theory, namely, efficient structure and market power.

Hannan (1991) employs an explicit model of a banking firm to estimate the relationship between market structure and various aspects of bank conduct and performance as implied by the structure-conduct-performance (S-C-P) paradigm and thereby assess the most commonly tested relationships in this large literature. Shaffer (1994) extends previous analysis of weaknesses of the structure-conduct-performance paradigm and of the price-cost margin as a measure of performance. Otten and

Schweitzer (2002) analysed the development and performance of the European mutual fund industry and compare it with the industry in the United States, using the traditional S-C-P paradigm.

Neuberger Doris (1997) reviews the industrial organization research in (commercial) banking within the revised structure-conduct-performance paradigm. Neuberger (1998) is of the opinion that empirical research about structure, conduct and performance in banking markets has developed mostly independently from the microeconomic theory of banking. Delorme et al. (2002) used a simultaneous equations framework to study the relationship between structure, conduct and performance in US manufacturing in the 1980s and 1990s. Moreover, Laderman (2006) empirically tests for the presence of countervailing effects of increases in market concentration on small business loan volume. Pawlowska (2007) explains the role of market structure on profitability in the Polish manufacturing firms based on panel data static analysis. Yusupova (2009) deals with industrial markets in Russian economy. Srinivas and Kumar (2010) conceptualised a theoretical model Based on Bain's work for the S-C-P paradigm.

Such a vast literature on S-C-P paradigm is still awaited in context of our own country.

8. CONCLUSION

There is no dearth of literature and myriad of studies are available not only evaluating impact of banking reforms but also making comparisons between public and private banking industry in India including foreign banks and measuring competition. Moreover, S-C-P paradigm has also been used in some studies in India and abroad especially in context of banking but a very few studies are found using S-C-P in relation to Indian banking industry. Hence, the present literature review highlights the importance of carrying out a study on analyzing the impact of banking reforms on Indian domestic banks in the light of a sound theoretical framework such as Structure-Conduct-Performance (S-C-P) paradigm. Thereby, the doctoral research conducted on the basis of this literature surveys makes an attempt to fill the gap between extant literature and need of the hour.

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