Comparative Performance of Different Bank Groups from the Era of Global Recession

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ABSTRACT

Banking sector reforms gave competition to the banks but the recent global financial crisis has shaken the financial markets in general and the banking industry around the world. Financial intermediaries influence growth of economy thus it becomes important to track their performance as casualty to banking sector may hamper growth prospects which was evident by the recent global crisis of 2008. Through the paper it has been tried to compare banking groups in terms of their performance through their Credit Deposit ratio (i.e. CD ratio) and NPAs during the period 2006 to 2010, which covers pre global crises of 2008, the crises time and post crises period. The paper concludes that before the global recession foreign bank group was performing much better than other banking sectors. Private, nationalized and SBI bank groups were keep on performing almost same but certainly better than RRBs for all the period of study.

Key words: Bank credit and deposit, Credit Deposit ratio (CD ratio).
JEL Classification codes: E51, G21.

INTRODUCTION

Bank plays very important role for the economic development of any country either developing or developed. Bank has to act desired role for the directional and overall development of any economy. As the basic function of the bank is to mobilize the saving and utilize it for the best development. Reserve Bank of India (RBI) issues directives to all the banks for better regulation and motivation. Banking sector reforms gave competition to the banks.

Nationalization of the banks saw growth and reforms in banking sector, which were unmatched by any other country. Indian banking industry has been successful to a great extent with basic services which are imperative for any growing economy to provide to its citizens in order to move on the path of inclusive growth. After nationalization it was observed that about 89000 new bank branches opened throughout the country. New branches were not only opened in metros but also in other unbanked areas. RBI's effective policy for granting licenses for new branches led to the expansion of banking services of less developed pockets of the country.

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One of the major objectives of banking sector reforms was to enhance efficiency and productivity through competition. With the institution of banking sector reforms, competition among the banks has increased as reducing barriers to entry of new private sector banks and foreign banks. The reforms have increased openness of the economy and improved freedom to operate in financial markets and introduced various policy measures to strengthen Indian banking. Consequently, different bank groups are operating at the different level of efficiency and profitability because of their in-built structural characteristics. The first banking sector reform was taken place in 1991 and after some time in 1998 the second banking sector reforms were introduced with major areas of recommendation. The computerization of all the banks of Indian banking industry and mergers and acquisitions of banks strengthen their efficiency and performance. Computerization along with advanced technology started in all the banks after implementation of IT Act (2000). Indian private sector banks and foreign banks operating in India performed well compared to Indian Public Sector Banks (PSBs). Due to globalization and WTO, banking has undergone paradigm shift and resulting transformation of whole banking industry. Since the beginning of 2008, the financial market crisis has led to the collapse of major financial institutions and now impacting the economic conditions of major markets around the world. The impact has been more profound on the industrialized economies in comparison to emerging markets. With the increase in globalization, from the era of global recession it is very important to know the impact on the performance of different bank groups in India.

India was also not entirely insulated from the global turmoil when FDI started drying up and GDP growth rate slowed down to 6.5 per cent. This turmoil required our central bank to move cautiously about liberalizing the banking sector. The period of recent slowdown desires new set of reforms to bring back growth on track.

When bank grants loans to its customer, it generally does not lend out cash, equal to the amount of the loan, to the customer as an individual money lender does, but on contrary, opens an account in borrower's name and credit the amount of loan to his account. Thus, when bank grants a loan, it creates a deposit or a liability against itself. Since the deposits of the bank circulate as money, the creation of such deposit leads to net increase in the money stock of the economy. Thus, credit creation indirectly increases the supply of money in the economy. Bank's lending and investment activities lead to changes in the quality of money in circulation, which in turn influence the nature, and quality of production. The volume of total bank credit disbursed shows the extent to which the productive sector availed credit from the commercial banks and other financial intermediaries. The CD ratio is the proportion of loan-assets created by banks from the deposits received. The higher the ratio, the higher the loan-assets created from deposits. CD ratio reveals the efficiency with which the commercial and financial intermediaries are tapping savings from the available sources and channelizing these to various productive activities of the economy. It is very important to have strong financial system, which acts as an engine of growth and development for fast developing nations. Uppal (2009) analyzed the paradigm shift in performance parameters of various types of banks and bank groups. The study concentrate mainly on factors which influence the relative share of banks in the era of post second banking sector reforms era (2003 to 2008). The paper concludes that the PSBs are in dominant position in terms of total assets in all scheduled commercial banks. Prithwiraj Nath *et. al.* (2003) explored the linkage between strategic grouping and performance of the Indian banking sector. This study offers a framework to commercial banks to take policy decisions about their competitive positioning in the target market, develop long-term strategic focus and identify a benchmark for improving their performance. Kusum *et. al.* (2008) found that foreign banks were most efficient in the banking sector and nationalized banks had lower efficiency. As per their index State Bank of India was not successful in leveraging its comparatively large market share to increase its efficiency. Priority sector lending, excessive bank investment in government securities had added to banks inefficiency.

Rakhe (2010) analyzed the financial performance of foreign banks in comparison with other bank groups in India during 2002-03 to 2008-09. The study indicates that access to low cost funds, diversification of income and other income to fully finance the operating expenses are the important factors to the higher profitability of foreign banks vis-à-vis other bank groups in India. Author expressed that efficiency of fund management, generation of other income are the most important factor determining profitability in the banking system. However, as regards to the foreign banks, financial inter-linkages and financial performance of parent banks are also equally important.

Sharad Kumar and Sreeramulu (2007) study compared the performance of modern banks (foreign and new private sector bank) with traditional banks (public and old private sector banks) in terms of employee productivity and employee cost ratios. The study concludes that the performance of modern banks was much superior to traditional banks during 1997 to 2008.

Shanmugam and Das (2004) attempted to measure the efficiency of banks for different bank groups of the Indian scheduled commercial banks during the reform period (1192-1999). The study showed that the state bank group and foreign banks are more efficient than their counterparts.

DATA AND METHODOLOGY

The major variables used for the present study are amount of outstanding credit and deposits and assets of each banking sectors performing in India. For the purpose, data from 2006 to 2010 on quarterly basis have been collected from various volumes of Basic Statistical Returns of Scheduled Commercial Banks in India published by RBI.

Since the particular form of the basic frequency function of CD ratio was not known, non-parametric one-way ANOVA test i.e. non-parametric test given by Kruskal-Wallis (1952) was applied to test the homogeneity of CD ratios among the bank groups. This test is analogous to the F-test used in analysis of variance (ANOVA).

The test assumes that there were three mutually independent random samples measured on at least an ordinal scale and drawn from any continuous distributions (not necessarily symmetric) that are identical except for central location, as measured by the medians $\mu_1, \mu_2, \mu_3, \mu_4$ and μ_5. The null hypothesis is that these medians are equal i.e. $H_0 : \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$ and the alternative hypothesis is that at least two of the samples differ only with respect to location (median), if at all. Let k independent samples of sizes $n_1, n_2, \ldots n_k$ are to be tested for their homogeneity. Combine all the samples into one large sample, sort the result from smallest to largest and assign ranks and then find $\bar{R}_i$, the average of the ranks of the observations in the ith sample.

$$KW = \frac{12}{N(N+1)} \sum_{i=1}^{K} n_i \left(\bar{R}_i - \frac{N+1}{2} \right)^2, \quad \text{where N=} \; n_1 + n_2 + \ldots n_k$$

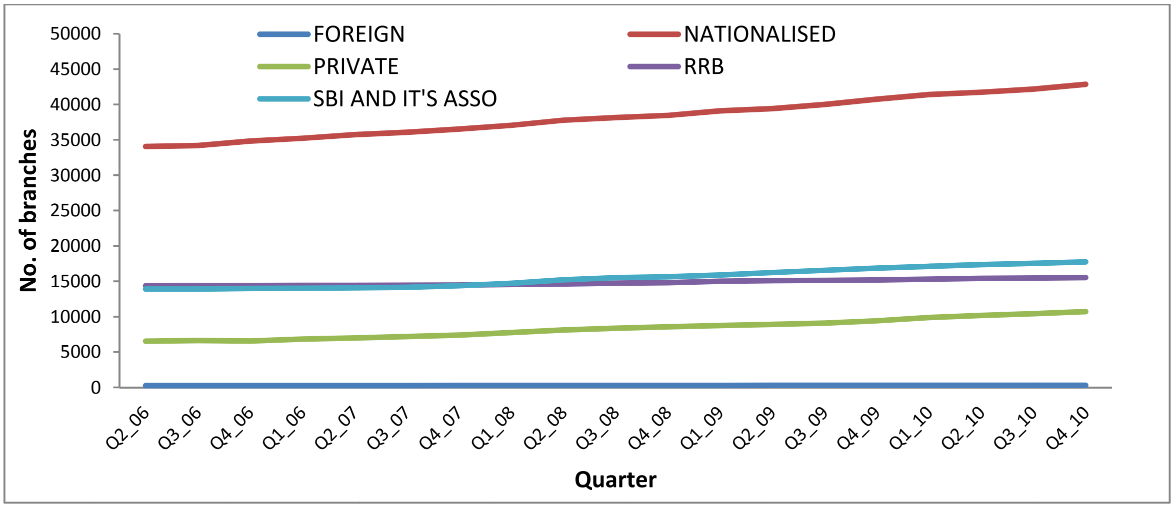
and reject the null hypothesis if KW> $\chi^2{}_{k-1}$. The corresponding p values are obtained from the Chi-square table and reject the null hypothesis if it is less than 0.05. Wilcoxon (1945) Signed rank test was also applied to test CD ratios match pairs. The sum of the ranks for the less frequent sign is standardized. Small significance values (<0.05) indicate that the two variables differ in distribution.

RESULT AND DISCUSSION

Since economic fundamentals of banks in India were sound with nearly no exposure to risky securities, they survived the initial scare. Economic share holding of any country by each of the bank groups is one of the important factors to be studied as they are different in their organization, regulation and approach of banking operations. Soon after the onset of global economic slowdown all the banks moved cautiously to open new branches.

Figure 1 shows that nationalized bank group has largest contribution of branches nearly 50 per cent in India and it is kept on increasing almost with the same acceleration followed by SBI and its associates, Regional Rural Banks (RRBs), private sector banks and foreign banks. Foreign bank branches contribution is very less only about 0.3 per cent.

Figure 1: Number of bank branches in each bank groups in India.



Asset is also one of the important variables for the bank and its entire group to establish and perform in any of the economy of the country. It has also been observed that on the baking of their assets bank can absorb undesired shocks of the economy whether it may be during recession or in any other adverse situation. For the purpose we have a look at asset of each bank group from year 2006 to 2010 through figure 2 and it was observed that assets of all bank groups increased annually significantly. Most impressively annual growth in assets were maximum for foreign bank followed by nationalized banks, SBI and its associates, private sector banks and RRBs. It is quite interesting to see that assets of foreign bank group is more than RRBs whereas RRBs branch wise contribution to the economy is more than foreign bank branches. This clearly indicates that assets per branches for foreign banks are quite higher than other groups.

Figure 2: Bank group wise assets.

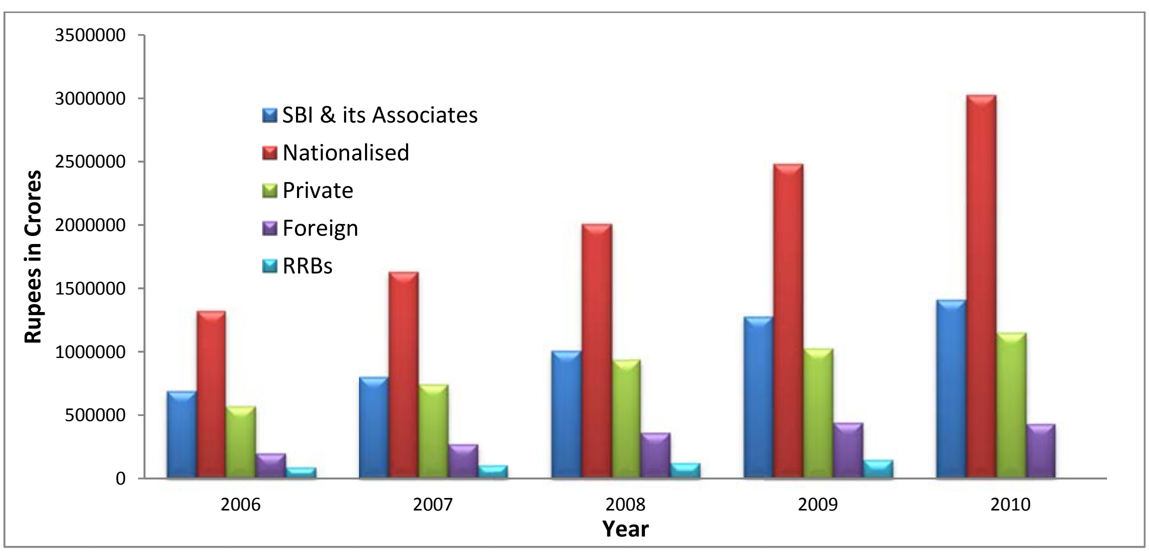
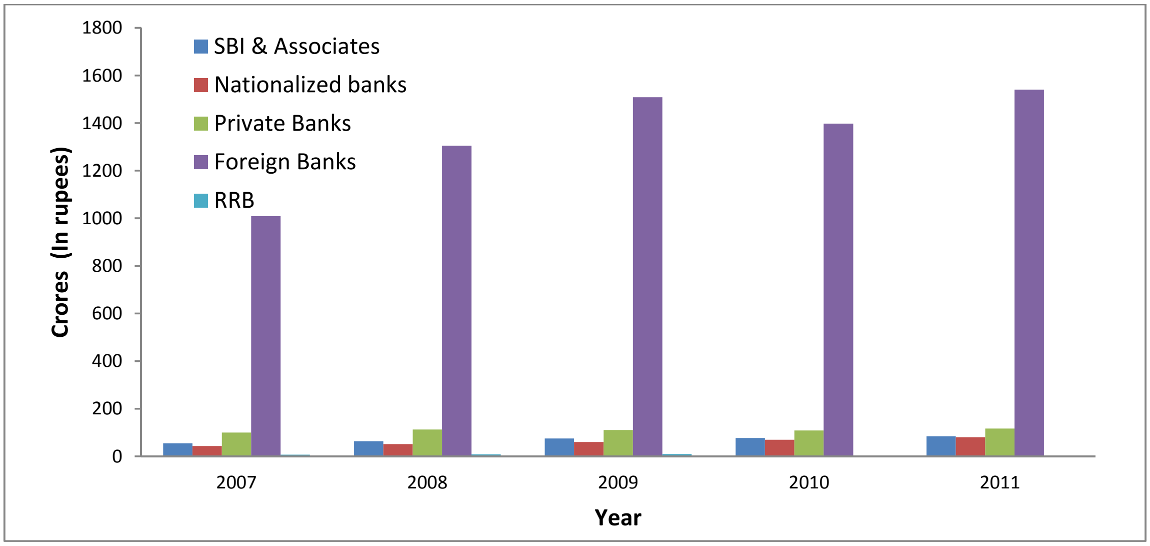


Figure 3: Bank group wise assets per branch.



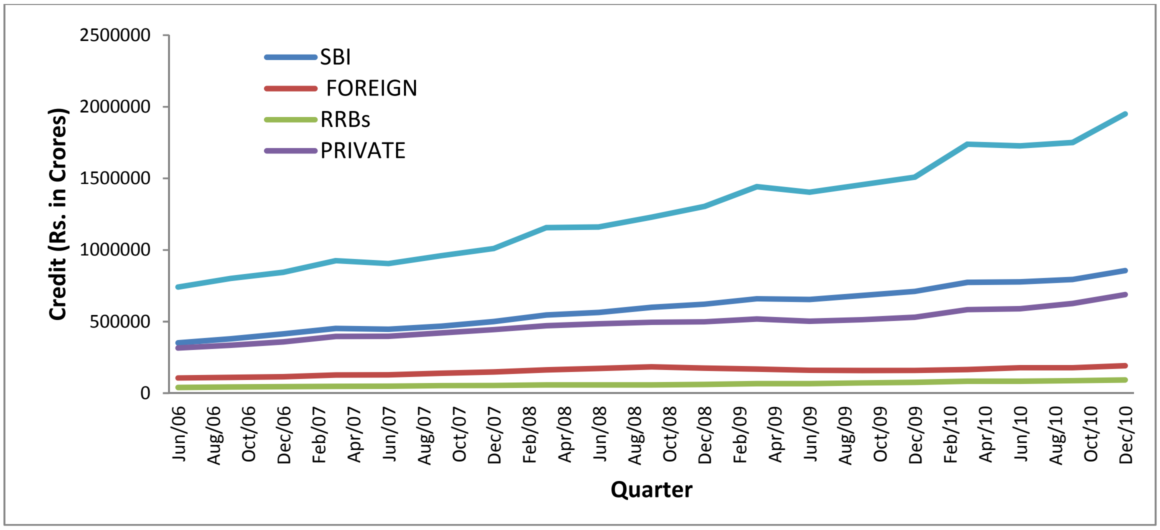
The same can be seen from figure 3. From the figure 3 it is also seen that apart from foreign bank branches other groups are having almost same assets. And foreign bank branches assets are about 16 times than other bank branches. With this inference it may be concluded that foreign banks had more safeguards to absorb economic shocks. Even after moderate increase in number of branches since the economic slowdown, foreign banks have expanded their asset base considerably because their main area of focus has been HNI clients with services such as wealth management and investment advisory. Table 1 shows return on per unit of assets of each bank groups and it is clear that Return on Assets (ROA) declines in 2010 as compared to previous year for all bank groups except private banks, which slightly increases. But in foreign bank groups ROA declined significantly from 1.99 to 1.05, which indicates that asset increment has not got benefitted for foreign bank during 2010.

Table 1: Return on Assets (ROA) of bank group.

Bank Group	Return on Assets- 2009	Return on Assets - 2010
Nationalized banks	1.03	1.00
SBI Group	1.02	0.91
Private Sector Banks	1.13	1.28
Foreign Banks	1.99	1.05

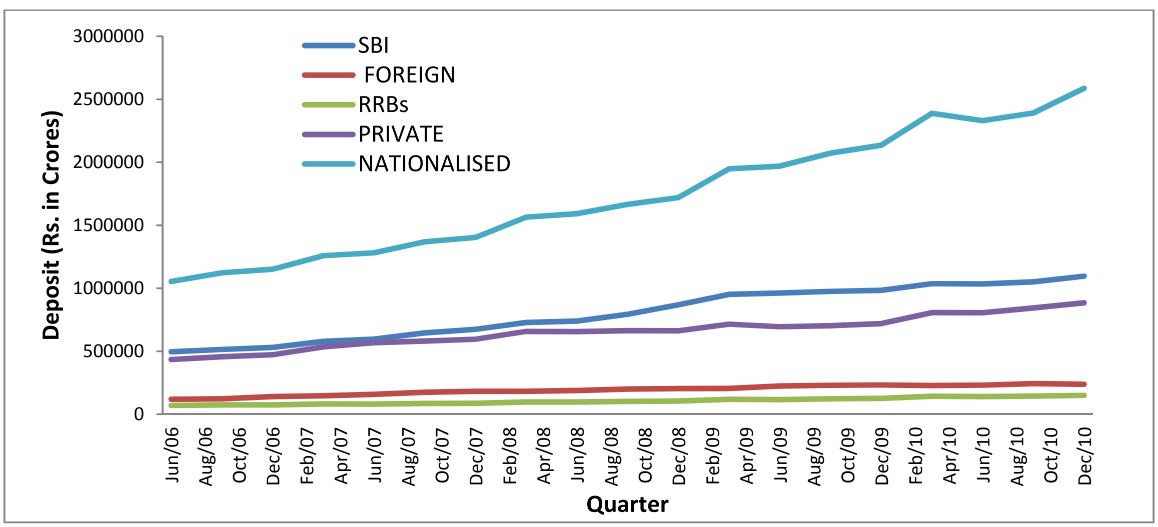
Figure 4 shows bank group wise share of credit in India and from the figure it is clear that nationalized banks are having always highest share of credit followed by SBI and associates and private banks. RRB's always remained very low. It has been pointed out that though foreign banks have low share in total credit but their credit distribution per branch is way more than other banks groups. On an average foreign bank gave credit of Rs. 570 crore per branch from year 2006 to 2011 whereas other bank groups like nationalized bank gave Rs 32 crore per branch, SBI and its associates gave Rs. 37.65 crore per branch. Rural banks gave very less credit of Rs 4.2 crore per branch owning to their limited reach.

Figure 4: Separate Bank group wise credit.



The credit is directly linked with mopping up saving from the public by the banks or deposit by the people or institutions. Low credit dispersion reflects inefficient management and lack of technological knowhow in particular banking groups.

Figure 5: Separate Bank group wise Deposit.



Since deposit is also main concern for any bank therefore it becomes important to examine the share of deposit of each bank groups in India. Figure 5 shows the share and from the figure almost same composition of share depicted with foreign banks having maximum Rs 798 crore of deposit per branch whereas RRBs have just Rs 7 crore per branch.

During the failure of Lehman brothers in Sept 2008, it was observed that there was decrease in deposits and credit for foreign bank as it was expected by the general public that foreign banks having their roots in west might not be the best bank at that point in time. Nationalized and PSBs were at the advantage during this period. However, foreign banks were quick to regain the lost momentum during year 2010.

Since foreign bank group has different behavior in all respect with highest asset per branch we need to look their credit and deposit separately during the period.

Figure 6: Credit and deposit of foreign bank group.

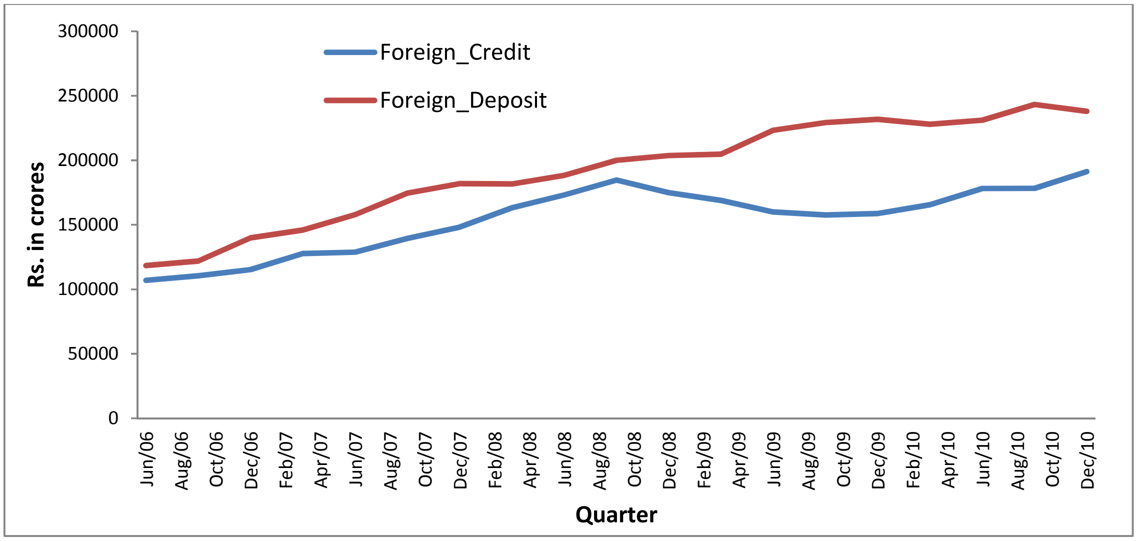


Figure 6 shows credit and deposit of foreign bank and it is observed that foreign bank group deposit has kept on increasing from June 2006 onwards but as regards credit is concern it has got structural break in its growth in September 2008. This could be mainly due to the global recession and subsequently Gulf Meltdown.

Similarly, RRBs were always at the lowest level as far as share of credit and deposit, asset per branch are concern we had a separate analysis for RRBs.

Figure 7: Credit and deposit of RRB group.

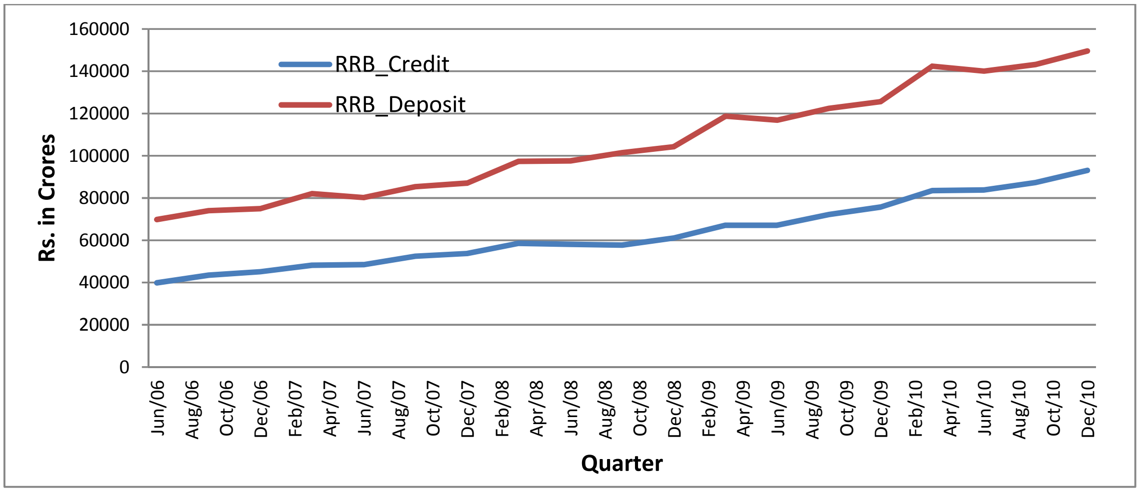
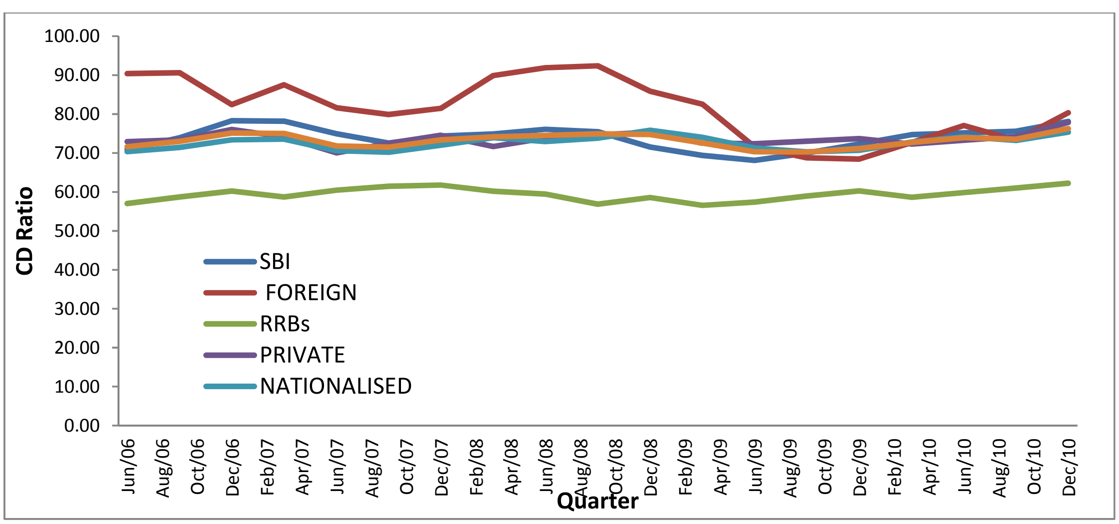


Figure 7 shows credit and deposit of RRBs and shown that both keep on increasing continuously almost in a same trend and therefore CD ratio for the RRB group remains almost same for the period of study. The region of low CD ratio for the group may be lack of infrastructure of the bank and place as well.

CD ratio is the proportion of loan-assets created by banks from the deposits received. According to Puneet Verma and Nitin Kumar (2007) CD ratio reveals the efficiency with which the commercial and financial intermediaries are tapping savings from the available sources and channelizing these to various productive activities of the economy. The importance of sound financial system in mobilizing deposits and disbursing credit for productive utilization is well documented in studies such as Levine *et. al.* (1999), King and Levine (1993), Rajan and Zingales (2001), Jayaratne and Strahan (1996).

Figure 8: Shows separate bank group wise CD ratio.



From the figure 8 it is shown that CD ratio for all the bank groups are not same for the entire period of study. It is clearly depicted that CD ratio of RRBs group remains always at the low level near to 60 per cent. Simultaneously it is also observed that with the thrust of effective financial inclusion, CD ratio for RRBs has got continuous improvement during the last five quarters and it has reached its own highest level of last 19 quarters. Another important observation from the figure is that there is a significant difference between CD ratio of foreign banks and other bank groups during the period of study. It is also to be noted that CD ratio of foreign bank groups was significantly high before June 2009. Subsequently, foreign bank group CD ratio came down to the level of other bank groups except RRBs.

Table 2: Descriptive statistics of CD ratio of bank groups

Bank Group	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Foreign	19	68.50	92.40	81.5105	7.86680	61.887
SBI and Associates	19	68.10	78.30	73.9211	2.96958	8.818
RRBs	19	56.50	62.20	59.3789	1.67915	2.820
Private	19	70.00	77.80	73.5895	1.71007	2.924
Nationalized	19	70.20	75.80	72.6211	1.75423	3.077
All India	19	70.30	76.30	73.1895	1.74129	3.032

Table 2 shows descriptive statistics of CD ratio of different bank groups and all India as well and it is observed that foreign banks mean CD ratio was highest during the period of study along with highest variation whereas RRBs remained at the lowest mean CD ratio with lowest variation. Rest three bank groups mean CD ratio were almost same about 70 per cent with low variation in comparison of foreign bank group. From table 1 and 2 it may be concluded that special attention should be given to the ailing group of banks which majorly comprise of RRBs since these banks lack technology that can improve their efficiency. Mukherjee *et. al.* (2003) says that 70 per cent of Indian PSBs are inefficient in utilizing their infrastructure, human resource and and other capabilities for optimal service delivery.

Table 3: Kruskal Wallis test statistics of CD ratio of all five bank groups

Chi-Square	55.807
df	4
Asymp. Sig.	.000

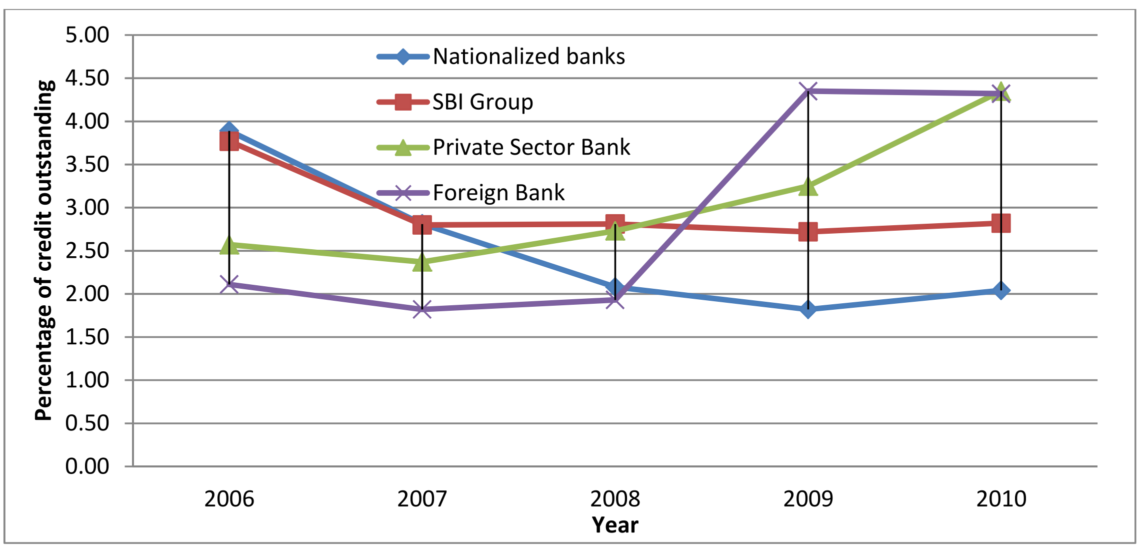
Table 3 shows Kruskal Wallis test statistics of CD ratio among all bank groups and from the table it is clear that CD ratio of all bank groups are not same or significantly different among themselves.

Table 4: Wilcoxon signed rank test statistics of CD ratio for each pair of bank groups.

Pair	Z	Asymp. Sig. (2-tailed)
SBI- Foreign	-3.022	.003
SBI- RRBs	-5.271	.000
SBI- Private	-8.030	.422
SBI – Nationalized	-1.723	.085
Foreign - RRBs	-5.271	.000
Foreign - Private	-3.935	.003
Foreign - Nationalized	-3.255	.001
RRBs - Private	-5.271	.000
RRBs - Nationalized	-5.271	.000
Private- Nationalized	-1.417	.157

Wilcoxon signed rank test was applied to check whether distribution pattern of CD ratio of all each pair wise bank groups significantly different. From the table 4 it is depicted that SBI and its associates, private and nationalized bank groups are not significantly different whereas all other pairs are significantly different from each other. With this table it is observed that only foreign bank and RRBs are different in the banking sector. Foreign banks performed well may be because they had lot of assets per branch in comparison of other bank branches in India whereas RRBs performance in terms of CD ratio remained at the least. The possible reason may be due to low asset availability per branch.

Figure 9: Bank group wise Non Performing Assets (NPA).



Comparison of bank performance in terms of NPA reflects the profitability of loan portfolios of banks since less NPA contributes to higher interest income. Importantly, how careful the banks have been using their discretion to give credit to unworthy borrowers. It has been observed that big banks collapse under the burden of high NPA and therefore it becomes highly relevant for banks to increase their profitability to sustain growth without under reporting nonperforming assets. From the figure 9, it is seen that during the global turmoil of 2008 foreign banks saw sharp rise in NPA as percentage of credit outstanding. While foreign and private banks saw rise, nationalized banks and SBI group showed resilience in the face of global meltdown. This shows that Indian banks were much more careful in giving loans to customers.

CONCLUSION

On the basis of above results and discussions it may be concluded that competition has been observed in all bank groups for maintaining optimum CD ratio. Except RRBs all other bank groups strived to keep their CD ratio more than 70 per cent during the period of study. Foreign banks could manage to keep CD ratio more than even 80 per cent for long time but just after recent global meltdown their CD ratio has started coming down and reached least in December 2009. Since then they have been trying to keep it as competitive as other Indian banking sector. RRBs always remained at low CD ratio with about 60 per cent and hence not in the competition with other Indian banks. Asset per branch could be one of the affecting factors. Except foreign banks and RRBs all other banks remained competitive for the entire period of study but after recent global slowdown in 2008 foreign banks have also come into the competition of other banks. Indian banking industry has come off an age since the nationalization of banks. Banking has been the important factor behind the growth of Indian economy. While the good work of the banks can't be ignored, it must also be pointed out that the potential and scope for further improvement is immense. Banks have definitely achieved efficiency owning to the progressive policy of RBI but to stay competitive in the global arena they still have to cover a lot of ground.

Indian banking system's conservative approach towards giving out credit saved it from the repercussions of the global slowdown where number of international banks failed. Foreign banks were successful in bringing down its high level NPA in 2010. Global recession hardly had any impact on Indian banks which shows the extent to which our banks have been responsible towards the public. This should be praised and new foundations should be laid to make banking a high performance sector.

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