

PUBLIC SECTOR BANKS IN INDIA: A REVIEW OF LITERATURE

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Abstract

This study aims to gain insight on various issues related to the public sector banking industry in India. For this study, forty research papers and studies related to market structure, conduct and performance of public sector banks in India have been examined. These studies made important contributions to the comparative analysis of profitability of public sector banking industry with respect to private and foreign banks, but none of them provided a rigorous analysis of the impact of reforms on the profitability of public sector banking industry over time. Issues explored in these studies are related to interest and non-interest income, bank size, technology issues, and formation of non-performing assets. In many studies, DEA, stochastic frontier analysis, ratio, regression, graphs and charts, production function have been used. In very few studies, the S-C-P framework has been used

in the banking industry in India. Many of the studies have compared public sector banks with old private, new private and foreign banks. None of these studies have examined public sector banks at bank level. But now questions arise whether with the adaptation of liberal economic policies and market model, other objectives than profit are irrelevant. Secondly, given their own frame of reference, can they be dubbed as good or bad?

Keywords: Banks, Investment decisions, Market structure, Advertising, Investment.

JEL Keywords: G21, G11, L10, M37, E22

1. Introduction

In the development of every field of a study, a stage is reached when it becomes indispensable to take stock of the whole work done in the past. A critical review of literature needs to precede the research work. This helps to focus on the areas which did not receive adequate attention. The literature review must be arranged in terms of a theoretical framework used in the study so that the link between the theoretical framework used in the study and the review of literature becomes clear enough. This leads us to classify the extant literature in the banking industry in three categories relating to structure, conduct and performance because in the present study the Structure-Conduct-Performance paradigm has been used as a theoretical framework. Moreover, there is a large and growing volume of literature of varying quality in the field of Indian banking industry. Therefore, a brief review of this literature and committee recommendations on the banking sector has been made.

The research questions for this article are as follows:

1. How has liberalization affected the public sector banking industry in India?
2. Are there strategic groups within public sector banks in India?
3. How has the entry of private sector banks led to changes in the public sector banking industry?
4. What have been the changes in the market structure of public sector banks in India?
5. Which conduct variables can better measure the behavior of public sector banks?
6. How have market structure and conduct affected performance of public sector banks in India?

The literature review helps to focus on the areas which are not explored enough. The literature review has been arranged in terms of a theoretical framework that will be used in the proposed study so that the link between the theoretical framework used in the study and the review of literature becomes clear enough. This leads us to classify the literature review in the banking industry, in categories relating to structure, conduct and performance. Keeping these research questions in view, the theme of this paper is to lay out the literature that explores the public sector banking industry in detail. For this paper, we have explored forty research papers.

A brief introduction and research questions of this chapter (Section 1.1) is followed by the theoretical framework in section 1.2. Section 1.3 provides the literature review on the structure, conduct and performance of PSBs. Section 1.4 summarizes the research gap and conclusion of this paper is highlighted in section 1.5.

2. Theoretical Framework

Within the broader industrial organisation approach, there are three strands that are used to establish characteristics of an industry. The S-C-P framework (figure 1.) which is the most appropriate to study the banking industry has been used to study the nature of the banking market in terms of market structure, conduct and performance.

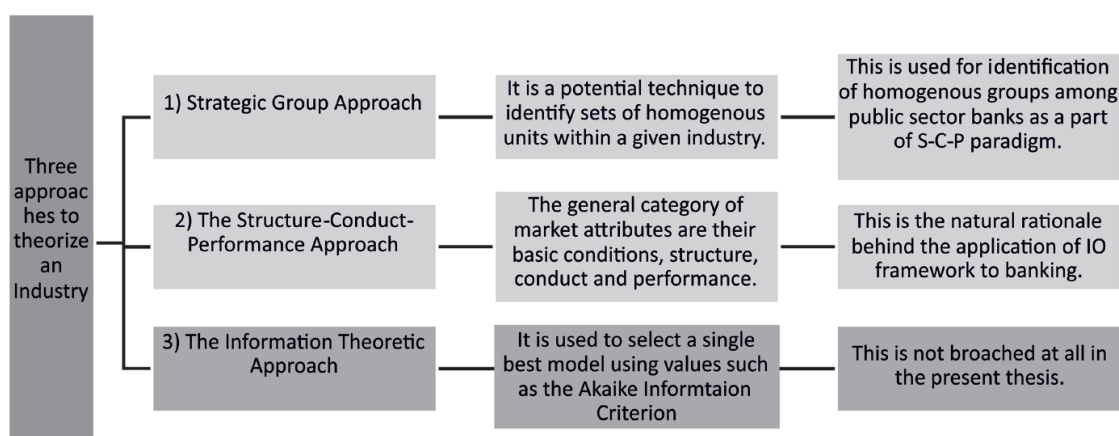


Figure 1: S-C-P Framework

Source: Authors' own compilation

The S-C-P paradigm assumes that there are certain attributes which are given and are referred to as basic conditions. Furthermore, there is a chain of causation that logically determines all the other attributes in a sequence as follows: In the chain, basic conditions are the primary determinants of the market or industry structure. In the next step, the structure of the industry influences the conduct or behavior of the participants in the industry. Conduct, in turn, influences performance finally. The schema of traditional S-C-P paradigm was like the flowchart below (figure 2):



Figure 2: Flowchart of S-C-P paradigm

Source: Authors' own compilation

3. Literature review

S. No.	Name of the Author & Title of the study	Objective of the study	Time Period of the study	Variables of the Study	Data & Methodology	Main Findings
A. Literature Review on Structure						
1	(Murthy & Deb, 2014) "Measurement and Determinants of Competition in Private Banking Industry in India during 1992-2002"	To analyse the limitations of concentration as a measure of competition.	1992-2002	Concentration and competition	Three-equation simultaneous equation model is used in the research through Tobit technique.	A fall in concentration ratio is equated with a rise in competition. An analysis of concentration ratio needs to be supplemented by an analysis of changes in the identities of leading firms.
2	(Bajaj, 2008) "Indian Public Sector Banking Industry: 1992-2006- An Impact of Reforms"	The focus was mainly on the impact of deregulation on public sector banks in India.	1992-2006	Assets, deposit, and advances	SCP framework	Share of public sector banks was slowly decreasing over the time because of the entry of new private banks and foreign banks.
3	(Gupta, 2013) "A comparative study of public and private banking industry in India"	It assesses the impact of banking reforms and competition in public and private sectors.	1996-2010	Net profit, operating efficiency, and absolute spread.	Use of Panel data research methodology involving 27 public sector banks and 19 private sector banks over fifteen years.	Competition has emerged in the form of new banks vs. incumbents rather than in the form of public vs. private banks. Operating efficiency and better conduct in terms of asset management, technology, advertisement, and absolute spread are the keys to performance.

S. No.	Name of the Author & Title of the study	Objective of the study	Time Period of the study	Variables of the Study	Data & Methodology	Main Findings
4	(Amel & Rhoades, 1988) "Strategic groups in Banking"	This paper tested the strategic groups hypothesis using cluster analysis.	1978, 1981, and 1984	U.S. Treasury securities; state and local government securities; real estate loans; construction loans; farm loans; residential loans; multifamily nonfarm loans; commercial and industrial (C & I) loans; and loans to individuals	The paper uses Analytical approach and non-hierarchical clustering algorithm.	The results indicate that approximately six strategic groups exist in banking and are stable over time Implications of the results are (1) intra industry profit differences may be due to strategic groups rather than efficiency differences, (2) markets may generally be defined too broadly, (3) investigations for collusion need to focus on homogeneous groups in an industry rather than the whole industry, and (4) there is no simple strategy choice for banks between retail and wholesale banking.
5	(Hannan, 1991) "Bank commercial loan markets and the role of market structure: Evidence from surveys of commercial lending"	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.	1984-1986	Market concentration, maturity of the loan, size of loan, total assets, market population, business failure rate, and average hourly earnings of nonsupervisory manufacturing employees in the market.	Secondary data has been used by the researcher. For evaluating data, coefficient and regression is used.	Greater price rigidity in concentrated markets is offered as a possible reason for the observed differences in the relationship between loan rates and market structure over time.
6	(Heggstad & Rhoades, 1976) "An Analysis of changes in Bank Market Structure"	It tests the market structure-stability relationship in commercial banking.	1966 and 1972	Controllable variables are bank mergers, bank holding company acquisitions, branching, and holding company laws while non-controllable variables are initial market structure, market growth, and size of banks.	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.	The greater the level of concentration in a market, the greater is the stability of firms. Thus, the results are generally consistent with expectations.

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B. Literature review on Conduct						
7	(Arasu, Sridevi, Nageswari, & Ramya, 2019) "A Study on Analysis of Non-Performing Assets and its Impact on Profitability"	It investigates the impact of the level of Non-Performing Assets of private and public sector banks on profitability.	2014-2018	Profitability and Non-performing assets	The secondary data is collected for NPAs of 10 banks. The study has used mean, standard deviation, Pearson cross-correlation, and linear regression model.	The trend of Gross & Net NPA and profitability of both public and private sector banks are found significant.
8	(Numer & Devika, 2019) "A Study on comparative Analysis of Non-Performing Assets in Selected Private Sector Banks in India"	It tries to study the trend of Gross NPA and Net NPA of Axis Bank, Federal Bank, IndusInd Bank only.	2014-2018	GNPA (Gross Non-performing Assets), and NNPA (Net Non-performing Assets)	The paper has used ratio analysis, trend analysis analysing data and Pearson correlation coefficient tool.	On concluding three private sector banks for the comparative is based on the sales report and their market values in the banking sectors.
9	(Kambar, 2019) "A study on the consolidation and merger of public sector banks in India: Issues and challenges"	It attempts to understand mergers and consolidation.	2016-2017	Deposits, Gross Advances, Gross NPAs, and Net Profits/Loss	The study has used secondary data based on descriptive analysis methods.	A steady rise in the NPA's of banks affects not only the banking sector but the country's economy. creating a bad bank remains a politically volatile idea and is difficult to implement.
10	(Kapadia & Madhav, 2019) "NPAs in Indian Scheduled Commercial Banks: Origination and Impact on Economy"	To investigate the trend in NPAs.	2006-2017	GNPA (Gross Non-performing Assets), and NNPA (Net Non-performing Assets)	The study is descriptive in nature.	The prudential norms laid down by the RBI must equip the banking system to reduce if not completely to keep away from the problem of NPAs.
11	(Kumari, Singh, & Sharma, 2017) "Impact of Non-Performing Assets (NPAs) on Financial Performance of Indian Banking Sector"	It examines the relationship between NPAs and financial performance (ROA) of selected public and private sector banks.	2013-2017	Return on assets, Gross Non-performing Assets, Net Non-performing Assets, and Age	It is an empirical study regression model.	The study found a significant and positive impact of GNPA and NNPA on financial performance (ROA) of public sector banks.
12	(Raj, Jain, Bansal, & Verma, 2018) "Non-Performing Assets: A Comparative Study of SBI & ICICI Bank from 2014-2017"	To study whether there exists any linear relationship between Net profit and Net NPA in case of both the banks.	2014-2017	NPAs (Non-performing Assets), and Net Profit	The data is collected using secondary data analysis and the techniques used involve correlation analysis using SPSS.	On comparing the two banks based on the effect on its profitability, SBI has higher NPAs as compared to ICICI bank because of its public nature.

S. No.	Name of the Author & Title of the study	Objective of the study	Time Period of the study	Variables of the Study	Data & Methodology	Main Findings
13	(Rayudu & Rajesh, 2018) "A Study on Non-Performing Assets in Selected Public and Private Sector Banks in India"	To study the status of Non-Performing Assets in selected public and Private sector banks.	2015-2017	NPAs (Non-performing Assets)	This study used techniques of mean, standard deviation, and two-way analysis of variance (ANOVA).	The government, Reserve Bank of India and management of banks should make more reforms in the financial sector especially in banking to control and avoid the bad loans and advances.
14	(Mishra & Pawaskar, 2017) "A Study of Non-Performing Assets and its Impact on Banking Sector"	The present study tries to understand the NPAs sector wise and the recovery through various channels.	2011-2016	NPAs (Non-performing Assets)	Financial Ratios	The conclusion of the study is that the Bank needs to have a better credit appraisal system so as to prevent NPAs from occurring.
15	(Alagarsamy, 2017) "Performance of non-performing assets (NPA) in state bank of India"	It analyses the performance of NPA in state banks of India.	2012-2017	GNPA (Gross Non-performing Assets)	Trend Analysis	The researcher concluded that the government and bankers have to make a serious effort to decrease the NPA otherwise it thoroughly damages the bank profit of the banker and also is not good for the developing countries.
16	(Mittal & Suneja, 2017) "The problem of Rising Non-performing Assets in Banking Sector in India: Comparative analysis of public and private sector banks"	It analyses the impact of NPAs on banks' performance and the reasons for mounting NPAs in banks in India.	2005-2016	GNPA (Gross Non-performing Assets), and NNPA (Net Non-performing Assets)	It is an analytical and descriptive study that analyses data using bar graphs and figures.	The government is taking many steps to reduce the problem of NPAs, but banks should also have to be more proactive to adopt a structured NPAs policy to prevent the non-performing assets and should follow stringent measures for its recovery.
17	(Bag & Islam, 2017) "Non-performing assets a biggest challenge in banking sector- a comparative study between India and Bangladesh banking sector"	To understand the concept of non performing assets of Indian Bank as well as Bangladesh Bank.	2011-2016	ROE, ROA, and NPA (Non-performing Asset)	The regression analysis has been performed to estimate the effect of NPAs on the profitability of banks in India.	The Conclusion of study is that the growth of NPAs in Indian public sector banks as well as Bangladesh State owned banks are dramatically upward rising while private sector banks in both the countries are more conscious about the NPAs as well as total advances.
18	(Laveena & Guleria, 2016) "A Study of Non-Performing Assets of Public Sector Banks in India"	This study tries to compare performance of public sector banks with private sector banks in India.	2011-2015	Net profit and ROA (Return on Asset)	This paper has computed NNPA to know the risk level of banks.	The NPA level of the banking system is still at a high level compared to the international standards.

S. No.	Name of the Author & Title of the study	Objective of the study	Time Period of the study	Variables of the Study	Data & Methodology	Main Findings
19	(Singh, 2016) "A Study of Non-Performing Assets of Commercial Banks and it's recovery in India"	It studies the status of Non-Performing Assets of Indian Scheduled Commercial Banks in India.	2000-2014	GNPA (Gross Non-performing Assets) and NNPA (Net Non-performing Assets)	The paper has used charts and graphs to represent data.	The conclusion of the study shows that the extent of NPA is comparatively very high in public sector banks as compared to the foreign banks.
20	(Durafe & Singh, 2016) "Cyclical Behavior of Public and Private Sector Banks: A Comparative Study of Non-performing Assets"	To study the cyclical behavior of public sector bank groups and private sector bank groups in India with a focus on non-performing assets.	1999-2013	NPA (Non-performing Asset), credit inclination, Loan maturity, unsecured lending, cost condition, GDP, and Inflation adjusted GDP deflator.	The study has used secondary data and the methods of Pearson correlation coefficient and multiple regression analysis for the analysis of data.	The findings indicate that when GDP increases, NPA decreases and when GDP decreases NPAs increase.
21	(Garg, 2016) "A study on management of non-performing assets in Context of Indian banking system"	To study the preventive mechanism for NPA and Compromise settlement scheme.	2010-2015	NPA (Non-performing Asset), profitability, liquidity, and credit loss.	The research has used a combined approach that involves both the features of analytical and descriptive research designs.	The conclusion of the study based on the problem of NPA has arisen due to the basic objective behind lending of public sector banks that is social welfare.
22	(Shiralashetti & Poojari, 2016) "Non-Performing Assets: A Case Study of Syndicate Bank"	To analyse the gross, net NPA, and sector wise NPA.	2011-2015	Net profit and Gross NPA	The data has been analysed by using percentage, t-test, regression and one way ANOVA.	Banks must take more care in avoiding any account becoming NPA by taking proper preventive measures in an efficient manner.
23	(Bandyopadhyay, 2016) "An Analysis of the Non-Performing Assets of some selected public sector banks in India."	To examine the overall trends of NPAs and to explore the dynamicity of NPA as the variable under study over time in selected PSBs.	1996-2012	NPA (Non-performing Asset) and strategic banking variables.	The study has used an empirical approach for analysing the movement of NPA and its impact on PSBs based on Secondary data.	The study has clearly demonstrated that NPA in PSBs are on the rise for the last three years and is expected to rise still further in next three years.
24	(Rao & Patel, 2015) "A study on non-performing assets management with reference to public sector banks, private sector banks and foreign banks in India"	To analyse and interpret various NPA related ratios for aggregates of Public Sector, Private Sector and Foreign Banks in India.	2009-2013	NPA (Non-performing Asset) and GNPA (Gross Non-performing Asset),	The paper has used Descriptive research design that includes tools like ratio analysis, application of least square method, and use of SPSS. The paper has used secondary data for analysis of NPA.	The conclusion of the study in case of ANOVA test is found, Ratio of Gross NPA to Gross Advances for Public Sector and Foreign Banks does not have significant difference from 2009 to 2013, and it does not reject our null hypothesis.

S. No.	Name of the Author & Title of the study	Objective of the study	Time Period of the study	Variables of the Study	Data & Methodology	Main Findings
25	(Joseph & Prakash, 2014) "A Study on Analysing the Trend of NPA Level in Private Sector Banks and Public Sector Banks"	To identify the trend in NPA level.	2008-2013	NPA (Non-performing Asset), Standard advances, Sub-standard advances, and doubtful advances	Ratios	The conclusion of the study is that compared to private sector banks, public sector banks are more in the NPA level.
26	(Ibrahim & Thangavelu, 2014) "A Study on the Composition of Non-Performing Assets (NPAs) of Scheduled Commercial Banks in India"	To review the trend of Gross NPAs of public, private, and foreign banks of Scheduled Commercial Banks in India.	2007-2012	NPA (Non-performing Asset) and loss assets	The paper has collected secondary data for analysis and used regression analysis for finding conclusions.	The conclusion of the study is that the RBI and the Government of India have taken innumerable steps to reduce the volume of NPAs of the Scheduled Commercial Banks.
27	(Das & Dutta, 2014) "A Study on NPA of Public Sector Banks in India"	The objective of the study is to find out whether there is any difference in the NPA occurrence between the various banks during the period of the study.	2008-2013	Net non-performing assets	For the purpose of this study, secondary data has been used and the researcher has used analysis of variance (ANOVA) one way.	The study finds out that there is no significant difference between the means of NPA of the banks at five percent level of significance.
28	Siraj K.K.(2014) "A Study on Non-Performing Assets Of Public Sector Banks In India With Special Reference To State Bank Of Travancore"	To analyse the trend of the NPA in Public Sector Banks in India vis-à-vis State Bank of Travancore.	2001-2012	Variables used are total advances, capital, reserve and surplus, deposits, advances-sector wise, investments, total assets, Interest expended, operating expenses, provision and contingencies, total expenses, and profit or loss.	The study is both a descriptive and analytical study. It has used both primary and secondary data. The statistical tools used include averages, ratio, Exponential Growth Rate, Correlation-Regression, ANOVA, F-test, t-test, Sobel test, Welch statistics.	Significant differences are observed between SBI and SB of Travancore.

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C. Literature review on Performance						
29	(Sarkar & Sarkar, 1998) "Does Ownership Always Matter? -Evidence from the Indian Banking Industry"	To investigate the effect of ownership by examining public and private sector banks.	1994-95	Explained variables includes ROA (Net profit/assets), OPR (Operating profit/assets), NIM (Net interest margin/assets), OCR (Operating cost/assets), and SER (Staff expense/asset) while explanatory variables are assets, investment in Govt securities/assets, Noninterest income/assets, rural branches/urban branches, and priority sector advances/assets.	Mean and standard Deviation	It is found privatization is likely to be an effective policy for improving the performance of ailing public-sector enterprises in emerging economies like India.
30	(Armijo & Jha, 1997) "Centre-State relations in India and Brazil: Privatisation of Electricity and Banking"	This paper examined the political factors involved in privatisation of the banking and electricity sectors of two nations: India and Brazil.	The period of study relates to the early 1990s	Center-state relations and the gradual process of national economic liberalization	It is a descriptive paper and uses secondary data.	They arrived at the conclusion that the leftist ideology and beliefs of particular politicians may be a factor in shaping politicians' attitudes toward privatization, but it is unlikely to be the most crucial one.
31	(Mohan, Privatisation: Theory and Evidence, 2001) "Privatisation: Theory and Evidence"	It attempts with the help of survey theoretical and empirical work on privatization to induce a measure of caution in statements about the likely efficacy of privatization.	1961-1990	Sales assets, and number of employees	The paper has used four performance measures that include return on assets, return on sales, net income, and return on equity.	The paper concludes that privatisation is seen to work best when allied with competition or deregulation.
32	(Subramanian, 2014) "Financial Performance Analysis - A Case Study"	It makes an attempt to evaluate the financial performance of private sector banks in India and rank them based on each variable	2003-2006	Business per employee, return on assets, profit per employee, capital adequacy, credit deposit ratio, operating profit and percentage of net non-performing asset to net advance	Regression	The paper concludes that the Indian banking system has undergone a drastic change since liberalization. The new generation private sector banks have best used the technology; utilize the manpower in an effective manner

S. No.	Name of the Author & Title of the study	Objective of the study	Time Period of the study	Variables of the Study	Data & Methodology	Main Findings
33	(Prasad & Ghosh, 2005) "Competition in Indian Banking"	This paper 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.	1996-2004	Number of banks, Total assets, total deposits, and total credits	The research paper has used the PANZAR-ROSSE test for assessing competition in banking.	The empirical evidence reveals that the Indian banking system operates under competitive conditions and earns revenues as if under monopolistic competition.
34	(Murthy & Deb, 2008) "Operationalizing and Measuring Competition: Determinants of Competition in Private Banking Industry in India"	This paper provides a theoretical framework of competition that can be applied to banking also. Discussing the evolution of competition, the study proves how ordinary Structure Conduct and Performance Approach (S-C-P paradigm) is unsuitable in judging market dynamics.	1995-2002	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	Correlation coefficient, chi square test, and simultaneous equation.	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
35	(Tabi & Joseph, 2006) "Profitability Performance in the Banking Industry of CFA Countries: _ The Case of Commercial Banks in Cameroon"	This study tested empirically the Structure - Performance (S- P) hypothesis within the context of the Cameroonian Commercial banking system.	1987-1999	Independent variable includes Index of market concentration, Management of bank's capital, Bank's loan portfolio, Total advances to total deposit, Bank size, Expense control, and period of study while dependent variables include ROA, ROC, and ROE	Three accounting measures of bank's performance were utilised: return on capital (ROC), return on assets (ROA) and return on equity (ROE).	The results indicate that the market concentration power is of paramount importance in the determination of bank profitability the positive effects of bank's size, time and savings deposits to total deposit ratio and the 1994 CFA devaluation cannot be emphasized

S. No.	Name of the Author & Title of the study	Objective of the study	Time Period of the study	Variables of the Study	Data & Methodology	Main Findings
36	(Neuberger, 1998) "Direct Banking - A Demand Pull and Technology Push Innovation"	His paper reviews the literature by focusing on the links between theoretical and empirical research.	1994-1995	Market share is the independent variable while price data as dependent variable	The paper has used SCP (Structure-conduct-performance) Paradigm for conducting theoretical and empirical research.	The results are to alternative assumptions about the type of competition or structural variables affected by deregulations and technological progress. He concludes, more research needs to be done which differentiates between different product and geographic markets and accounts for banking size, portfolio structure and regulatory settings.
37	(Srinivas & Kumar, 2010) "Is Structure-Conduct-Performance a case of structure-performance? Structural Equation Modelling of Indian industries"	This paper conceptualised a theoretical model Based on Bain's work for the Structure-Conduct-Performance (S-C-P) paradigm.	1991-2005	Structure variable is HHI and entry barrier; conduct variables are advertisement as proportion of sales, research and development Expenditure, debt-equity ratio, and distribution expenditure; and performance variable include profit after tax	The paper has collected data for 124 industries and the technique of Structural Equation Modelling (SEM).	The results indicate that direct and total effects of industry structure on firms' profitability are positive and significant while the indirect effects are insignificant. It is observed that in the presence of entry barriers, industry concentration has no significant effect on firms' profitability.
38	(Mohan, 2005) "Bank Consolidation Issues and Evidence"	It states that India's public sector banks lack a compelling rationale for consolidation.	1996-2004	Assets, deposits, profits, non-interest income, and operating costs	The study is a descriptive study and has used secondary data.	The performance of PSBs, measured by the appreciation in stock values, has also been very impressive. Also, greater size is the key to further performance improvement.

S. No.	Name of the Author & Title of the study	Objective of the study	Time Period of the study	Variables of the Study	Data & Methodology	Main Findings
39	(Kaur & Kaur, 2010) "Impact of Mergers on the Cost Efficiency of Indian Commercial Banks"	It examined the cost efficiency of Indian commercial banks	1990-2008	Input variables are labor, loanable funds, and physical capital while the output variables are non-interest income, net-interest income, and advances	The paper has analysed the cost efficiency of Indian commercial banks by using a non-parametric Data Envelopment Analysis Technique.	This study suggests that over the entire study period average cost efficiency of public sector banks was found to be 73.4 and for private sector banks is 76.3 percent. The findings of this paper suggest that to some extent the merger programme has been successful in the Indian banking sector.
40	(Gupta & Murthy, 2012) "Demise of Development Financial Institutions in India: A Critical Appraisal"	It evaluated the views in favor and in against demise of DFIs in India and concluded that commercial banks are not in a position to fill the gap of long-term financing being taken care of DFIs earlier.	1999-2005	NPA, Profit after tax, Margin, and Capital adequacy ratio	The research paper is a descriptive study and has used secondary data from the bank's annual reports, journals, RBI website.	It has been concluded that Development finance institutions were capable of bearing the risk of undertaking huge projects.

4. Research Gap

These studies made important contributions to the comparative analysis of profitability of public sector banking industry with respect to private and foreign banks, but none of them provided a rigorous analysis of the impact of reforms on the profitability of public sector banking industry over time. Issues explored in these studies are related to interest and non-interest income, bank size, technology issues, and formation of non-performing assets. At times, public sector banks have faced criticism that they are inefficient, uncompetitive, and a burden on exchequer. Many of the studies have compared public sector banks with old private, new private and foreign banks. But now questions arise whether with the adaptation of liberal economic policies and market model, other objectives than profit are irrelevant. Secondly, given their own frame of reference, can they be dubbed as good or bad? These issues are to be taken in the present study to have a deep insight into the functioning of public sector banks and to examine whether there are homogeneous groups among public sector banks.

5. Conclusion

From the discussion of literature on structure, conduct and performance, it broadly follows that the PSBs are facing stiff competition after the

entry of new private and foreign banks. Their share in the market is decreasing slowly and the share of private and foreign banks is increasing. The existing literature looks at concentration ratio in terms of asset, deposit and advances. Market structure needs to be analyzed by taking more variables like deposits plus advances to show barriers to entry, absolute advertisement expenditure as a proxy of selling cost, other income to show product differentiation, and concentration ratio which tells about the nature of the market. There is a strong need to check the presence of strategic groups amongst public sector banks in India because very often it is said that there are no strategic groups. Moreover, the State Bank of India (SBI) is the undisputed leader in the market, but we need to examine whether competitive rivalry has impacted SBI adversely. Also, we must investigate if there is presence of oligopolistic behavior in the market. In case of conduct it can be said that reforms have been successful in affecting change in the conduct of the banks. But banks still need to focus on various conduct variables to compete efficiently. The other conduct variables related to staff, operational expenditure, advertisement expenditure, other fixed assets, non-interest income, term loans to total advances, investment in G-sec etc. need to be examined in case of the public sector banking industry. There are some more general impressions about the public sector banking industry; they don't compete with new private banks which entered the Indian banking industry due to the historic accident which led to implementation of Narasimham Committee report I and II. Very often it is said that these banks are homogeneous in character and that is why they do not compete amongst each other. The extant literature shows that performance and productivity of the public sector banking industry has improved but banks level data needs to be analysed to have in-depth results to see how competitive forces are being unleashed in the industry. Moreover, one needs to check the impact of new policies and variables on profitability of the public sector banking industry because their profitability and efficiency is questioned at times.

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