Performance of the Indian Banking Industry : A Comparison of Public and Private Sector Banks

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Abstract

The paper sought to analyze the performance of the banking industry in India on the basis of established financial parameters. By using the purposive sampling technique, 46 scheduled commercial banks were studied and the business standard banking annual database was explored to collect the relevant information. Both public and private sector banks were included in the sample and analyzed on the basis of four parameters (size, growth, profitability, and soundness) segregated into 11 financial performance indicators. The findings highlighted that public and private sector banks were not very much different in terms of size and growth parameters. However, significant differences were found in terms of profitability and soundness of business, indicating robust growth prospects for private sector banks. The study represented a pioneering and seminal attempt to provide a number of implications for policy makers, budding researchers, and professionals.

Keywords : **performance, banking industry, private banks, public sector banks**

JEL Classification: A1, G21, G18, M00

Paper Submission Date: May 12, 2015 ; Paper sent back for Revision : December 5, 2015 ; Paper Acceptance Date : December 12 , 2015

After a sustained downturn, the Indian economy is moving towards a new direction of development and growth. With this dawn, the financial system of India is also witnessing startling changes, especially in the financial institutions. The Indian financial system has four pillars : these are financial institutions, the financial market, financial instruments, and regulatory bodies. Among all, the banking industry is one the most integral part of the Indian financial system. For an economy, the banking sector just acts as a mirror by which the financial health of that country can be predicted, and India is no exception (Kamath, Nayak, & Ravichandran, 2003). In India, the public sector banks account for more than 70% of the assets of the total banking industry. Thus, their performance and outcomes have a major impact on the financial health of our country.

Due to globalization and deregulatory forces, the competitive structure of the banking industry has undergone tremendous changes (Mohapatra, Sahoo, & Kesharwani, 2015 ; Uppal & Khanna, 2015). Changes in terms of customer demand, technology, culture, demographic shift, and so forth are imposing new challenges for every business organization, and not only the banking industry. Analyzing this change, Kumar and Singh (2013) opined that customers seek and demand world class products as in today's global market, everything is benchmarked and compared. In line with these changes, the public sector banks need to modify as well as restructure themselves in order to adopt and inculcate a new air of competition for providing the best value to their customers. With the opening up of the economy, the private sector banks are endeavoring to mark their footprint on the Indian banking industry; whereas, in the shadow of government protection, the public sector bank are enjoying their credibility since long and are now losing their ground due to inefficiency and traditional approach of business.

Various studies have confirmed that the private sector and foreign banks have a better performance as compared

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to the public sector banks (Business Standard, 2014 ; D'Souza, 2002 ; Jadhao, 2010 ; Selvaraj, 2009 ; Srivastava & Purang, 2009). Keeping this notion as a pivotal point, the present study tries to compare the private and public sector banks in terms of their performance.

This study is important in the Indian scenario because of various reasons. First, accounting for more than 70% of the assets, the public sector banks have a significant impact on the well developed financial system of India as well as its growth prospects (Das, Ashok, & Ray, 2004 ; Gupta, Yogesh, & Aneesh, 2008). Second, to analyze the differences in performance in the ambience of upcoming banking reforms becomes imperative so that a new direction for public sector banks can be paved (Makkar & Singh, 2013). Thus, the present paper is an attempt to compare the public and private sector banks in term established performance indicators.

Literature Review

The service sector is one the dominant sectors for global as well as the Indian context, and financial services are one the most important segment of the service sector. Therefore, the role of the banking industry cannot be taken for granted in a developing economy like India. Even before privatization and liberalization, the banking system was the backbone of the Indian economy (Milind, 2002). The Indian banking industry is one the most robust banking industries in the world. When we talk about the structure, Kamath (2009) defined the three tier system of the Indian banking industry :

(1) Scheduled commercial banks (public sector banks, private sector banks, foreign banks),
(2) Development banks (IFCI, IDBI, SIDBI, NABARD etc),
(3) Co-operative banks (State cooperative banks, centre cooperative banks, etc).

In the present scenario, India has a well developed banking industry that dates back to 1786, when the first bank was established, then the nationalization of banks happened in 1969, and recently, the liberalization of the banking industry happened in 1991. Traditionally, banking was related to only deposits and withdrawing for some nominal interest benefits, moreover, for lending, but now, the concept of banking has changed entirely. The span of banking has increased by many folds, and now, a bouquet of services are available as per customers' demands. Different types of accounts and loans, facilitating with plastic money, and money transfer across the globe are available. At one end, delivering a quality service at customers' demand has become an indispensable part of competitiveness (Gizaw & Pagidimarri, 2013 ; Kumar & Singh, 2013). On the other side, PSBs are at the verge of reforms in many policies related frameworks to sustain and maintain their position in a hyper competitive environment (D'Souza, 2002 ; Jadhao, 2010).

Due to the globalization and deregulation forces, the competitive structure of the banking industry has undergone tremendous changes (Arun & Turner, 2002 ; Ghosh, 2009 ; Reddy, 2005). Ghosh (2009) identified many major changes after 1991 as- lowering the statutory reserve requirement, liberalization of the interest rate regime, entry of foreign players, infusion of new competition, micro-prudential measurement (CAR, asset classification, income recognition, etc), diversification of ownership, strict mandatory disclosure, and so forth. Sensing the importance of the banking industry for a transitional economy like India, the government made it highly regulated (dual regulation) and amends the same from time to time (Ataullah, Cockerill, & Le, 2004 ; Milind, 2002). However, with the entrance of private and foreign players in the banking industry, demand for more autonomy is creeping in the public sector banks. Due to a hyper competitive market, state of art technology, innovation in services, new policies & philosophies by private sector banks, the public sector banks are lagging behind in competition (Business Standard, 2014; Selvaraj, 2009).

Many researchers have opined that governance related problems, political interference, a dual regulatory system, and so forth have imposed newer challenges for PSBs (Business Standard, 2014). With the changing demographic shift, income levels, cultural convergence, technology dominated lifestyle, and other profound effects (Kamath et al, 2003; Srivastava & Purang, 2009), customers are also demanding customized, fast, and door step services. Private sector banks as well as foreign banks are providing a spectrum of services with added values in this realm. According to the *Annual Database of Top Banks in India* (Business Standard, 2014), foreign and private sector banks appear to lead the digital revolution in Indian banking, and are leveraging it with impact of high income, low cost, and reduction of NPAs relatively. Therefore, it becomes imperative for public sector banks to overcome their very problem of mis-management related to intellectual capital, policy issues, and focus on their core products with added mix of augmented services.

After analyzing the public sector banks, studies found that the basic three problems are debilitating the health and growth prospects of PSBs. These are:

(1) Problems/ issues related to governance as dual regulation, less autonomy, opaque appointment of top level executives, political interference, and so forth (Business Standard, 2014; Milind, 2002).

(2) Problem/ issues related to management of people as leadership gap, high attrition rate, inefficient training and development, cultural & ethical conflicts, and so forth (Kamath et al., 2003 ; Shukla, 2014 ; Srivastava & Purang, 2009).

(3) Problem/ issues related to management of funds as increasing level of non-performing assets, low capital adequacy ratio, and so forth (Kamath et al., 2003 ; Milind, 2002).

Many studies have identified that the Indian public sector banks are suffering from various problems related to management of risk and management of people. Being regulated by the supremacy of RBI and other regulatory bodies, individual public banks cannot take their own decisions related to policy matters and other strategic issues. So, it becomes imperative for authorities and policy makers to identify the thrust areas where changes are inevitable. However, mere changes and certain measures will not help if these are not properly aligned with the strategic needs of the banks.

Research Objectives

The study aims to accomplish the following objectives :

(1) Analyze the performance of the Indian banking industry.
(2) Compare the performance of public and private sector banks operating in India.
(3) Explore the future prospects for the Indian banking industry.

Research Hypotheses

In line with the above mentioned objectives, the working hypotheses of the present study are:

Difference in Terms of Size

↳ **H01:** There is no significant difference between domestic and foreign banks in terms of percentage change in total assets.

Difference in Terms of Growth

- **H02:** There is no significant difference between public and private sector banks in terms of percentage change in advances.
- **H03:** There is no significant difference between public and private sector banks in terms of percentage change in deposits.
- **H04:** There is no significant difference between public and private sector banks in terms of percentage change in total income.
- **H05:** There is no significant difference between public and private sector banks in terms of percentage change in interest income.

Difference in Terms of Profitability

- **H06 :** There is no significant difference between public and private sector banks in terms of percentage change in operating profit.
- **H07 :** There is no significant difference between public and private sector banks in terms of percentage change in net profit.

Difference in Terms of Soundness of Business

- **H08:** There is no significant difference between public and private sector banks in terms of NPA.
- **H09:** There is no significant difference between public and private sector banks in terms of CRAR.
- **H010:** There is no significant difference between public and private sector banks in terms of ROA.
- **H011:** There is no significant difference between public and private sector banks in terms of RONW.

Research Methodology

Quantitative research design has been used for the present study. Selection of banks was done on the basis of non probability (purposive sampling). A total of 46 scheduled commercial banks were selected (from the ranking of Business Standard's Annual Banking Database), in which 26 were public sector banks and 20 were private sector banks ($N = 46$). For the purpose of this study, secondary published database of Business Standard (2013, 2014) was explored to collect all the relevant information about the selected banks. A total four parameters have been used for analyzing the differences in performance. On the basis of established parameters, financial performance indicators used for analyzing performance are :

(1) Size : Percentage change in total assets (2013-14).

(2) Growth : (a) Percentage change in advances (2013-14) , (b) Percentage change in deposits (2013-14), (c) Percentage change in total income (2013-14), (d) Percentage change in interest income (2013-14).

(3) Profitability : (a) Percentage change in operating profit (2013-14), (b) Percentage change in net profit (2013-14).

(4) Soundness : (a) Nonperforming assets (NPA) of year 2014 (percentage), (b) Return on assets (ROA) of year 2014 (percentage), (c) Return on net worth (RONW) of year 2014 (percentage), (d) CRAR of year 2014 (percentage).

Instead of taking absolute values, percentage changes in indicators have been taken to remove the impact of bank size, experience, and other extraneous variables. SPSS 20 was used to analyze the data.

Analysis and Results

(1) Difference in Terms of Size : The Table 1 shows the change in total assets of the banks in the year 2014. It is seen that both public and private sector banks witnessed an increase in percentage change in total assets. Even the magnitude of change is also not significantly different in public as well as private sector banks. Non- parametric Mann Whitney test was performed because of not normal distribution of variable (K-S value : .121, Sig : .087) and test statistic (U = 294.00, Sig : .894) does not reject the null hypothesis H01 in terms of percentage change in total assets, indicating no significant differences. Although, wide range differences are found in terms of increment as minimum is 2.00 and maximum is 40.30. However, with the mean of 13.27, the Indian banking industry shows a satisfactory position, which can be ascertained from the Table 2.

(2) Difference in Terms of Growth : The Table 3 shows the growth rate of public and private sector banks and it is seen that public sector banks come in front position on all indicators as increase in advances (96.2% public sector bank as compared to 90% private sector banks), change in deposits (100% in case of public sector banks compared to 95% private sector banks), change in total income (100% in case of public sector banks compared to 95% private sector banks), and change in interest income (100% public sector banks compared to 95% private sector banks) can easily be figured out. Further analyzing the variables through Mann-Whitney test (for not normally distributed variables) and *t*-test (for normally distributed variables), it is seen that test statistics do not reject the null hypotheses in all cases (H02, H03, H04, H05) as H02 : percentage change in advances (U =230.00, Sig : .506), H03 : percentage change in total income (U = 201.00, Sig : .195), H04 : percentage change in interest income (U

Table 1. Type of the Bank * Change in Total Assets - Cross Tabulation

			Change in total asset	Total
			Increased	
Type of the bank	Public sector bank	Count	26	26
		% within Type of the bank	100.0%	100.0%
		% within Change in total asset	56.5%	56.5%
		% of Total	56.5%	56.5%
Private sector bank	Count	20	20	
		% within Type of the bank	100.0%	100.0%
		% within Change in total asset	43.5%	43.5%
		% of Total	43.5%	43.5%
Total	Count	46	46	
	% within Type of the bank	100.0%	100.0%	
	% within Change in total asset	100.0%	100.0%	
	% of Total	100.0%	100.0%	

Table 2. Size of the Banks: Percentage Change in Total Assets (Descriptive Statistics)

			Statistic	Std. Error
Percentage change in total asset of the bank (2013-14)	Mean		13.2761	1.04553
	95% Confidence Interval for Mean	Lower Bound	11.1703	
		Upper Bound	15.3819	
	5% Trimmed Mean		12.7986	
	Median		12.4000	
	Variance		50.284	
	Std. Deviation		7.09113	
	Minimum		2.00	
	Maximum		40.30	
	Range		38.30	
	Interquartile Range		7.85	
	Skewness		1.319	.350
	Kurtosis		3.429	.688

Test Statistics

	Percentage change in total asset of the bank (2013-14)
Mann-Whitney U	254.000
Wilcoxon W	464.000
Z	-.133
Asymp. Sig. (2-tailed)	.894
Kolmogorov-Smirnov test value	.121
Df	46
Sig.	.087

a. Grouping Variable: Type of the bank

=182.00, Sig : .084), H05 : percentage change in deposits (*t*- test value = .333, Sig : .741) are not rejected, implying no significant difference between public and private sector banks in terms of growth indicators.

The descriptive statistics of Table 4 show that gap between lowest and highest values (Min-Max values = -4.60 to 5420, -.30 to 39.10, -4.00 to 60.30, -1.20 to 53.70) are more in all the indicators that implies greater discrepancies among banks in terms of growth rate. However, means (X_1=13.133, X_2=13.428, X_3=13.328, X_4=12.993) of all variables indicate poised growth collectively (Table 4).

(3) Difference in Terms of Profitability : Profitability of selected banks on the basis of net profit and operating profit is shown in the Table 5. It is seen that public sector banks are lagging behind the private sector banks in terms of both indicators. The data in the Table 5 depicts that 80% of the private banks showed an increase in operating profit compared to 61.5% of the public sector banks. On the other end, 75% of the private sector banks witnessed a positive change in their net profit, and only 19.2% of the public sector banks showed increased net profit.

Further analysis reveals that the null hypothesis H06 is rejected and there is a significant difference between public and private sector banks in terms of percentage change in net profit (Mann Whitney U = 154.00, Sig : .019). However, test statistics (b) (*t* - test value = -1.91, Sig : .062) do not reject the null hypothesis (H07) and conclude that there is no significant difference between public and private sector banks in terms of operating profit. Other descriptive statistics of Table 6 show that the net profit margin of all banks is negative (Mean X_1 = -9.88, Median = -11.00), and operating profit is also marginal in nature (Mean X_2 = 5.67, Median =3.300).

Table 3. Growth of Banks : Change in Advances, Deposits, Income, Interest Income Cross Tabulation

			Change in advances		Total	Change in deposits of the bank		Total	Change in total Income of the bank		Total	Change in interest Income of the Bank		Total
			Increased	Decreased		Increased	Decreased		Increased	Decreased		Increased	Decreased	
Type of the bank	Public sector bank	Count	25	1	26	26	0	26	26	0	26	26	0	26
		% within Type of the bank	96.2%	3.8%	100.0%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%
		% of Total	54.3%	2.2%	56.5%	56.5%	0.0%	56.5%	56.5%	0.0%	56.5%	56.5%	0.0%	56.5%
	Private sector bank	Count	18	2	20	19	1	20	19	1	20	19	1	20
		% within Type of the bank	90.0%	10.0%	100.0%	95.0%	5.0%	100.0%	95.0%	5.0%	100.0%	95.0%	5.0%	100.0%
		% of Total	39.1%	4.3%	43.5%	41.3%	2.2%	43.5%	41.3%	2.2%	43.5%	41.3%	2.2%	43.5%
Total		Count	43	3	46	45	1	46	45	1	46	45	1	46
		% within Type of the bank	93.5%	6.5%	100.0%	97.8%	2.2%	100.0%	97.8%	2.2%	100.0%	97.8%	2.2%	100.0%
		% of Total	93.5%	6.5%	100.0%	97.8%	2.2%	100.0%	97.8%	2.2%	100.0%	97.8%	2.2%	100.0%

Table 4. Growth of the Banks: Percentage Change in Advances, Deposits, Total Income, Interest of Banks

Descriptive statistics	Advances of the bank		Deposits of the banks		Total Income of the bank		Interest Income of the bank	
	Statistic	Std. Error	Statistic	Std. Error	Statistic	Std. Error	Statistic	Std. Error
Mean	13.133	1.449	13.428	1.139	13.328	1.307	12.993	1.181
95% Confidence	Lower Bound	10.215		11.134		10.696	10.614	
Interval for Mean	Upper Bound	16.050		15.722		15.960		15.373
5% Trimmed Mean	12.573		13.080		12.618		12.290	
Median	12.950		12.850		12.250		11.500	
Variance	96.53		59.67		78.54		64.21	
Std. Deviation	9.83		7.72		8.86		8.01	
Minimum	-4.60		-.30		-4.00		-1.20	
Maximum	54.20		39.10		60.30		53.70	
Range	58.80		39.40		64.30		54.90	
Interquartile Range	11.25		8.85		7.15		7.63	
Skewness	1.470	.35	.86	.35	3.28	.35	2.96	.35
Kurtosis	5.650	.69	1.51	.69	17.43	.69	14.32	.69

Test of Normality

	Advances of the bank	Deposits of the banks	Total Income of the bank	Interest Income of the bank
Kolmogorov-Smirnova	.144	.114	.165	.148
Df	46	46	46	46
Sig	.001*	.080	.000*	.000*

Test Statistics (a)

		Mean Rank	Sum of Ranks	Test	Value	Sig
Percentage change in	Public sector bank	22.35	581.00	Mann-Whitney U	230.00	.506
advances of the bank	Private sector bank	25.00	500.00			
Percentage change in	Public sector bank	21.25	552.50	Mann-Whitney U	201.50	.195
total Income of the bank	Private sector bank	26.43	528.50			
Percentage change in	Public sector bank	20.50	533.00	Mann-Whitney U	182.00	.084
interest Income of the Bank	Private sector bank	27.40	548.00			

Test Statistics (b)

		Value	Sig	T-test for equality of means	Value	Sig.
Deposits of the banks	Levene's Test (F) Value	.302	.585	Equality of means assumed	-.333	.741
				Equality of means not assumed	-.323	.748

Note: Values marked with * have significant influence

Table 5. Profitability of the Banks: Change in Operating Profit , Net Profit Cross Tabulation

			Change in operating profit of the bank		Total	Change in net profit of the bank		Total
			Increased	Decreased		Increased	Decreased	
Type of the bank	Public sector bank	Count	16	10	26	5	21	26
		% within Type of the bank	61.5%	38.5%	100.0%	19.2%	80.8%	100.0%
		% of Total	34.8%	21.7%	56.5%	10.9%	45.7%	56.5%
	Private sector bank	Count	16	4	20	15	5	20
		% within Type of the bank	80.0%	20.0%	100.0%	75.0%	25.0%	100.0%
		% of Total	34.8%	8.7%	43.5%	32.6%	10.9%	43.5%
Total		Count	32	14	46	20	26	46
		% within Type of the bank	69.6%	30.4%	100.0%	43.5%	56.5%	100.0%
		% of Total	69.6%	30.4%	100.0%	43.5%	56.5%	100.0%

(4) Difference in Terms of Soundness : The fourth parameter of comparison is soundness of business, and it can be inferred from the Table 7 that private sector banks were in a favourable position as compared to public sector banks. Increased ROA is found in 30% foreign banks as compared to 3.8% public sector banks, and increased RONW is shown by 3.8% public sector banks as compared to 25% private sector banks, respectively.

On the other side, the condition of the public sector banks is also pathetic in terms of NPA and CRAR ratio. The Table 8 shows that the CRAR of 2014 of 88.5% public sector banks decreased as compared to 65% in case of private sector banks. Large number of public sector banks also saw increased NPA, that is, 80.8% compared to private sector banks (where the figure is 75%). Sensing the importance of uncontrolled NPAs in the Indian banking sector, it can easily be remarked that this is one of the critical issues that is hampering the performance of the whole Indian banking industry.

The descriptive statistics show that the condition is not even very good for both public as well as private sector banks. Means of ROA (X_1=.80), RONW (X_2= 10.11) do not indicate soundness of business for all banks collectively. Lowering CRAR (Means X_3= 12.33) and increasing NPAs (X_4=1.96) are also making the condition out of control. However, the private sector banks are somewhere able to manage their NPA, CRAR issues, but the picture is not quite satisfactory. Test statistics (a) for H08 : ROA (Mann Whitney U = 97.50, Sig : .000), H09 : RONW (Mann-Whitney U =126.00, Sig : .003), H010 : CRAR (Mann-Whitney U = 81.00, Sig : .000), and test statistics (b) for H011 : NPA (t - test = 4.780, Sig : .000) also adduce the pathetic condition by rejecting the null hypotheses H08, H09, H010, and H011 and confirm that private sector banks significantly differ from public sector banks in terms of soundness of business (Table 9). Thus, according to this parameter, private sector banks have a better performance than the public sector banks, and can expect to have good future prospects and sound business as compare to their public sector counterparts.

Discussion

In line with the above mentioned objectives, the major findings of the present study in terms of stated parameters are: The study brings forth the fact that there is no difference between the public and private sector banks in terms of total assets acquisition and change in the same, as null hypotheses H01 to H06 are not rejected. However, the quality of assets and their deterioration varies between these two groups, as is indicated by rejection of null hypotheses - H07 to H011. According to Business Standard (2014), asset quality deterioration among public

Table 6. Profitability of the Banks: Percentage Change in Net Profit, Operating Profit (2013-14)

Descriptive statistics		Change in Net profit of the banks		Change in Operating profit	
		Statistic	Std. Error	Statistic	Std. Error
Mean		-9.8891	6.15827	5.6761	2.97861
95% Confidence	Lower Bound	-22.2925		-.3231	
Interval for Mean	Upper Bound	2.5143		11.6753	
5% Trimmed Mean	-10.4877		6.2614		
Median	-11.0000		3.3000		
Variance	1744.518		408.118		
Std. Deviation	41.76743		20.20194		
Minimum	-100.00		-88.20		
Maximum	144.30		49.00		
Range	244.30		137.20		
Interquartile Range	42.58		15.73		
Skewness	.555	.350	-1.742	.350	
Kurtosis	3.642	.688	10.047	.688	

Test of Normality

	Change in Net profit of the banks	Change in Operating profit
Kolmogorov-Smirnova	.123	.185
Df	46	46
Sig	.077	.000*

Test Statistics (a)

		Mean rank	Sum of rank	Test	ValueSig
Percentage change in	Public sector bank	19.42	505.00	Mann-Whitney U	154.00.019*
net profit of the banks	Private sector bank	28.8	576.00		

Test Statistics (b)

		Value	Sig.	T-test for equality of means	ValueSig
Percentage change	Levene's Test (F) Value	.462	.500	Equality of means assumed	-1.91.062
in operating profit				Equality of means not assumed	-2.00.051

(Note: Values marked with * have significant influence)

sector banks is one of the most important factors driving the negative outlook of India's banking sector. One of the surprising results of the present study is that in spite of being indifferent in terms of percentage change in total income, interest income, advances, deposits, operating profit, and so forth, the eventual performance indicators like net profit, ROA, RONW, and so forth differ significantly between both groups.

Due to the quality deterioration (high NPA, low CRAR etc), highest reporting of flat or lower profits are found in PSBs. Here, private sector banks lead the banking industry and their future prospects also support the robust growth rate with sound business. These finding somewhere adduce the various claims made by studies that one the basic reasons for underperformance of public sector banks is the mismanagement of intellectual capital, that is, human resources, technology, goodwill, and management of funds (Kamath et al., 2003 ; Shukla, 2014 ; Srivastava & Purang, 2009). According to Shinjini Kumar, PWC (Business Standard, Banking Annual, Dec

Table 7. Soundness of the Banks * Change in ROA, Change in RONW (2013-14) Cross Tabulation

			ROA of the banks (2013-14)			Total	RONW of the banks (2013-14)			Total
			Increased	Decreased	No Change		Increased	Decreased	No Change	
Type of the bank	Public sector bank	Count	1	24	1	26	1	24	1	26
		% within Type of the bank	3.8%	92.3%	3.8%	100.0%	3.8%	92.3%	3.8%	100.0%
		% of Total	2.2%	52.2%	2.2%	56.5%	2.2%	52.2%	2.2%	56.5%
	Private sector bank	Count	6	11	3	20	5	15	0	20
		% within Type of the bank	30.0%	55.0%	15.0%	100.0%	25.0%	75.0%	0.0%	100.0%
		% of Total	13.0%	23.9%	6.5%	43.5%	10.9%	32.6%	0.0%	43.5%
Total		Count	7	35	4	46	6	39	1	46
		% within Type of the bank	15.2%	76.1%	8.7%	100.0%	13.0%	84.8%	2.2%	100.0%
		% of Total	15.2%	76.1%	8.7%	100.0%	13.0%	84.8%	2.2%	100.0%

Table 8. Soundness of the Bank * Change in CRAR, Change in Net NPA Cross Tabulation

			CRAR of the bank (2014)		Total	Net NPA of the bank (2014)			Total
			Increased	Decreased		Increased	Decreased	No Change	
Type of the bank	Public sector bank	Count	3	23	26	21	3	2	26
		% within Type of the bank	11.5%	88.5%	100.0%	80.8%	11.5%	7.7%	100.0%
		% of Total	6.5%	50.0%	56.5%	45.7%	6.5%	4.3%	56.5%
	Private sector bank	Count	7	13	20	15	0	5	20
		% within Type of the bank	35.0%	65.0%	100.0%	75.0%	0.0%	25.0%	100.0%
		% of Total	15.2%	28.3%	43.5%	32.6%	0.0%	10.9%	43.5%
Total	Count	10	36	46	36	3	7	46	
		% within Type of the bank	21.7%	78.3%	100.0%	78.3%	6.5%	15.2%	100.0%
		% of Total	21.7%	78.3%	100.0%	78.3%	6.5%	15.2%	100.0%

2014), the challenge with public sector banks is that with all the advantage of location, they will lose their competitive advantage in the absence of sound, long term management that can lead with vision and integrity. One of the basic reasons of high NPAs may be the political interference and influence on the banking industry. Public sector banks also do not have complete autonomy in managing their funds and lending deals ; this is also a reason for their poor performance. Therefore, even after being at par with private sector banks in terms of assets, deposits, income, etc, due to these reasons, their profitability and growth prospects go downhill.

The present study bring forth the fact that previous studies have postulated in terms of high growth prospects for private sector banks, problems of mismanagement in PSBs (Shukla, 2014), and need of reforms for Indian public sector banks (D'Souza, 2002 ; Jhadao, 2010, Mohan & Ray, 2004 ; Makkar & Singh, 2013 ; Srivastava & Purang, 2009). However, the present government has some orientation to make the public sector banks more autonomous and interference free, as reported by Saha (2015) that the finance ministry has issued direction to public sector

Table 9. Soundness of the Banks: ROA, RONW, CRAR, NPA of Year 2014

Descriptive Statistics		ROA (2014)		RONW (2014)		CRAR (2014)		NPA (2014)	
		Statistic	Std. Error	Statistic	Std. Error	Statistic	Std. Error	Statistic	Std. Error
Mean		.8043	.11323	10.1196	1.20683	12.3380	.33345	1.9630	.20977
95% Confidence	Lower Bound	.5763		7.6889		11.6664		1.5405	
Interval for Mean	Upper Bound	1.0324		12.5502		13.0096		2.3855	
5% Trimmed Mean		.8106		10.6500		12.1872		1.8775	
Median		.7000		10.4500		11.5950		2.0000	
Variance		.590		66.996		5.115		2.024	
Std. Deviation		.76796		8.18513		2.26156		1.42273	
Minimum		-1.80		-29.10		8.67		0.00	
Maximum		3.20		25.00		18.83		7.20	
Range		5.00		54.10		10.16		7.20	
Interquartile Range		.85		7.78		2.95		2.03	
Skewness		-.020	.350	-2.336	.350	1.042	.350	.989	.350
Kurtosis		3.395	.688	10.983	.688	.622	.688	2.498	.688

Test of Normality

	ROA (2014)	RONW (2014)	CRAR (2014)	NPA (2014)
Kolmogorov-Smirnova	.169	.148	.158	.084
Df	46	46	46	46
Sig	.002*	.000*	.002*	.004*

Test Statistics (a)

		Mean rank	Sum of rank	Test	Value	Sig
ROA (2014)	Public sector bank	17.25	448.50	Mann-Whitney U	97.500	.000*
	Private sector bank	31.63	632.50			
RONW (2014)	Public sector bank	18.35	477.00	Mann-Whitney U	126.00	.003*
	Private sector bank	30.20	604.00			
CRAR (2014)	Public sector bank	16.62	432.00	Mann-Whitney U	81.00	.000*
	Private sector bank	32.45	649.00			

Test Statistics (b)

		Value	Sig.	T-test for equality of means	Value	Sig
NPA (2014)	Levene's Test (F) Value	.013	.911	Equality of means assumed	4.780	.000*
				Equality of means not assumed	4.885	.000*

(Note: Values marked with * have significant influence)

banks "...to act without 'fear or favour' and to ignore 'extraneous considerations' in their commercial decisions" (p.6). But merely issuing directions will not solve the problem at the ground level. There is a strong need for robust measures and reforms for PSBs. The banking industry is one of the important industries for any economy, therefore, it is imperative for the public sector banks to perform up to their level and compete with upcoming as well as existing rivals (Uppal & Khanna, 2015).

Table 10. Summary of Parameters, Accepted Hypotheses, and their Description

Parameters	Hypothesis	Description	Results	Interpretation
Size	H01: (Null)	There is no significant difference between public and private banks in terms of percentage change in total assets.	Not Rejected	Difference : Not Exist
Growth	H02: (Null)	There is no significant difference between public and private banks in terms of percentage change in advances.	Not Rejected	Difference: Not Exist
	H03: (Null)	There is no significant difference between public and private banks in terms of percentage change in deposits.	Not Rejected	Difference: Not Exist
	H04: (Null)	There is no significant difference between public and private banks in terms of percentage change in total income.	Not Rejected	Difference: Not Exist
	H05: (Null)	There is no significant difference between public and private banks in terms of percentage change in interest income.	Not Rejected	Difference: Not Exist
Profitability	HO6: (Null)	There is no significant difference between public and private banks in terms of percentage change in operating profit.	Not Rejected	Difference : Not Exist
	HO7: (Null)	There is no significant difference between public and private banks in terms of percentage change in net profit.	Rejected	Difference Exists
Soundness	HO8: (Null)	There is no significant difference between public and private banks in terms of NPA.	Rejected	Difference Exists
	HO9: (Null)	There is no significant difference between public and private banks in terms of CRAR.	Rejected	Difference Exists
	HO10: (Null)	There is no significant difference between public and private banks in terms of ROA.	Rejected	Difference Exists
	HO11: (Null)	There is no significant difference between public and private banks in terms of RONW.	Rejected	Difference Exists

Implications

Due to the lower economic activity (low economic growth, high inflation, etc) and its inevitable impact on the financial sector, the Indian banking industry needs to reformulate in terms of competitive ground. A hypercompetitive market enforces the banks to equip themselves with innovative ways of doing business. Public sector banks need to be ahead of their potential rivals in terms of services, processes, operation activities, strategic orientation, and financial performance. Furthermore, the strategic posture of PSBs need to reshape, and alignment of each and every functional unit with their strategic orientation is very important for their long term survival and profitability.

Conclusion

The study concludes that public sector banks, being equal in terms of size and growth, are not able to compete with private sector banks in terms of profitability and soundness. Thus, a gap exists between resource mobilization and utilization. Although, the Indian banking industry has grown with leaps and bounds, but time has come to take certain corrective actions in term of policy measures.

Limitations of the Study and Scope for Future Research

The study is limited to secondary data only. Therefore, limitations associated with the use of secondary data apply to this study also. However, every measure was taken to ensure the accuracy of the results, though certain primary variables would have increased the relevance and generalization of the results. It is supposed that the findings of this study would be of interest to future researchers in this realm. Impact of certain factor like HR orientation, political interference, economic variables, and other managerial practices will increase the in-depth understanding of difference among private and public sector banks in terms of their performance.

References

Arun T. G., & Turner, G.D. (2002). *Financial sector reforms in developing countries: The Indian experience* (pp. 429 - 445). India: Blackwell Publishers Ltd.

Ataullah, A., Cockerill, T., & Le, H. (2004). Financial liberalization and bank efficiency: A comparative analysis of India and Pakistan. *Applied Economics, 36* (17), 1915 - 1924.

Bharati, G. K. (2007). The intellectual capital performance of Indian banking sector. *Journal of Intellectual Capital, 8* (1), 96-123.

D'Souza, E. (2002). *Employment and human resource practices in public sector banks in the nineties. Labour Market Institution in India: 1990's and beyond*. Japan : Institute of Developing Economies.

Das, A., Ashok, N., & Ray, C. S. (2004). *Liberalisation, ownership and efficiency in Indian banking: A non parametric approach* (Economics Working Paper). Retrieved from http://digitalcommons.uconn.edu/econ_wpapers/200429

Ghosh, S. (2009). *Financial deregulation and profit efficiency: A non parametric analysis of Indian banks.* Retrieved from http://mpra.ub.uni-muenchen.de/24292/

Gizaw, K.D., & Pagidimarri, V. (2013). Impact of service quality on customer loyalty: A study of Ethiopian policy holders. *The Indian Journal of Commerce, 66* (4), 1-10.

Gupta, O. K., Yogesh, D., & Aneesh, C. (2008). Dynamics of productive efficiency of Indian banks. *International Journal of Operational Research, 5* (2), 78-98.

Jhadao S.P. (2010). Present scenario of banking sector in India. *International Referred Research Journal, 1* (9), 87-95.

Kamath, G. B. (2009). The intellectual capital performance of Indian banking sector. *Journal of Intellectual Capital, 8* (1), 96-123.

Kamath, K. V., Nayak, R.M., & Ravichandran, N. (2003). Indian Banking sectors: Challenge and opportunity. *Vikalpa, 28* (3), 83-99.

Kumar, R., & Singh, M. (2013). Comparative service quality analysis of the Indian non-life insurance sector. *The Indian Journal of Commerce, 66* (4), 11-21.

Makkar, A., & Singh, S. (2013). Analysis of the financial performance of Indian commercial banks: A comparative study. *Indian Journal of Finance, 7* (5), 41-49. DOI:10.17010/ijf/2013/v7i5/72113

Milind, S. (2002). The impact of foreign banks on market concentration: The case of India. *Applied Econometrics and International Development (AEEADE), 2* (1), 7 -21.

Mohan, T.T.R., & Ray, S. C. (2004). *Productivity growth and efficiency in Indian banking: A comparison of public, private, and foreign banks* (Economics Working Papers 10/2004). USA : University of Connecticut.

Mohapatra, S., Sahoo, D., & Kesharwani, A. (2015). Outsourcing of information technology: An empirical study in the Indian banking industry. *Indian Journal of Finance, 9* (7), 7-21. doi:10.17010//2015/v9i7/72350

Reddy, A. A. (2005). Banking sector deregulation and productivity change decomposition of Indian banks. *Finance India, 19* (3), 983-1001.

Saha, M. (2015, January 6). Act without fear: Govt to Banks. *Business Standard*, p 6.

Selvaraj, M. (2009). Total quality management in Indian commercial banks: A comparative study. *Journal of Marketing and Communication, 4* (3), 59 - 70.

Shukla, S. (2014). Emerging issues and challenges for public sectors banks of India. *Procedia- Social and Behavioural Science, 133*, 358-363.

Srivastava, A., & Purang, P. (2009). Employee perception of job satisfaction: Comparative study of public banks. *Asian Academy of Management Journal, 14* (2), 65-78.

Top Banks in India: Banking Annual (Database). (2013, Jan). *Business Standard.* 4 (1).

Top Banks in India; Banking Annual (Database). (2014, Dec). *Business Standard.* 6 (1).

Uppal, R.K., & Khanna, P. (2015). Factor affecting NPA's of scheduled commercial banks: An empirical study based in Punjab. *Indian Journal of Finance, 9* (2), 7-16. doi:10.17010//2015/v9i2/71517