Comparative Analysis of Selected Bank Groups Performance in India (2011-2016)

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Abstract

Since the initiation of financial sector reforms 1991, RBI has taken several steps to improve operational, financial, productivity and profitability performance of commercial banks. The use of technology has brought a revolution in the working style of the banks. Now, banking sector is performing well to make every citizen free from poverty, ignorance, finance problems which had plagued millions of our people for centuries.

Under this study productivity of selected private and public sector commercial banks are analyzed to show banking sector performance under changed scenario. The productivity is measured by using panel data of commercial banks for the period from 2011 to 2016. Growth rate and other productivity parameters i.e. Business per employee, profit per employee etc. are used to find Productivity performance of Public and Private sector banks

This paper concludes that Indian banking Industry has shown marvelous & positive change in all the parameters of productivity, but private sector banks have edge over public sector banks and overall employee productivity and operational productivity of private sector banks is moving in the positive direction because they emphasize on reduction of cost, creation of team spirit improvement in the management. This paper also highlights the emerging issues and new strategies to enhance bank's performance.

Key words: Productivity, E- Banking, Emerging Issues and strategies.

Introduction

The overall development and growth of any economy depends more on the sound services sector. The role of service sector in Indian economic development has increased by several notches from the fact that service sector which was contributing only 20 percent during the independence time, now it is contributing over 50 pc of GDP India. Indian economy is the fastest growing major economy in the world with GDP growth rate of 8.4 percent at the end of third quarter of 2011-12.

Banking plays very important role in the economic development of all the nations

of the world because a developed banking system holds the key as well as serves as a barometer of economic health of a country. The banking sector is core competency of the world economy which influences the strength of every nation's economy in the world economy. Indian banking today is witnessing drastic changes. The liberalization of the financial sector and banking sector reforms have exposed the Indian banks to a new economic environment that is characterized by increased competition and new regulatory requirements. As a result, there is a transformation in every sphere of activities of the banks in India, especially in Governance, nature of business, style of functioning and delivery mechanisms. The new generation banks brought the necessary competition into the industry and spearheaded changes towards higher utilization of technology, improved customer service and innovative products. In spite of their strong and larger network, public sector banks proved to be surprisingly quick and flexible to meet the emerging needs of customers. Change is the order of the day. Hence, Indian banking industry is also growing at the cost of new competitive changes after liberalization, privatization and globalization. Now, banking sector is performing well to make every citizen free from poverty, ignorance, finance problems which had plagued millions of our people for centuries.

In this era every firm is concerned with its productivity because it helps firms, industries and nations to achieve sustainable competitive advantage. Though productivity is not the sole factor, it is an important factor influencing profitability. The key to increase profitability is increased productivity. Public sector banks have not been as profitable as the other banks primarily because of two reasons--Low Productivity and High Burden ratio. These results show that for analyzing the firm performance it's important to study their productivity. Banks mostly used productivity ratios as a tool of performance analysis to check their growth. The productivity indicators measure output in terms of labour productivity and branch productivity.

Productivity is defined as the goods and services produced per unit of labour, capital or both. The ratio of output to labour and capital is a total productivity measure. In simple words, productivity is the output per unit of input employed. The basic definition of productivity is:

Productivity = Total Output / Total Input

Review of Literature

The study of **Kaushik S.** (1995) concludes that the productivity of public sector banks show greater decline as compared to that of private sector banks, which further reduces their profits. **Padamasai T.** (2000) evaluates the profitability, productivity and efficiency of India's five big public sector banks i.e. SBI, PNB, BOB, BOI, Canara Bank. The study concludes that productivity and profitability of five big banks has increased throughout the post-reforms period in terms of selected ratios of each parameter, but on account of efficiency, the performance of the top five banks is very dismissal as inefficiency has increased during the study period**.Cheema and Aggarwal** (2002) found that commercial banks operating in India are below the average level of efficiency. **The study conducted by Vij Madhu** (2003) presents the changing profile of Indian banks with the help of a comparative study of three private sector banks in India namely ICICI bank, HDFC bank and IDBI bank. The comparative analysis of the three private sector banks shows that HDFC stands out as a clear winner with ICICI at number two. **Singla and Arora** (2005) examine the comparative performance of Canara Bank and Indian Bank for 4 years from 2000-01 to 2003-04 with the

help of various profitability and productivity ratios. The study reveals that both the banks have improved their financial performance during the study period where Canara Bank has an upper hand in growth of deposit, advances and average working funds. In the case of net NPAs to net advances ratio it is decreasing in both the banks but more in Indian Banks. **Uppal R.K. and Kaur R. (2007)** analyze the efficiency of all the bank groups in the post banking sector reforms era. Time period of study is related to second post banking sector reforms (1999-2000 to 2004-05). The study concludes that the efficiency of all the bank groups has increased in the second post banking sector reforms period but these banking sector reforms are more beneficial for new private sector banks and foreign banks. **Rao N. and Tiwari S. (2009)** study the efficiency of 5 public sector banks selected on the basis of deposits size in 2005. The study concludes that all employee efficiency factors have insignificant influence on deposits, assets and advances, from branch efficiency, only operating profits per branch and from operating efficiency, cost of deposits have significant and positive impact. **Bodla B.S. (2010)** in his study observes that the efficiency of private sector banks was acceptable during the study period which was from 1998-1999 to 2005-2006. **Rao P. Hanumantha (2011)** paper examines comparative performance of public sector banks and private sector banks for a period of four years 2011-12 to 2011-2012 on the basis of certain key parameters like- business per employee, profit per employee and credit deposit ratio etc. The period had a significant impact on not only Indian economy but the World economy. This was the most volatile period of time as the whole world economy faced difficult time. As the banking system is one of most significant parts of our financial system, its performance has a significant impact on the entire economy. The paper of **Sharma K. Anil and Sharma Dipasha (2012)**, aims to assess the determinants and to predict the relationship of firm specific factors with the efficiency and productivity of Indian banking sector.

Objective and Research Methodology

The prime aim of the proposed research is to analyze productivity of selected banks in India. To achieve the objective of the study, the following hypothesis is formulated:

H0: Productivity of selected sample banks SBI and its associates, nationalized banks and Private sector banks do not differ significantly.

Data base

Deposit per employee	(D/E)	Deposit per branch	(D/BR)
Credit per employee	(CR/E)	Credit per branch	(CR/BR)
Business per employee	(BUS/E)	Business per branch	(BUS/BR)
Profit per employee	(TP/E)	Profit per branch	(TP/BR)

The Three major bank groups, State bank of India & its associates, nationalized banks, Old Private sector banks and New Private sector banks from the universe of the present study. Samples are taken on the basis of Extensive Sampling. In this study secondary data is taken as input to achieve the objectives of the study, For this study secondary data has been procured from:(i) Performance highlights, various issues, IBA (Mumbai) 2011-12 to 2015-16; (ii) IBA Bulletin (Special Issues),2011-12 to 2015-16; (iii) Report on Trend and Progress of Banking in India, 2011

to 2016; (iv) Indian Banking at a Glance, 2015-16; (v) Annual Reports of the selected Banks; and (vi) Statistical Tables Relating to Banks in India (RBI).

Data Analysis Tools and Methods: The collected data in the present study is analyzed through descriptive and inferential statistical techniques. The analysis is in conformity with the objectives of study and the hypotheses formulated to achieve these objectives. The productivity indicators measure output in terms of labour productivity and branch productivity. These set of indicators are as follows: -

Results of Analysis of Data

As stated earlier the objective of this paper is to analyze productivity performance of selected scheduled commercial banks. Accordingly, the data has been processed with the help of spss and the results of the analysis are given in table 1and table 2 in the following part of this section.

Table 1 present averages of various productivity ratios during 2011 to 2016 for various banks under this study. The deposit per employee ratio was 33.60 percent in case of SBI and its associates during 2011-12 but there is a tremendous and remarkable positive change in this ratio in 2012-2016 periods. Similarly, deposit per Employee become 51.48 per cent and 74.42 percent from 34.98 per cent and 38.4per cent in case of private banks and nationalized banks. The table shows that overall Deposit per Employee highest among various banks (57.22%) in case of nationalized banks followed by (44.4%) sbi and its associates and (43.41%) private banks during 2011-16.

Table 1: Averages of Productivity ratios of banks for the periods 2011-2012 to 2015-2016

Banks	Items	Deposits per employee	Credit per employee	Business per employee	Profit per employee	Deposit per branch	Credit per branch	Business per branch	Profit per branch
SBI and Its Associates	2011-12	33.6	25.34	58.94	0.35	471.66	356.86	828.52	5
	2012-13	40.64	30.12	70.75	0.44	552.83	410.36	963.19	6.07
	2013-14	44.27	33.13	77.4	0.48	598.65	448.86	1047.51	6.59
	2014-15	49.37	38.04	87.41	0.58	639.42	494.34	1133.76	7.56
	2015-16	54.1	42.96	97.05	0.55	702.01	558.02	1260.03	7.1
	Grand Average	**44.4**	**33.91**	**78.31**	**0.48**	**592.91**	**453.69**	**1046.6**	**6.46**
Private Banks	2011-12	34.98	24.47	59.45	0.44	658.79	481.62	1140.4	9.26
	2012-13	38.44	27.21	65.65	0.49	617.09	460.92	1078.01	8.24
	2013-14	42.97	31.16	74.13	0.55	655.56	492.44	1148	9.38
	2014-15	49.19	37.06	86.25	0.69	700.51	534.31	1234.82	10.7
	2015-16	51.48	40.22	91.69	0.74	720.52	570.56	1291.07	11.54
	Grand Average	**43.41**	**32.02**	**75.44**	**0.58**	**670.49**	**507.97**	**1178.46**	**9.82**
Nationalized Banks	2011-12	38.4	28.53	66.93	0.42	459.6	349.98	809.57	5.02
	2012-13	47.79	34.64	82.43	0.48	569.12	423.43	992.56	5.72
	2013-14	57.59	40.91	98.5	0.57	649.15	467.56	1116.71	6.36
	2014-15	67.88	50.1	117.98	0.7	714.26	533.8	1248.06	7.4
	2015-16	74.42	56.26	130.68	0.7	751.38	572.85	1324.23	7.11
	Grand Average	**57.22**	**42.09**	**99.3**	**0.57**	**628.7**	**469.53**	**1098.23**	**6.32**

F-test has been applied to examine whether the Deposit per Employee varies across the banks under the study. Table 2 indicates that F-value is 2.744 and the corresponding p value (.104) > 0.05 level for Deposit per Employee. It implies that Deposit per Employee across the selected banks is not significantly different. On an average, Deposit per Employee ratio of the selected banks is found higher during 2011-2012 than that of previous years.

Table 2: Analysis of Variance results about Productivity of selected banks under study.

Ratios	Banks	N (Time Period)	Mean	Std. Deviation	F	Sig.
Deposit per employee	1 (SBI AND ITS ASSOCIATES)	5 (2011-16)	44.40	7.90	**2.744**	**0.104**
	2 (PRIVATE BANKS)	5 (2011-16)	43.41	6.97		
	3 (NATIONALIZED BANKS)	5 (2011-16)	57.22	14.60		
	Total	**15**	**48.34**	**11.62**		
Credit per employee	1 (SBI AND ITS ASSOCIATES)	5 (2011-16)	33.92	6.84	**1.98**	**0.181**
	2 (PRIVATE BANKS)	5 (2011-16)	32.02	6.59		
	3 (NATIONALIZED BANKS)	5 (2011-16)	42.09	11.24		
	Total	**15**	**36.01**	**9.07**		
Business per employee	1 (SBI AND ITS ASSOCIATES)	5 (2011-16)	78.31	14.72	2.387	0.134
	2 (PRIVATE BANKS)	5 (2011-16)	75.43	13.55		
	3 (NATIONALIZED BANKS)	5 (2011-16)	99.30	25.82		
	Total	**15**	**84.35**	**20.64**		
Profit per employee	1 (SBI AND ITS ASSOCIATES)	5 (2011-16)	0.48	0.09	**1.177**	**0.341**
	2 (PRIVATE BANKS)	5 (2011-16)	0.58	0.13		
	3 (NATIONALIZED BANKS)	5 (2011-16)	0.57	0.13		
	Total	15	0.55	**0.12**		
Deposit per branch	1 (SBI AND ITS ASSOCIATES)	5 (2011-16)	592.91	87.19	**0.984**	**0.402**
	2 (PRIVATE BANKS)	5 (2011-16)	670.49	40.67		
	3 (NATIONALIZED BANKS)	5 (2011-16)	628.70	117.19		
	Total	**15**	**630.70**	**87.44**		
Credit per branch	1 (SBI AND ITS ASSOCIATES)	5 (2011-16)	453.69	77.16	**0.744**	**0.496**
	2 (PRIVATE BANKS)	5 (2011-16)	507.97	44.05		
	3 (NATIONALIZED BANKS)	5 (2011-16)	469.52	88.36		
	Total	**15**	**477.06**	**71.01**		
Business per branch	1 (SBI AND ITS ASSOCIATES)	5 (2011-16)	1046.60	164.06	**0.87**	**0.444**
	2 (PRIVATE BANKS)	5 (2011-16)	1178.46	84.15		
	3 (NATIONALIZED BANKS)	5 (2011-16)	1098.23	205.16		
	Total	**15**	**1107.76**	**157.77**		
Profit per branch	1 (SBI AND ITS ASSOCIATES)	5 (2011-16)	6.46	0.99	**16.259**	**0.000**
	2 (PRIVATE BANKS)	5 (2011-16)	9.82	1.30		
	3 (NATIONALIZED BANKS)	5 (2011-16)	6.32	0.98		
	Total	15	7.54	1.96		

Credit per employee is the second ratio used to analyze productivity performance of banks. Table 1 indicates that the average of credit per employee is higher in case of nationalized banks during 2011-16 in comparison to SBI and its associates and private banks. Table shows that there is a positive change in this ratio in 2011-2012 and the above phenomenon holds true irrespective of the bank. As indicated by table 2 that F- Test value for significance of difference in productivity among selected banks are not significant at 1 percent level. So, we accept the null hypothesis regarding this ratio.

Nationalized Banks are having higher 'Business per employee' during 2011-16 respectively than other banks. Overall, this ratio is high during 2015-16(Table 1).Table 2 shows that p value corresponding to 'Business per employee ratio' is not significant at 5 percent level so we accept the hypothesis and conclude that performance of various banks is not significantly different.

Profit per employee ratio is found higher in case of Private sector banks in comparison to SBI and its associates and nationalized banks (Table 1). On Average basis this ratio is found higher during 2011-16 in case of private banks, but this ratio is holding a declining trend in case of SBI and its associate's and it become constant in 2011-2012 in case of nationalized banks. p –value (0.402) corresponding to this ratios is not significant at 5 percent level. This implies that no variance exists among the performance of all banks with respect to this ratio (Table 2).

The productivity indicators measure output in terms of branch productivity also. First ratio which measures the productivity is deposit per branch and it is found highest among sample banks in private banks during 2011-16 (Table1). similarly credit per branch was also find highest in case of private banks. Both the ratios are showing an increasing trend from 2011-12 to 2015-2016. Table 2 presents that p value corresponding to these ratio is not significant at 5 percent level so we accept the hypothesis with respect to this ratio and conclude that performance of selected banks are not significantly different.

Business per branch is next ratio to measure the productivity performance of banks and this ratio is found higher in case of private sector banks in comparison to nationalized banks and sbi and its associates during 2011-16 (Table1). Similarly to above ratios this ratio is also showing a positive impact and this ratio is found highest during 2011-2012 in comparison to other years. p value corresponding to Business per branch ratio is not significant at 5percent level (i.e. $0.444 > 0.05$) so we accept the null hypothesis and conclude that performance of sample banks is same for the whole period.

Last ratio namely 'profit per branch' is found higher in case of private sector banks in comparison to other banks on average basis during 2011-16 and private sector banks are in very good position than other two bank groups (Table1). This is ratio is showing an increasing trend in case of private sector banks till 2011-2012 but this ratio starts showing declining trend in case of nationalized banks and sbi and its associates during 2015-16. p –value corresponding to this ratio is significant at 1 percent level ($0.000 < 0.01$). So, we reject the null hypothesis and conclude that that variance exists among the performance of all banks with respect to this ratio.

Conclusion

This paper concludes that Indian banking Industry has shown marvelous & positive change in all the parameters of productivity, but private sector banks have edge over other

banks and overall branch productivity of private sector banks is moving in the positive direction because they emphasize on reduction of cost, creation of team spirit improvement in the management. The productivity in the recent years is significantly higher than first two years of study. The variance in productivity across the banks is insignificant irrespective of the ratio of measure of productivity. The labor productivity ratios excepts profit per employee are found higher in case of nationalized banks followed by sbi and its associates and private sector banks, profit per employee is found higher in case of private sector banks than that of other banks. Productivity performance of various banks does not differ significantly from each other as indicated by the ANOVA test applied on various productivity ratios. No doubt, nationalized banks and sbi and its associates have also made this progress because they are leading in employee productivity but still they are lagging behind in this progress, when we compare them with their counterparts. All the banks should give more stress to motivational factors for higher performance.

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