

Deregulation and Changes in the Performance of Indian Banks

Dr. R.K.Uppal*

KEY WORDS:

Banking Sector Reforms,
Deregulation, Net Profit,
Intermediation Cost.

Abstract: The financial sector reforms particularly the banking sector reforms, enhanced the performance of the various bank groups. The present paper has analysed the performance of various bank groups in the deregulation era on the basis of certain parameters like net profit as percentage of total assets, intermediation cost as percentage of total assets, net interest income as percentage of total assets, provisions and contingencies as percentage of total assets and non – performing assets as percentage of total assets. The paper concludes that performance during the study period has increased in all bank groups particularly more benefited are new private banks and foreign banks.

Introduction:

A major area of the macro-economy that has received renewed focus in recent years has been the financial sector. Within the broad ambit of the financial sector, the banking sector has been the cynosure of academia and policy makers. Consequently policy has been dovetailed to measure the enhancement of the ease of intermediation in order to lower the cost at which these resources can be made available to final investors, to enhance the investment and growth in long run. Secondly, there is a world-wide trend towards deregulation of the financial sector. With the deregulation of financial sector, various categories of risk are faced by the banking sector. Therefore the main thrust of the first banking sector reforms was to minimise the risk to the banking sector. At that time, a number of deficiencies were found in Indian banking system such as increasing branches, continuous losses, declining productivity and profitability, functioning under highly regulated environment etc. that resulted in declining performance of Indian banks. To control this situation the first banking sector reforms were introduced in 1991. With the banking sector reforms, competition among the banks has increased because of entry of new private sector banks and foreign banks. Banks have to explore and exploit the economies of scale and scope for successfully facing competition. Thus efficiency, as a result, has become a critical objective to be aimed at and achieved. The reforms have improved the freedom of banks to operate in financial markets and various policy measures have been introduced to strengthen Indian banking.

After some period, second banking sector reforms were introduced with the focus on computerisation of all the Indian banking industry and mergers and acquisitions of banks to

* The author is Head, Dept. of Economics, D.A.V.College, Malout (Pb) and he can be reached at :
rkuppal_mlt@yahoo.com

strengthen their efficiency. Due to globalisation and WTO, banking has under gone a paradigm shift that has resulted in the transformation of the whole banking industry. Due to these very changes, Indian banking industry has to face competition. This is especially true of public sector banks. By the very nature of ownership, having large network of branches, Public sector banks are facing many problems such as overstaffing, conflict to adopt new technology, etc. because they may not have the type of flexibility that Indian private sector banks and foreign banks operating in India enjoy. Hence they are facing serious challenges from new private sector banks and foreign banks. With the changing time, various policy measures were introduced to improve the performance of the banks but these did not always delivered desired results. Therefore, there is a need to introduce further reforms with respect to the changing environment. Also, there is a need to evaluate the performance and profitability of the banks at various time intervals.

Review of Literature:

Perhaps, because profitability was not the objective of Indian Banks, there have not been many attempts at comparing profitability in the various categories of banks. Swami (1994) attempted to focus on profitability within public sector banks in an attempt to set benchmarks for laggards. Sarker and Das (1997) compared performance public, private and foreign banks for the year 1994-95 by using the measures of profitability, productivity and financial management. They find public sector banks (PSBs) comparing poorly with the other two categories. However, they caution that no firm inference can be derived from a comparison done for a single year.

Bhattacharyya(1997)studied the impact of the limited liberalisation initiated before the deregulation of the nineties on the performance of the different categories of banks, using Data Envelopment analysis. Their study covered 70 banks in the period

1986-91. They constructed one grand frontier for the entire period and measured technical efficiency of the banks under study.

T T Ram Mohan (2002) found that PSBs had the highest efficiency among the three categories, with foreign and private banks having much lower efficiency. After 1987, private banks showed no change and foreign banks showed a sharp rise in efficiency. This might be attributed to the fact that in the nationalised era, public sector banks were successful in achieving their principal objective of deposit and loan expansion. It is all too often forgotten that efficiency is to be judged in relation to objectives set for management, not in relation to objective that are believed to be desirable in themselves.

The Reserve Bank of India's (RBI) observation on the period subsequent to 1990-96 deserves to be carefully observed viz. "Development in the subsequent period indicate that a majority of the public sector banks have been able to progress considerably towards the direction of passing the 'acid test' of achieving the competitive efficiency. They have been actively engaged in overcoming the challenges of progressively conforming to the international best practices in various areas."

Bhide, Parsad and Ghosh, (2002) concluded that the reform process cannot be entirely painless. While there are achievements, there are pitfalls as well. What is important is to strike a balance: tread a careful middle path between the ex-cathedra over zeal for invention and a complacent belief in the ability of the banking system to self-rectify its deficiencies. This is because in an ideal world, there is always a smattering of small disturbance every year to keep the authorities on their toes.

Ketkar (2008) commented that a number of researchers have used the DEA model to determine efficiency of banks around the world, including India. Ketkar further highlights the uniqueness of her study as "Our research covers a much longer time period from 1993-94 to 2003-04, allowing us to draw conclusions about changes in the efficiency of different types of banks following the liberalisation and deregulation of the system in recent years. Furthermore, we advance the research in this area in one important way by explicitly incorporating regional economic disparities that impinge upon the various banks' perceived efficiency in providing banking services. We develop a new branch weighted state level income variable as a measure of economic environment in which banks operate. Banks with extensive multi-state branch networks such as the State Bank of India (SBI) would be tapping into the income of many more households and businesses than regional banks. Banks with multi-state presence will, therefore, show higher efficiency scores certainly in garnering deposits and perhaps in making loans as well. We test this hypothesis in two alternative ways – (1) by using the branch-weighted state-level income variable as an input in the DEA model, and (2) by introducing this variable as a factor in the multiple regressions estimated to explain efficiency differentials among banks due to regulatory mandates and managerial decisions. Our study finds that regulatory mandates negatively impacted bank efficiency and more capital and improved worker skills had a positive impact on bank efficiency."

Objective:

To study and examine the trends in selected parameters and their impact on the performance of all bank groups under the regime of interest deregulation.

Research Methodology:

The present paper is concerned with the banking industry and their different groups like public sector banks, SBI group, nationalised banks, old private banks, new private banks, foreign banks and with all scheduled commercial banks to analyse the performance of the banks with selected parameters. Mean, S.D. and C.V. have been calculated to assess and analyse the performance of various bank groups. Secondary data viz. Performance Highlights, IBA, (issues from 1999-00 to 2007-08) was used for the study.

Parameters:

To assess the profitability of banking industry the following parameters have been considered.

- 1 Net profit as a percentage of total assets
- 2 Intermediation cost as a percentage of total assets
- 3 Net interest income as a percentage of total assets
- 4 Provisions and Contingencies as a percentage of total assets
- 5 Non-performing assets as a percentage of total assets

All the parameters have been analysed after second banking sector reforms era.

Results and Discussions:

It is mandatory for all the banks to make provisions for tax, non-performing assets etc. under the accounting norms which further depends on number of factors. Thus profitability is a ratio of net profits as a percentage of total assets, whereas Intermediation cost indicates the extent of operating expenses to total assets that reflects the competitive efficiency.

Public Sector Banks:

In public sector banks, net profit was 0.57 per cent in 1999-00 and 0.88 per cent in 2007-08. Net interest income has increased in 2007-08. Net interest income of banks was 2.70 per cent in 1999-00 and 2.15 per cent in 2007-08. But on the other hand, net interest income has decreased during the year 2007-08. NPA of public sector bank was 2.94 per cent and 0.54 per cent respectively year 1999-00 and 2007-08. Overall average intermediation cost is 5.01 per cent and net profit is 0.79 per cent. Similarly overall average of net interest income of public sector bank is 2.74 per cent. The highest variation is found in nonperforming asset (49.02 %).

Nationalised Banks:

Net profit in nationalised bank was 0.44 per cent in 1999-00 and 0.90 per cent in 2007-08. Intermediation cost was 6.40 per cent in 1999-00 and 4.98 per cent in 2007-08. Provisions and contingencies were 0.86 per cent in 1999-00 and 0.79 per cent in 2007-08. It shows decline during the year 2007-08. Table 2 shows

Table 1 : Key Performance Indicators for Public Sector Bank

As percentage of Total Assets	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Average	S.D.	C.V.
Net Profit	0.57	0.42	0.72	0.96	1.12	0.87	0.82	0.83	0.88	0.79	0.21	26.58
Intermediation Cost	6.22	5.99	5.99	5.43	4.47	3.88	4.00	4.18	4.93	5.01	0.93	18.56
Net Interest Income	2.70	2.86	2.73	2.91	2.98	2.91	2.85	2.55	2.15	2.74	0.26	9.48
Provisions and Contingencies	0.89	0.92	1.16	1.36	1.55	1.31	1.06	0.92	0.79	1.10	0.252	2.73
Non Performing Assets	5.95	5.31	5.42	4.21	3.50	2.73	2.05	1.60	1.54	3.57	1.754	9.02

Source: Performance Highlights, IBA, Various Issues from 1999-00 to 2007-08.

Table 2: Key Performance Indicators for Nationalised Bank

As percentage of Total Assets	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Average	S.D.	C.V.
Net Profit	0.44	0.33	0.69	0.98	1.19	0.89	0.81	0.85	0.90	0.79	0.27	34.17
Intermediation Cost	6.40	6.19	6.03	5.39	4.38	3.89	3.84	4.16	4.98	5.03	1.01	20.07
Net Interest Income	2.66	2.90	2.74	3.00	3.06	3.02	2.89	2.66	2.23	2.79	0.26	9.32
Provisions and Contingencies	0.86	0.95	1.15	1.35	1.52	1.28	0.98	0.95	0.79	1.09	0.25	22.94
Non Performing Assets	6.00	5.44	3.70	4.66	3.86	2.96	2.24	1.64	1.25	3.38	1.75	51.78

Source: Performance Highlights, IBA, Various Issues from 1999-00 to 2007-08.

shows that overall average net profit is 0.79 per cent in 2007-08 and intermediation cost i.e. interest expenditure is 5.03 per cent. The highest variation is found in non performing assets 51.78 per cent.

SBI Group:

Net profit was 0.80 per cent in 1999-00 and 0.89 per cent in 2007-08. Intermediation cost of the bank was 5.91 per cent in 1999-00 and 4.73 per cent in 2007-08. Net interest income was 2.76 per cent in 1999-00 and 2.24 per cent in 2007-08. It shows net interest income has declined during 2007-08. Similarly NPA of the bank were 5.88 per cent in 1999-00 and 1.53 per cent in 2007-08.

Overall average intermediation cost is 4.93 per cent and provisions and contingencies are 1.17 per cent. Net interest income is 2.76 per cent. Coefficient of variation is highest 50.45 per cent in non performing asset.

Old Private Banks:

Net profit of the old private banks was 0.79 per cent in 1999-00 and 1.02 per cent in 2007-08. Net profit of the banks increased during 2007-08. Intermediation cost of old private banks was 6.82 per cent in 1999-00 and 5.12 per cent in 2007-08. It shows intermediation cost has declined during 2007-08. Net interest income was 9.02 per cent in 1999-00 and 2.43 per cent in 2007-

Table 3: Key Performance Indicators for SBI Group

As percentage of Total Assets	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Average	S.D.	C.V.
Net Profit	0.80	0.55	0.77	0.91	1.02	0.91	0.86	0.82	0.89	0.84	0.13	15.48
Intermediation Cost	5.91	5.68	5.91	5.50	4.62	3.96	4.05	4.05	4.73	4.93	0.82	16.63
Net Interest Income	2.76	2.79	2.71	2.76	2.83	3.06	3.07	2.59	2.24	2.76	0.25	9.06
Provisions and Contingencies	0.94	0.87	1.17	1.36	1.59	1.53	1.31	0.96	0.83	1.17	0.29	24.79
Non Performing Assets	5.88	5.11	5.16	3.48	2.91	2.49	1.81	1.57	1.53	3.33	1.68	50.45

Source: Performance Highlights, IBA, Various Issues from 1999-00 to 2007-08.

Table 4: Key Performance Indicators for Old Private Bank

As percentage of Total Assets	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Average	S.D.	C.V.
Net Profit	0.79	0.59	1.08	1.17	1.20	0.33	0.58	0.70	1.02	0.83	0.30	20.69
Intermediation Cost	6.82	7.02	6.97	6.03	4.96	4.25	4.17	4.39	5.12	5.53	1.19	23.26
Net Interest Income	9.02	2.51	2.39	2.47	2.60	2.70	2.75	2.75	2.43	3.29	2.15	67.97
Provisions and Contingencies	0.94	1.15	1.62	1.50	1.45	1.35	0.93	1.18	0.84	1.22	0.28	21.78
Non Performing Assets	0.41	5.64	6.03	4.34	3.64	3.15	2.51	1.85	1.31	3.21	1.91	59.50

Source: Performance Highlights, IBA, Various Issues from 1999-00 to 2007-08.

Non performing assets were 0.41 per cent in 1999-00 and 1.31 per cent in 2007-08. It shows NPA have increased during 2007-08. Overall average of provisions and contingencies is 1.22 per cent and intermediation cost is 5.53 per cent. Similarly average net profit is 0.83 per cent. Coefficient of variation of net interest income is 67.97 per cent, which is highest.

New Private Banks:

Net profit of the private sector banks is 0.91 per cent in 1999-00, which is less than 1.01 per cent in 2007-08. Intermediation cost was 5.33 per cent in 1999-00 and 5.17 per cent in 2007-08. It

shows that intermediation cost has declined during 2007-08. Net interest income is 7.10 per cent in 1999-00 and 2.40 per cent in 2007-08. It shows that net interest income has declined during 2007-08. Provisions and contingencies were 0.94 per cent in 1999-00 and 0.84 per cent in 2007-08. Non-performing assets were 0.41 per cent in 1999-00, which is less than 1.31 per cent in 2007-08. Overall average of net profit is 0.87 per cent. Similarly intermediation cost and provisions and contingencies were 4.73 per cent and 1.01 per cent. The highest variation 79.03 per cent is found in non-performing asset.

Table 5: Key Performance Indicators for New Private Banks

As percentage of Total Assets	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Average	S.D.	C.V.
Net Profit	0.91	0.81	0.44	0.90	0.83	1.05	0.97	0.91	1.01	0.87	0.18	20.69
Intermediation Cost	5.33	6.03	3.33	6.43	4.68	3.60	3.62	4.41	5.17	4.73	1.10	23.26
Net Interest Income	7.10	2.14	1.15	1.70	2.03	2.17	2.27	2.10	2.40	2.56	1.74	67.97
Provisions and Contingencies	1.08	0.93	0.78	1.41	1.26	0.80	0.81	0.91	1.08	1.01	0.22	21.78
Non Performing Assets	0.87	6.53	5.45	3.76	2.42	1.56	0.96	1.07	1.40	2.67	2.11	79.03

Source: Performance Highlights, IBA, Various Issues from 1999-00 to 2007-08.

Foreign Banks

Profitability of the foreign banks was 1.17 per cent in 1999-00, which is less than 1.82 per cent in 2007-08. It shows that profitability increased during the 2007-08. Intermediation cost in 1999-00 was 6.01 per cent and 2.91 per cent in 2007-08. Net interest income was 3.92 per cent in 1999-00 and 3.79 per cent in 2007-08. It shows that net interest income has decreased. NPA were 3.16 per cent in 1999-00 and 0.78 per cent in 2007-08. Non-performing assets decreased during the period 2007-08. Overall average of net profit is 1.44 per cent.

Scheduled Commercial Banks:

Net profit was 0.66 per cent in 1999-00 and 0.99 per cent in 2007-08. Net interest income increased in 2007-08. Net interest income of banks was 2.73 per cent in 1999-00 and 2.35 per cent in 2007-08. But on the other hand, net interest income decreased during the year 2007-08. NPA of public sector bank were 5.09 per cent and 1.30 per cent respectively year 1999-00 and 2007-08. Overall average intermediation cost is 4.94 per cent and net profit is 1.52 per cent. Similarly overall average of net interest income of public sector bank is 2.71 per cent. The highest variation is found in net profit is 132.89 per cent.

Table 6: Key Performance Indicators for Foreign Banks

As percentage of Total Assets	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Average	S.D.	C.V.
Net Profit	1.17	0.93	1.32	1.56	1.65	1.29	1.54	1.67	1.82	1.44	0.28	19.44
Intermediation Cost	6.01	5.64	5.34	4.33	3.15	2.63	2.58	2.77	2.91	3.93	1.41	35.87
Net Interest Income	3.92	3.63	3.22	3.35	3.59	3.34	3.58	3.76	3.79	3.58	0.23	6.42
Provisions and Contingencies	2.08	2.12	1.78	1.63	2.02	1.69	1.80	1.83	2.03	1.89	0.18	9.52
Non Performing Assets	3.16	3.04	2.89	2.44	2.13	1.43	0.97	0.82	0.78	1.11	1.44	129.7

Source: Performance Highlights, IBA, Various Issues from 1999-00 to 2007-08.

Table 7: Key Performance Indicators for Scheduled Commercial Banks

As percentage of Total Assets	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Average	S.D.	C.V.
Net Profit	0.66	0.49	0.75	1.01	1.13	6.89	0.88	0.90	0.99	1.52	2.02	132.89
Intermediation Cost	6.25	6.03	5.70	5.51	4.44	3.78	3.85	4.12	4.81	4.94	0.95	19.23
Net Interest Income	2.73	2.85	2.57	2.77	2.88	2.83	2.81	2.58	2.35	2.71	0.17	6.27
Provisions and Contingencies	1.00	1.03	1.19	1.39	1.54	1.28	1.07	1.01	0.95	1.16	0.20	17.24
Non Performing Assets	5.09	4.46	4.32	4.00	3.30	2.52	1.83	1.46	1.30	3.14	1.41	44.90

Source: Performance Highlights, IBA, Various Issues from 1999-00 to 2007-08.

Change In Profitability of Public Sector Banks:

In the public sector banks in 2008 profitability increased up to 0.31 per cent over the year 1999-00. Similarly profitability increased in 2008 over the period 2000-01. Intermediation cost, NPA, provision and contingencies and non-interest income as percentage of total assets declined in 2008. It is a good sign for the Indian banking industry. These changes are showing changing landscape of the Indian banking industry. Indian banking is moving towards a better tomorrow.

Table 8: Change in profitability in 2007-08 relative to 1999-00 and 2000-01 of Public Sector Banks

As percentage of Total Assets	Change Over 1999-00	Change Over 2000-01
Net Profit	0.31	0.46
Intermediation Cost	-1.29	-1.06
Net Interest Income	-0.55	-0.71
Provisions and Contingencies	-0.10	-0.13
Non Performing Assets	-0.35	-2.13

Source: Derived from Table 1

Change in Profitability of Nationalised Banks :

Amongst nationalised banks, in 2008, profitability increased up to 0.46 per cent as percentage of total assets. Similarly profitability increased to 0.57 per cent over the year 2000-01. Intermediation cost declined 1.42 per cent and 1.21 per cent in year 2008 over the year 1999 and 2000 respectively. Similarly non-performing assets, provisions and contingencies and non interest income declined during the year 2008. These changes are showing that nationalised bank has more profitability. These changes are essential for the development of Indian banking industry in future.

Table 9: Change in Profitability in 2007-08 relative to 1999-00 and 2000-01 of Nationalized Banks

As percentage of Total Assets	Change Over 1999-00	Change Over 2000-01
Net Profit	0.46	0.57
Intermediation Cost	-1.42	-1.21
Net Interest Income	-0.43	-0.67
Provisions and Contingencies	-0.07	-0.16
Non Performing Assets	-2.69	-2.51

Source: Derived from Table 2

Table 10 : Change in profitability in 2007-08 relative to 1999-00 and 2000-01 of SBI Group

As percentage of	Change Over 1999-00	Change Over 2000-01
Total Assets		
Net Profit	0.09	0.34
Intermediation Cost	-0.18	-0.95
Net Interest Income	-0.52	-0.55
Provisions and Contingencies	-0.11	-0.04
Non Performing Assets	-2.76	-1.51

Source: Derived from Table 3

Change in Profitability of SBI Group:

In SBI group in 2008, profitability has increased up to 0.09 per cent over the year 1999-00. Similarly profitability has increased 0.34 per cent over the year 2000-01. Net interest income has decreased 0.52 per cent over the year 1999-00 and 0.55 per cent over the year 2000-01. Similarly intermediation cost, provisions and contingencies and non-performing assets have decreased. These changes are showing that Indian banking industry is growing in the recent time.

Change in Profitability of Old Private Banks:

Profitability has increased up to 0.23 per cent over the year 1999-00. Similarly profitability increased 0.43 per cent over the year 2000-01. Provisions and contingencies have decreased up to 0.1 per cent over the year 2000-01. NPA have increased up to 0.9 per cent over the year, but 4.33 per cent over the year 2000-01.

Change in Profitability of New Private Banks:

In new private sector bank in 2008, profitability increased up to 0.1 per cent over the year 1999-00 and it increased up to 0.2 per cent over the year 2000-01. In 2008, provisions and contingencies have not changed over the year 1999-00. But it increased up to 0.15 per cent over the year 2000-01. Non-performing assets, intermediation cost and net interest income declined in 2008.

Table 11: Change in profitability in 2007-08 relative to 1999-00 and 2000-01 of Old Private Banks

As percentage of	Change Over 1999-00	Change Over 2000-01
Total Assets		
Net Profit	0.23	0.43
Intermediation Cost	-1.7	-1.9
Net Interest Income	-6.59	-0.08
Provisions and Contingencies	-0.1	-0.31
Non Performing Assets	-0.9	-4.33

Source: Derived from Table 4

Table 12: Change in profitability in 2007-08 relative to 1999-00 and 2000-01 of New Private Banks

As percentage of	Change Over 1999-00	Change Over 2000-01
Total Assets		
Net Profit	0.1	0.2
Intermediation Cost	-0.16	-0.8
Net Interest Income	-4.7	-0.26
Provisions and Contingencies	-0	-0.15
Non Performing Assets	-0.53	-5.13

Source: Derived from Table 5

Change in Profitability of Foreign Banks:

In foreign banks, profitability increased up to 0.65 per cent over the year 1999-00. Similarly profitability increased over the year 2000-01. Intermediation cost decreased 3.1 per cent over the year 1999-00, but it increased 2.73 per cent over the year 2000-01. Similarly net interest income declined in 2008 over the year 1999-00 but it increased 0.16 per cent over the year 2000-01.

Change in Profitability of All Scheduled Commercial Banks:

In scheduled commercial banks, profitability has increased 0.33 per cent over the year 1999-00 and 0.50 per cent over the year 2000-01. Intermediation cost, net interest income, provisions and contingencies and non-performing assets declined in the year 2008. These changes are showing that Indian banking industry has more profitability.

Table 13: Change in Profitability in 2007-08 relative to 1999-00 and 2000-01 of Foreign Banks

As percentage of	Change Over 1999-00	Change Over 2000-01
Total Assets		
Net Profit	0.65	0.89
Intermediation Cost	-3.1	0.73
Net Interest Income	-0.13	0.16
Provisions and Contingencies	-0.05	-0.09
Non Performing Assets	-2.82	-2.7

Source: Derived from Table 6

Table 14: Change in Profitability in 2007-08 relative to 1999-00 and 2000-01 of All Scheduled Commercial Banks

As percentage of	Change Over 1999-00	Change Over 2000-01
Total Assets		
Net Profit	0.33	0.50
Intermediation Cost	-1.44	-1.22
Net Interest Income	0.38	-0.50
Provisions and Contingencies	-0.05	-0.08
Non Performing Assets	4.52	-3.89

Source: Derived from Table 7

Implications:

The current study is mainly concerned with the analysis of comparative performance of specific bank groups during the period of 1999-00 to 2007-08 that reflects the impact of new competitive environment on the banks' performance in terms of various selected variables. As the study reflects the number of banks that have improved or declined their share in assets of all scheduled commercial banks in respect of all the selected variables, so it provides important analysis to judge the banks with poor performance which further will help to make some policy measures to improve their performance. The study will be more beneficial for the bankers and policy makers to make some important decisions and to make policy measures to improve their performance. The study will also be helpful to the academicians and researchers for further study in this respect.

Conclusion:

Public sector banks have improved their performance in both absolute and relative terms. Net profit of the public sector banks has increased. While foreign banks and other private sector banks continue to earn higher profit rates, the differential in the profit performance among different bank groups has narrowed down substantially. At the same time, efficiency of the banking system as a whole, measured by declining spreads, has improved.

References:

Ackland, R. and Harper, I.R. (1990). Financial Deregulation in Australia: Boon or Bane?. Paper presented to the Joint Conference on Microeconomic Reform in Australia, Canberra.

Bhattacharya, Arunva, Lovell C. A. K. and Sahay Pankaj. (1997), The Impact of Liberalization on the productive Efficiency of Indian Commercial Banks. *European Journal of Operational Research*, 332-345.

Dale, R., (1992), *International Banking Deregulation*, Blackwell Finance.

Dale, R., (1994), *Regulating Investment Business in the Single Market*, Bank of England Quarterly, November, 333-340.

Das, A. (1997). Efficiency of Public Sector Banks: An Application of Data Envelopment Analysis Model. *Prajnan*, 28, 2, 119-131.

Das, A. (1999). Profitability of Public Sector Banks: A Decomposition Model. *Reserve Bank of India Occasional Papers* 20, 1.

Fraser, B. (1996). *Financial Regulation and the Financial System Inquiry*, 5 July, 1996.

George (1996). *Some Thoughts on Financial Regulation*. Bank of England Quarterly Bulletin, May.

Ginsberg, D. (1991). The Goals of Antitrust Revisited. *Journal of Institutional and Theoretical Economics*, 27.

Goodhart, C. and Schoenmaker, D. (1995). Should the Functions of Monetary Policy and Banking Supervision be separated?. *Oxford Economic Papers*, 47, 539-60.

Grenville, S. (1991). *The Evolution of Financial Deregulation*. Macfarlane, I. (ed.), *The Deregulation of Financial Intermediaries*, Reserve Bank of Australia, Sydney.

Harper, I.R., and Scheit, T., (1992), *The Effects of Financial Market Deregulation on Bank Risk and Profitability*, *Australian Economic Papers*, December, 260-271.

House of Representatives Standing Committee on Finance and Public Administration (Martin Committee) (1991), *A Pocket Full of Change: Banking and Deregulation*. (Mr S. Martin, Chairman), AGPS, Canberra.

Indian Banking Association (2005-06). *Performance of Public and Private Sector Banks*. Mumbai

Industry Commission, (1995), *Regulation and its Review 1994 - 95*, Canberra.

Jonson, P., (1996), "Financial Deregulation - the Scorecard", The Committee for Economic Development of Australia.

Jalan, B. (2003). Strengthening Indian Banking and Finance: Progress and Prospects. *IBA Special Issues*, 35, 3, 5-14.

Khezwana, M. and Maunder, D.A.C. (1994). International experiences of deregulated urban public transport systems. *Indian Journal of Transport Management*, July.

Kusum W. Ketkar (2008). *Liberalization and Deregulation: Performance of Banks in India*.

Litan, (1985). *Evaluating and Controlling the Risks of Financial Product Deregulation*. *Yale Journal on Regulation*, 3, 1.

Bhide M.G., Parsad A. and Saibal Ghosh (2002). *Banking Sector Reforms: A Critical Overview* *Economic and Political Weekly*, 36, 4, 399-408.

Ram Mohan, T T (2001) "Setting the Stage for Bank Preservation", *Economic and Political Weekly*, 36, 4, 265-67.

Ram Mohan, T. T. (2002). *Deregulation and Performance of Public Sector Banks*. *Economic and Political Weekly*, 37, 5, 393-96.

Rao, P. (2004). *Indian Banking in 2010*. *IBA Bulletin*, 26, 1, 170-72.

Sarker, P.C. and Das Abhiman (1997). *Development of Composite Index of Banking Efficiency: The Indian Case*. *Reserve Bank of India Occasional Papers*, 18, 1.

Swami, S.B. (1994). *Comparative Performance of Public Sector Banks in India*. *Prajnan*, 21, 2, 185-195.

The Tripartite Group of Bank, Securities and Insurance Regulations, (1995). *The Supervisors of Financial Conglomerates*. July.

Wall, Reichert, and Mohanty, (1993). *Deregulation and the Opportunities for Commercial Bank Diversification*. *Federal Reserve Bank of Atlanta Economic Review*, Sept/Oct.