

**Performance Analysis of Indian Banking Sector: A Comparative Study of Public Sector  
Banks and New Private Sector Banks**

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**Abstract**

The financial sector reforms of 1991 resulted in a comprehensive transformation of the banking sector. With the entry of new private sector banks public sector banks forced to face tough competition. To analyze the profitability of the banking industry a sample of top 5 public sector banks top 5 new private sector banks has been selected for the purpose of study. The data in the study has been taken from 1992-93 to 2011-12. Time period has been further divided into two parts the first part cover the time period of 7 years P1 (From 1992-93 to 1998-99) the first period of reforms and second part covers the period of 13 years P2 (from 1999-2000 to 2011-12) after the second generation bank reforms. The study concluded that the profitability of new private sector banks is significantly better than the public sector banks .The bank reforms had significant impact on the performance of public sector banks as well as new private sector banks over the time period of study.

**Key Words:** Banks, Profitability, Reforms

**Introduction**

The foundation for the banking sector resilience was laid with the introduction of the financial sector reforms in 1991 with focus on free it from the shackles of a highly regulated and strict policy framework, so that it become more competitive and efficient. The economic and qualitative performance of public sector banks was poor as many of them were plagued by poor profitability. Most of them were undercapitalized, with a high proportion of

non-performing assets. The financial sector reforms resulted in a comprehensive transformation of the banking sector.

The reforms had a major impact on the overall efficiency and stability of the banking sector. Indian banking industry was highly concentrated because of state ownership; the Narsimham committee was of the view that uncompetitive and inefficient banking sector would grow with deregulation and opening up it for the new

generation Private sector bank (RBI, Reserve Bank Of India Bulletin). Therefore, the presence of a large number of new private sector banks was seen, as a result public sector banks forced to face tough competition. Banks reforms had a major impact on the overall efficiency and stability of the banks. The outreach of the banks increased in term of bank branches, and ATMs.

### **Profitability of Banks**

The financial performance and efficiency of the Indian banks improved with increased in business and competition, as reflected in their profitability, net interest margin, return on investment and return on equities. The commercial banks in India have been entrusted with the task of providing finance to the weaker section of the society, priority sectors and are under compulsion to implement other schemes of the Government although not profitable. The implementation of govt schemes and adoption of new rules have direct impact on the profitability of the banks. The banks should earn sufficient profit to grow, expand and survive. Thus there is need to study the emerging trends in the profits of commercial banks in India. Profit is the function of income and expenditure, interest earned contribute maximum in the total income of

the banks. In this paper attempt has been made to study the profitability of public sector banks and New private sector banks in India.

### **Review of Literature**

**Kumar and Chalam (1993)** studied profitability of Indian public sector banks during the period 1986 to 1991. For analyzing the profitability they applied these profitability ratios-operating income as percentage of working funds, gross profit as percentage of operating income, gross profit as percentage of working funds and published profit and operating income as percentage of working funds. They suggested that banks should earn sufficient profits, not only to meet their current obligations but also to strengthen their capital base. They were of the opinion that banks could improve their performance and profitability by optimizing the use of funds.

**Mohini (1994)** in her M.Phil Thesis studied the profitability of Indian scheduled commercial Banks with the foreign banks for the period of 1970 to 1990. The study revealed that during the period of study Indian scheduled commercial banks had made remarkable progress in branch expansion in rural areas, deposit mobilization and advances to priority sector and small borrowers, but their profits had

not kept pace with the growth, whereas foreign banks with a limited geographical area and resources earn much more profit as compare to the Indian scheduled commercial banks. She concluded that there was a lot of difference in pattern of business and investments of Indian and foreign banks. The study suggests that more autonomy

**Krishna** (1996) in his paper entitled “Profitability Analysis: An overview” analysed the profitability of banks in detail. According to the researcher it is a rate expressing profit as percentage to the total assets or sales or any other variable to represent assets or sales. It depends upon the nature of the objective that what should be used as numerator and denominator to compute the profit rate.

**Jain and Kumar** (1998) in their study on profitability of banks evaluated and compare the profitability of the selected Indian banks during liberalization and examined the various factors that contributed to the variations in the profitability of various banks. For the purpose of study five large banks in different categories at the time of financial sector reforms in 1991-92 were taken. The study revealed that the performance of private and foreign banks was satisfactory whereas the public sector banks did not perform well.

**Chandan and Rajput** (2002) studied the performance of banks and found that spread (difference between interest earned and non interest income) is the major contributor in the profitability of the banks. He applied

the multiple regression technique to analyse the data. The study further revealed that the performance of private and foreign banks was better than the performance of public sector banks. The study suggested that public sector banks should concentrate on NPAs management and technology development.

**Kohli and chawla** (2006) in their paper evaluated the emerging trends in profits and profitability. For the purpose of study total four banks were selected two from public sector and two from private sector banks. The study covered a time period of ten years from 1995-96 to 2003-04, and data relating to variables like interest income, interest expended, non-interest income, non-interest expenditure, total assets, operating expenditure, deposits and advances had been utilized. Ratio analysis and trend analysis had been employed to measure the profitability and efficiency in banking operations. The study revealed that the performance of the selected private sector banks was better than the public sector banks. The researcher recommended that information technology would be the determinant of growth in future.

**Vinod** (2012) in his paper “A comparative Study of Financial Performance of Indian Banking Sector in Post- Reform period” concluded financial sector reforms had positive impact on the Banking sector in India. The Entry of new private banks has thrown stiff competition for the Public sector banks. The financial sector reforms have brought India’s financial system closer to the global standards but Indian Banks have still a long way to go to catch their counter parts.

**Kalakkar (2012)** in his study analyzed the financial performance of the Indian banks. For the purpose of study 83 Commercial Banks of different categories i.e Public Sector, Private Sector and Foreign Banks were taken into consideration and the empirical results were derived out of the data, which were produced by the banks annually for three years ranging from 2009, 2010 and 2011. The study found that key determinants for the financial performance of the Indian banking sector are: Market share, Investment to deposit ratio and Dummy variables, study suggested that the public sector banks and private sector banks have to increase the market share in order to achieve higher profits, while investment to deposit ratio should also be increased.

### **Objectives of the Study**

- 1) To Compare the Profitability of Public Sector Banks And New Private Sector Banks during the First And Second Period Of Reforms.
- 2) To analyze the impact of bank reforms on the profitability of different bank groups during the time period of study.

### **Research Methodology**

#### **Data collection**

Data has been collected from the Trend and progress of Banking in India, Statistical tables relating to banks various issues published by RBI, Mumbai ,Books, various reports of IBA, and Journals.

#### **Sample Design**

The present study attempts to study the profitability of banking sector in India. To analyze the profitability of the banking

industry a sample of top 5 public sector banks i.e. SBI, bank of Baroda, Punjab National bank, Canara bank, and Bank of India, from public sector banks and top 5 new private sector banks i.e. HDFC, ICICI, Axis Bank, Kotak Mahindra Bank, and IndusInd Bank has been selected for the purpose of study. The data in the study is after the bank reforms, i.e, from 1992-93 to 2011-12. Time period has been further divided into two parts the first part cover the time period of 7 years P1 (From 1992-93 to 1998-99) the first period of reforms and second part covers the period of 13 years P2 (from 1999-2000to 2011-12)after the second generation bank reforms .

### **Profitability Ratios**

- 1) Interest earned as percentage of Total Assets.
- 2) Interest expended as percentage of total assets.
- 3) Spread as percentage of total assets.
- 4) Non-interest income as percentage of total assets.
- 5) Non-interest expenditure as percentage of total assets.
- 6) Burden As percentage of total assets.
- 7) Net profit as percentage of Total assets.

### **Statistical Tests**

Mean and S.D, have been calculated for each variable for all banks. In order to see the impact of bank reforms and to make comparison of profitability of public sector banks and new private sector banks Mann-Whitney U test has been applied to draw the result .To calculate the statistical results, SPSS software package has been used.

**Findings of the Study**

**Comparison of Bank Profitability**

**Table: 1 – Comparison of Profitability of Public and New Private sector Banks (P1 1992-93 to 1998-99)**

Variables	Public<99	Private<99		Mann-Whitney U	p-value	
	Mean	SD	Mean			SD
Intt. income as percentage of total Assets	9.256	.448	9.140	1.299	11.000	0.648ns
Intt. Exp as percentage of Total Assets	6.248	.439	5.828	1.892	15.000	0.755ns
Spread as percentage of Total Assets	3.008	.272	2.436	.509	6.000	0.073ns
Non Intt. Income as percentage of Total Assets	2.416	.337	2.680	.539	15.000	0.755ns
Non Intt. Exp. as percentage of Total Assets	2.833	.168	1.649	.451	0.0001	0.003**
Burden as percentage of Total Assets	2.662	.391	1.031	.208	0.0001	0.003**
NP as percentage of Total income	3.011	5.498	14.639	3.233	0.0001	0.003**
NP as percentage of Total deposits	.429	.637	1.960	.533	0.0001	0.003**
NP as percentage of Total Assets	.346	.532	1.450	.424	0.0001	0.003**

\*Significant at (0.05) level of significance. \* \*Significant at (0.05) level of significance

Table 1 revealed the results of independent sample t-test on profitability during the period 1992-93 to 1999-2000 i.e. the first period of reforms, it shows that there is highly significant difference between public sector banks and public sector banks for non- interest expenses as percentage of total assets ( $p < 0.01$ ), Burden as percentage of

total assets ( $p < .01$ ), Net profit as percentage of total income ( $p < .01$ ), Net profit as percentage of total deposits ( $p < .01$ ), and net profit as percentage of total assets ( $p < .01$ ). The results revealed that the profitability of the new private sector banks is significantly higher than the public sector bank.

**Table: 2 Comparison of Profitability of Public and New Private sector Banks  
(P2 1999-00 to 2011-2012)**

Variables	Public,99-2012		Private,99-2012		Mann - Whitney U	p-value
	Mean	SD	Mean	SD		
Intt. income as percentage of total Assets	7.426	.871	7.183	.796	67.000	0.390ns
Intt. Exp as percentage of Total Assets	4.781	.830	4.670	.768	80.000	0.840ns
Spread as percentage of Total Assets	2.645	.247	2.513	.556	72.000	0.545ns
Non Intt. Income as percentage of Total Assets	2.025	.389	3.126	.474	7.000	0.000*
Non Intt. Exp. as percentage of Total Assets	2.321	.403	1.686	.248	12.000	0.000*
Burden as percentage of Total Assets	1.748	.362	1.440	.456	52.000	0.101ns
Net profit as percentage of Total income	10.401	2.576	12.165	2.780	69.000	0.448ns
Net profit as percentage of Total deposits	1.060	.215	1.522	.409	29.000	0.003*
Net profit as percentage of Total Assets	.889	.179	1.064	.249	55.000	0.139ns

\*Significant at (0.05) level of significance.

Table 2 revealed the results of independent sample t-test on banks 'profitability during the second period of reforms P2 1999-2000 to 2011-2012, The results shows that there is significant difference between the public and

new private sector banks for non interest income as percentage of total assets ( $p < .01$ ), non- interest expenses as percentage of total assets ( $p < .01$ ) and net profit as percentage of total deposits,

**Table: 3 – Comparison of Profitability of Public Sector Banks**

(P1 1992-93 to 1998-99 and P2 1999-2000 to 2011-2012)

Variables	Public<99		Public,99-2012		Mann-Whitney U	p-value
	Mean	SD	Mean	SD		
Intt. income as percentage of total Assets	9.256	.448	7.426	.871	3.000	0.000* *
Intt. Exp as percentage of Total Assets	6.248	.439	4.781	.830	6.000	0.001* *
Spread as percentage of Total Assets	3.008	.272	2.645	.247	17.000	0.024*
Non Intt. Income as percentage of Total Assets	2.416	.337	2.025	.389	21.000	0.056ns
Non Intt. Exp. as percentage of Total Assets	2.833	.168	2.321	.403	11.000	0.005* *
Burden as percentage of Total Assets	2.662	.391	1.748	.362	4.000	0.000* *
Net profit as percentage of Total income	3.011	5.498	10.401	2.576	6.000	0.001* *
Net profit as percentage of Total deposits	.429	.637	1.060	.215	11.000	0.005* *
Net profit as percentage of Total Assets	.346	.532	.889	.179	9.000	0.002* *

\*Significant at (0.05) level of significance.

Table 3 revealed the results of independent paired sample t-test on profitability of public banks, during the period of study i.e. P1 1992-93 to 1998-99 and P2 1999-2000 to 2011-2012) the Periods of reforms, it shows that there is highly significant difference in productivity of public sector banks for interest income to total assets(p<.01),

Interest expended to total assets (p<.01), Burden to total assets (p<.01), and net profit to total income (p<.01).The table further revealed that there is significant difference for spread to total assets(p<.05), and net profit to total assets(p<.05). The results revealed that a big change has taken place in the profitability of public sector banks in the second period of reforms.

**Table: 4 1992-93 to 1998-99 and P2 1999-2000 to 2011-2012)**

Variables	Private<99		Private,99-2012		Mann-Whitney U	p-value
	Mean	SD	Mean	SD		
Intt. income as percentage of Total Assets	9.140	1.299	7.183	.796	2.000	0.003**
Intt. Exp as percentage of Total Assets	5.828	1.892	4.670	.768	14.000	0.075ns
Spread as percentage of Total Assets	2.436	.509	2.513	.556	30.000	0.849ns
Non Intt. Income as percentage of Total Assets	2.680	.539	3.126	.474	19.000	0.208ns
Non Intt. Exp .as percentage of Total Assets	1.649	.451	1.686	.248	26.000	0.566ns
Burden as percentage of Total Assets	1.031	.208	1.440	.456	13.000	0.059ns
Net profit as percentage of Total income	14.639	3.233	12.165	2.780	19.000	0.208ns
Net profit as percentage of Total deposits	1.960	.533	1.522	.409	16.000	0.117ns
Net profit as percentage of Total Assets	1.450	.424	1.064	.249	13.000	0.059ns

\*Significant at (0.05) level of significance.

Table 4 revealed the results of independent paired sample t-test on profitability of new private banks, during the period of study i.e. P1 1992-93 to 1998-99 and P2 1999-2000 to 2011-2012) the Period of reforms. The table revealed that there was highly significant difference for interest income as percentage of total assets ( $p < .01$ ), while for all other ratios there is insignificant

difference. The results revealed that no change takes place in the profitability of new private sector banks in the second period of reforms.

### Conclusion

From the above analysis, it is concluded that due to reforms performance public sector banks as well as new private sector banks

has increased. The profitability analysis revealed that in P1 spread margin of new private sector banks was less than the public sector banks, but burden as percentage of total assets was significantly less than the public sector banks, that is the reason that the net profit as percentage of total income, net profit as percentage of total deposits, and net profit as percentage of total assets, was significantly higher than the public sector banks. In P2 public sector banks managed to decrease their burden margin that is the reason that there is no significant difference in the profitability of public and private sector banks.

Within the banks group analysis revealed that spread margin decreased in P2 significantly, but banks managed their non-interest expenses as a result their burden

margin decreased significantly, that is the reason that the net profit as percentage of total income, net profit as percentage of total deposits, and net profit as percentage of total assets improved significantly in P2. But the new private sector banks did not recorded such improvement in P2. Even their burden margin increased and as a result their profit margin also came down.

To conclude, New private sector banks had been found to be more productive and profitable as compare to the public sector banks, public sector banks had also made significant improvement in P2 but still they have to work hard to catch their counterpart. Public sector banks should concentrate to improve their spread, and management of burden to improve their overall performance.

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