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Profitability of Foreign Banks vis-à-vis Other Bank Groups in India – A Panel Data Analysis

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The paper analysed the financial performance of foreign banks in comparison with other bank groups in India. The study assumes importance in the context of the on-going preparation of roadmap for the presence of foreign banks in India by the Reserve Bank. The results of the study indicate that access to low cost funds, diversification of income, adequate other income to fully finance the operating expenses are the important factors leading to the higher profitability of foreign banks vis-à-vis other bank groups in India. The results of the panel data regression also indicate that efficiency of fund management is the most important factor determining profitability in the banking system followed by generation of other income. However, with regard to the foreign banks policy, a holistic view may be taken by considering factors such as global financial inter-linkages, financial performance of parent banks as also the pursuit of social objectives by these banks.

Introduction

Scheduled Commercial Banks (SCBs), with their wide geographical coverage and large volume of banking business, is the most important segment of the Indian financial system. After the implementation of the first Narasimham Committee (1991) recommendations, which enabled the entry of new private sector banks and allowed for more liberal entry of foreign banks, SCBs have become a heterogeneous group of institutions in terms of their ownership and risk taking appetite[1]. Presently, with a credit-deposit ratio of 73.9 per cent at end-March 2009, SCBs play an important role in the financial intermediation of the economy. Public sector banks

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(PSBs) are the biggest segment of SCBs comprising about 72 per cent of total assets of SCBs followed by private sector banks (PrSBs) (20 per cent) and foreign banks (FBs) (8 per cent) as at end-March 2009. After the liberalisation policies adopted in India since 1991, in terms of interest rate liberalisation, reduction in reserve requirements, entry deregulation, credit policies and prudential supervision, these banks acquired considerable commercial freedom to pose themselves as profit making entities in the whole industry. As at end-March 2009, PSBs account for 65.2 per cent of the total net profits of SCBs followed by PrSBs (20.6 per cent) and FBs (14.2 per cent).

The positive dividends on account of higher profitability in the banking sector are many: First, it would enable banks to attract more resources (equity capital) from the market, Second, it would equip banks to absorb the risk of non-performing assets and third, it would facilitate the implementation of aggressive written off policy for non-performing loans (Chaudhuri, 2002). Healthy profits are also desired for the development activities of banks such as branch expansion in the rural areas and the fulfillment of priority sector advances (Mittal and Aruna, 2007). Thus, a profitable banking system is a necessary condition for a pro-development financial intermediation.

In India, the profitability of various bank groups as well as banks considerably varies and foreign banks operating in the country report higher profitability than others, *viz*., public sector banks and private sector banks. It may be noted that FBs with 8 per cent of the total assets of SCBs, generated 14.2 per cent of the total net profits of SCBs as at end-March 2009. This raises the question what determines profitability in the banking sector or what explains the higher profitability of FBs *vis-à-vis* other bank groups.

An analysis of financial performance of FBs assumes added importance in the context of the preparation of roadmap for FBs by the Reserve Bank. The Reserve Bank released the roadmap for the presence of FBs in February 2005. The roadmap had two phases. First phase from March 2005 to March 2009 and second phase would begin after reviewing the experience in the first phase.

However, after the completion of the first phase, the Reserve Bank continued with the existing policies with regard to FBs because the global financial system was experiencing turbulence. Later on, in the Annual Monetary Policy Statement announced in April 2010, the Reserve Bank proposed to prepare a discussion paper on the mode of presence of FBs through branch or wholly owned subsidiary by September 2010. In this background, this paper is an attempt to analyse the financial performance of FBs *vis-à-vis* other banks in detail by examining the data in 2000s on the banking sector of India.

The paper is organised in the following sections. Followed by introduction the previous studies on profitability of Indian banks are discussed in Section II. Conceptual framework in presented in Section III. Section IV analyses the profitability of FBs *vis-à-vis* other bank groups in India during the recent years based on financial ratios. Section V presents the determinants of profitability based on results of the panel regressions and Section VI draws broad conclusions.

Section II
Review of Literature

There have been many attempts in the past to analyse the profitability of banks in general and also to compare the performances of different bank groups. Most of these studies tried to study the performance of banks during the post-liberalisation period. During the pre-liberalisation period, the Indian banking sector was characterised by state ownership and administered interest rates. Thus, the performance of banks during this period was dependent to a great extent on policies undertaken in the banking sector. One of the earlier studies (Verghese, 1983) found that changes in the interest rate were the most important factor determining profitability of banks during the post-nationalisation but pre-deregulation period. The trend has changed after the adoption of the liberalisation policies. Banks have gained considerable commercial freedom within the broad regulatory framework.

There is a difference of opinion among previous studies with regard to the performance of banks during the post liberalisation period. A study that covers the time period from 1991-92 to 1999-2000 (Ram Mohan, 2002) revealed that the performance of PSBs improved during the post-liberalisation period both in absolute and relative terms. The study analysed the performance of PSBs by taking a number of indicators, *viz*., net profits, net interest margin, intermediation cost and non-performing assets. However, another study (Chaudhuri, 2002) pointed out that during the period from 1997-98 to 2000-01, the PSBs witnessed a decline in their profitability, mainly owing to the thinning down of net interest margin.

Similarly, with regard to the performance of FBs in comparison with other bank groups, some of the studies have come to the conclusion that there is convergence in the performances of different bank groups in India. Some other studies concluded that public and private sector banks continue to be more efficient than foreign banks. To illustrate, Mittal and Aruna (2007) compared the profitability of various bank groups using ratio analysis during the period 1999-00 to 2003-04. The study found that FBs were the most profitable bank group in India followed by PrSBs and PSBs. The study also noted that the profitability of the PSBs have witnessed improvement over the last five years. A study by Das (1999) also opined that there is convergence in the performances of different bank groups in India. The Report on the Committee on Financial Sector Assessment (CFSA) noted that 'the relatively higher productivity ratios of new PrSBs and FBs in terms of business per employee could be due to increased mechanisation, lower staff strength and increased outsourcing activities as compared to PSBs. PSBs have a legacy of labour-intensive work procedures and greater penetration in rural areas, which also result in comparatively low business per employee' (RBI, 2009).

Another study by Sensarma (2006), however, opined that foreign banks are less cost efficient as compared with other bank groups in India. This study compared the performances of different bank groups for the period from 1986 to 2000.

A study by Reddy (2002) pointed out that reduction in employee strength through voluntary retirement schemes and reduction in non-performing assets mainly through write-off schemes were the two major developments in the banking sector of India during the post-liberalisation period which had a positive impact on the profitability of banks.

Section III
Profitability – The Analytical Framework

This section documents the analytical framework in which the profitability of banking institutions is determined.

The net interest income, other income, operating expenses and provisioning are the factors which get into the direct calculation of net profits.

$$NP = (NII + OI) - (OE + Pr)$$

Where NP – Net Profits, NII – Net Interest Income, OI – Other Income, OE – Operating Expenses, Pr – Provisioning.

The net interest income is the difference between interest income and interest expenses. The interest income is dependent on the return on funds and the interest expenses depend upon the cost of funds. While the cost of funds indicates the efficiency of resource mobilisation by a bank, the return on funds indicate how profitably the bank has deployed its funds. Thus, the capability to raise low cost resources and the ability to design profitable asset creating strategy are the keys to increase the net interest income of a bank.

Apart from interest income, banks also have income from other sources such as commission, exchange and brokerage, profit on sale of investments, and profit on exchange transactions. Those banks which make conscious efforts to increase income from other sources would register higher net profits than others. On the expenditure side, apart from interest expenses, *i.e.*, interest paid on deposits and borrowings, another major expenditure category is the operating expenses. The operating expenses mainly consists of payments to and provisions for employees, rent, taxes, printing and stationary, advertisement and publicity, law charges and insurance, among others. Savings in these expenses through austerity measures would increase net profits of banks.

Provisioning including those for non-performing assets, standard assets, depreciation on investment and floating provisions, is another major item which has a bearing on net profits of banks. Banks are required to keep aside a portion of their operating profit as provisions. Thus, as NPA increases or the value of investment decreases due to adverse market movements, banks have to increase the amount kept aside as provisions[2], which will reduce their net profits. Thus, quality of loans and investment strategies will have a strong bearing on profitability of banks. Further, it is observed that some of the sectors in the economy are more prone to NPAs. Accordingly, if a bank has more exposures to such sectors, it is likely to impact the profitability of those banks adversely.

While factors discussed above such as net interest income, other income, operating expenses and provisioning, would get into the direct calculation of net profits, there could be other factors in the second line which would influence these first line factors and through them, net profits. For example, if macroeconomic growth momentum is conducive in a particular economy, it would have a positive impact on the banking sector as well through reduction in NPAs and good growth in banking business. Further, the credit risk undertaken by a bank as reflected in the NPA generation would impact the profitability negatively. Further, banks' profitability would also move in tandem with business cycles in the economy owing to the pro-cyclical behavior of banks. Thus, the profitability of banks would increase during an economic upturn and decrease during an economic downturn. The inflationary pressures in the economy would tighten the interest rate environment in the economy, thus, making banking services less attractive to customers. This also will have a negative impact on the profitability of the banking sector.

Section IV
Profitability of Foreign Banks *vis-à-vis* Other Bank Groups: An Analysis of Financial Ratios

Net profit to total assets ratio (return on assets (ROA)) across the bank groups showed that the ratio hovered around 1 per cent for SCBs during the period 2002-03 to 2008-09. While PSBs and PrSBs witnessed a ratio of 0.9 per cent and 1.1 per cent, respectively at end-March 2009, FBs reported a higher ratio of 1.7 per cent during the same year. It may be noted that the net profit to total assets ratio of FBs hovered around 1.6 per cent and were considerably higher than other bank groups during the period 2002-03 to 2008-09 (Chart 1).

On the income side, the interest income was the major component of the total income of SCBs comprising more than 80 per cent of the total income. The bank group wise data depicted that in case of FBs the percentage of interest income in total income declined during the recent years. This is in contrast to the trend observed in case of other bank groups. As at end-March 2009, while SCBs as a whole raised 83.8 per cent of their total income through interest, FBs raised only 67.1 per cent of their total income through interest (Table 1).

The net interest income (NII) (difference between interest income and interest expenses) as a ratio to total assets is observed to be higher for foreign banks than the other bank groups, though the interest income as a per cent of total income was witnessing a declining trend in case of them. At end-March 2009, FBs as a group registered a NII to total asset ratio of 3.9 per cent as compared with the ratio of 2.4 per cent for SCBs as a whole. The higher NII for FBs indicated that either they were able to access sufficiently low cost funds or were able to deploy funds with higher returns or both.

Chart 1: Net Profit to Total Assets

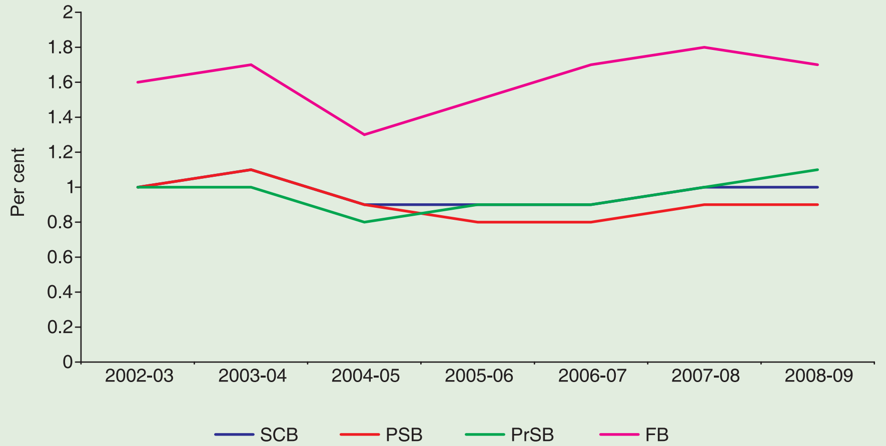


Table 1: Interest Income as a per cent to Total Income

(per cent)

Year	FBs	PSBs	New PrSBs	Old PrSBs	SCBs
2002-03	74.4	83.5	76.0	79.1	81.7
2003-04	70.2	79.6	76.2	78.9	78.5
2004-05	70.3	82.7	76.9	88.1	81.9
2005-06	69.6	86.3	78.3	89.5	84.0
2006-07	71.8	87.4	78.0	88.0	84.3
2007-08	69.8	86.7	79.2	87.0	83.6
2008-09	67.1	86.6	81.4	87.1	83.8

FBs – Foreign Banks, PSBs – Public Sector Banks, PrSBs – Private Sector Banks, SCBs – Scheduled Commercial Banks.

Source: The Report on Trend and Progress on Banking in India, various issues.

An analysis of return on funds indicated that the return on funds for FBs was higher than other bank groups. As at end-March 2009, FBs registered a return on funds at 9.9 per cent as compared with the ratio of 8.5 per cent registered by SCBs. However, it is important to note that new PrSBs as well as old PrSBs did have higher return on funds which was close to FBs (Table 2).

This pointed to differences in cost of funds faced by different bank groups. Trends in cost of funds faced by the different bank groups indicated that the cost of funds was considerably lower for FBs as compared with other bank groups. While the cost of funds was 4.2 per cent for FBs at end-March 2009, it was 5.5 per cent for SCBs as a whole.

Table 2: Return on Funds

(per cent)

Year	FBs	PSBs	New PrSBs	Old PrSBs	SCBs
2003-04	8.4	8.2	7.7	8.5	8.2
2004-05	7.3	6.9	7.3	8.0	7.1
2005-06	7.6	7.5	6.6	7.7	7.4
2006-07	8.2	7.5	7.4	8.0	7.6
2007-08	8.7	8.0	8.7	8.5	8.2
2008-09	9.9	8.2	9.5	9.1	8.5

Note: Return on funds is calculated as (interest on advances + interest on investments)/(total advances + total investments).

FBs – Foreign Banks, PSBs – Public Sector Banks, PrSBs – Private Sector Banks, SCBs – Scheduled Commercial Banks.

Source: The Report on Trend and Progress on Banking in India, various issues.

Notably, new PrSBs as well as old PrSBs registered considerably higher cost of funds at end-March 2009 (Table 3).

The decomposition of cost of funds of SCBs indicated that FBs had the lowest cost of deposits of 4.3 per cent as at end-March 2009 as compared with the cost of deposits of SCBs at 5.7 per cent during the same year. It may be noted that PrSBs registered the highest cost of deposits of 6.3 per cent at end-March 2009. However, deposits were costlier than borrowings for all bank groups including FBs. In this context, it is interesting to note that the dependence of FBs on costly funds, *viz*., deposits was relatively less. In contrast, deposits were the major source of funds for other SCBs. Thus, it is clear that the lower dependence on deposits as well as access to low cost deposits enabled FBs to register higher profits than other bank groups in India (Table 4).

Accordingly, FBs gained on account of the higher difference between cost of funds and return on funds, *i.e*., higher spread (Chart 2). This point was also noted in an earlier study by Mittal and Aruna (2007).

Apart from net interest income, other income was the second source of income for banks. As at end-March 2009, the other income constituted 32.9 per cent of the total income of FBs, whereas for SCBs as a whole, it constituted only 16.2 per cent. Old PrSBs recorded the lowest other

Table 3: Cost of Funds

(per cent)

Year	FBs	PSBs	New PrSBs	Old PrSBs	SCBs
2003-04	3.8	5.0	3.7	5.3	4.8
2004-05	3.1	4.2	3.0	4.6	4.0
2005-06	3.2	4.2	3.5	4.5	4.0
2006-07	3.5	4.4	4.5	4.8	4.3
2007-08	3.9	5.3	5.5	5.7	5.3
2008-09	4.2	5.5	6.0	6.1	5.5

Note: Cost of funds is calculated as (interest on deposits + interest on borrowings)/(total deposits + total borrowings).

FBs – Foreign Banks, PSBs – Public Sector Banks, PrSBs – Private Sector Banks, SCBs – Scheduled Commercial Banks.

Source: The Report on Trend and Progress on Banking in India, various issues.

Table 4: Details of Sources of Funds of SCBs as at end-March 2009

(per cent)

Year	FBs	PSBs	PrSBs	SCBs
Cost of deposits	4.3	5.6	6.3	5.7
Cost of borrowings	3.9	4.0	4.4	3.9
Share of deposits in total funds	75.3	95.2	88.6	92.6
Share of borrowings in total funds	24.7	4.8	11.4	7.4

FBs – Foreign Banks, PSBs – Public Sector Banks, PrSBs – Private Sector Banks, SCBs – Scheduled Commercial Banks.

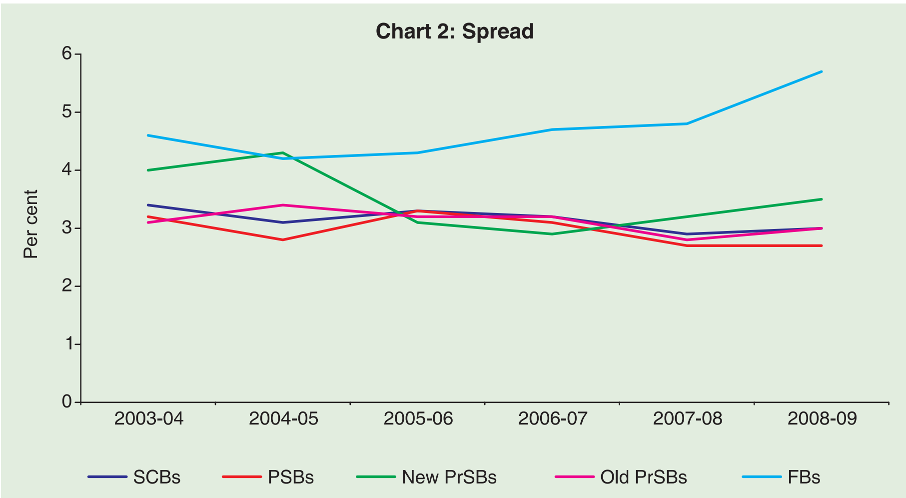
Note : 1. Cost of deposits is calculated as interest paid on deposits/total deposits.

2. Cost of borrowings is calculated as interest paid on borrowings/total borrowings.

Source : 1. The Report on Trend and Progress on Banking in India, various issues.

2. Statistical Tables Relating to Banks in India.

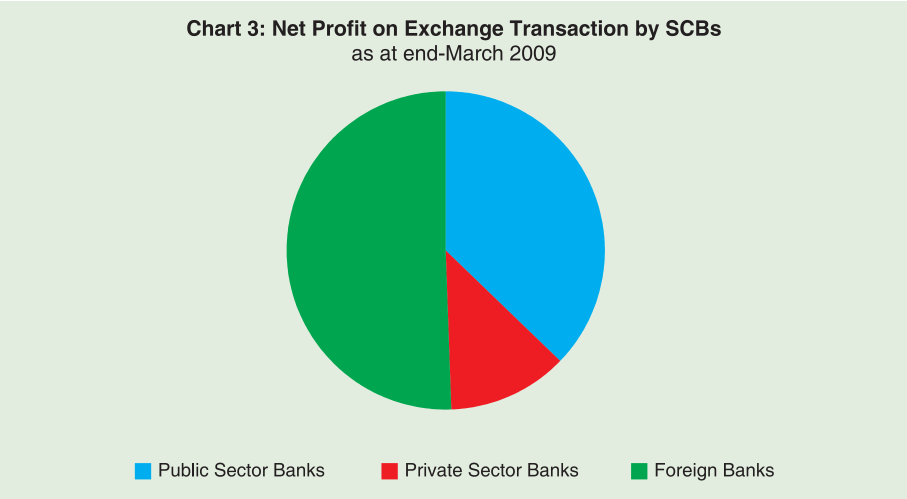
income to total income ratio of 12.9 per cent followed by PSBs (13.4 per cent) and new PrSBs (18.6 per cent) during the same year. Thus, it is clear that the dependence of FBs on other income was relatively high in comparison with other bank groups in India. Or in other words, this indicated that FBs had diversified their sources of income during the recent years. One factor which enabled FBs to diversify their income was the higher foreign exchange transactions undertaken by them. It is interesting to note that FBs raised considerable amount of income through net profit on exchange transaction (12.9 per cent of the total income) and net profit on sale of investments (3.2 per cent of the total



income) at end-March 2009. In this context, it may also be noted that as at end-March 2009 out of the total income raised through net profit on exchange transaction by all SCBs, FBs accounted for 50.2 per cent (Chart 3).

On the expenditure side, the operating expenses to total assets ratio of FBs was 2.8 per cent as at end-March 2009. In contrast, the ratio was lower for both PSBs and PrSBs at 1.5 per cent and 2.1 per cent, respectively during the same year. It is interesting to note that FBs incurred relatively higher expenditure than other bank groups for managing their assets. The possible reason for these high operating expenses of FBs as documented in literature is that these banks generally spend more for technology up-gradation, and also for advertisement and publicity. Though this spending may impinge upon their profits in the short run, it may yield a high dividend in the long run (Mittal and Aruna, 2007). Another study by Sensarma (2006) also opined that higher operating expenses of FBs reflect higher expenditure incurred by them on costly real estate, salaries and expenditure for technology up-gradation. The higher operating expenses of FBs led some of the earlier studies to conclude that FBs were not cost efficient as compared with other bank groups in India (ibid.).

Wage bills as a per cent of total assets was the highest in the case of FBs at 1.1 per cent as compared with 0.8 per cent for PrSBs and 0.9 per cent for PSBs as at end-March 2009. However, as a percentage of



total operating expenses, the wage bills constituted only 39.7 per cent in case of FBs as at end-March 2009. In contrast, for SCBs as a whole, as at end-March 2009, wage bills constituted 53.4 per cent of the total operating expenses. The relatively lower percentage of wage bills in the total operating expenses of FBs may be due to the relatively higher operating expenses incurred by these banks (Chart 4).

A detailed analysis of the operating expenses of FBs indicated that though wage bills as a per cent of operating expenses was low, wage bills was the biggest item of expenditure in the total operating expenses of FBs. Further, it is interesting to note that FBs spent almost 9 per cent of the total operating expenses on advertisement and publicity[4].

FBs, however, were able to finance the entire operating expenses through other income. This is in contrast to the trend observed in case of other bank groups. At end-March 2009, for SCBs as a whole, the other income was sufficient to finance only 84.0 per cent of the operating expenses, whereas in the case of FBs, other income was more than the operating expenses (121.1per cent). Old PrSBs financed only 70.8 per cent of the operating expenses through other income at end-March 2009 followed by PrSBs (76.4 per cent) and new PrSBs (85.0 per cent) (Table 5).

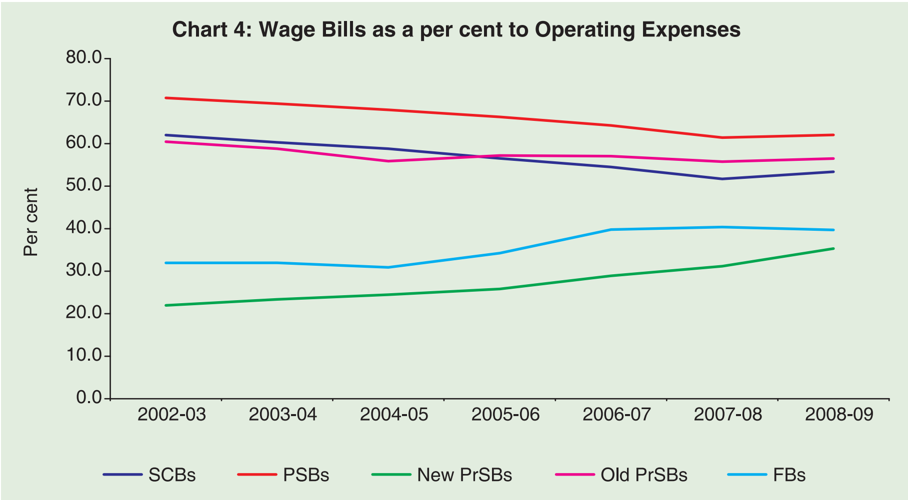


Table 5: Other Income as a per cent to Operating Expenses

(per cent)

Year	FBs	PSBs	New PrSBs	Old PrSBs	SCBs
2002-03	94.6	73.5	130.7	109.9	83.0
2003-04	103.1	86.2	102.8	102.3	90.4
2004-05	87.5	82.5	84.4	47.9	68.7
2005-06	91.8	53.0	76.8	39.5	59.7
2006-07	90.9	54.8	87.0	52.8	64.9
2007-08	102.3	70.3	87.0	67.5	78.1
2008-09	121.1	76.4	85.0	70.8	84.0

FBs – Foreign Banks, PSBs – Public Sector Banks, PrSBs – Private Sector Banks, SCBs – Scheduled Commercial Banks.

Source: The Report on Trend and Progress on Banking in India, various issues.

Provisioning are made by banks against loan assets including standard assets and non-performing assets. These provisioning are made out of operating profits and thus, get reflected in the calculation of net profits. SCBs as a whole kept aside 7.6 per cent of their income as provisioning for NPAs as at end-March 2009. FBs made provisioning of 7.7 per cent of their total income against NPAs. It is important to note that the PSBs kept aside the lowest portion (7.1 per cent) of their income as provisioning.

Section V
Determinants of Profitability: A Panel Data Analysis

In this section, we examine determinants of profitability in the Indian banking sector using panel data regression analysis. We used a sample of 59 banks, which include 14 FBs, 14 old PrSBs, 5 new PrSBs and 26 PSBs. The criterion for inclusion in the sample is the consistent availability of data for the period 2000-2009. These 59 banks together account for 94 per cent of the total assets of all SCBs as at end-March 2009. The bank-wise data used in the study have been taken from the *Statistical Tables Relating to Banks in India*.

Net profits to total asset ratio was taken as the dependant variable. We have taken efficiency of fund management, operating expenses to total assets, other income to total assets, credit risk, cyclical output and inflation as the explanatory variables of net profits of the banking sector.

Thus, symbolically, the model used in the study can be written as:

$$\pi_{it} = c + \sum_{k=1}^{K} \beta_k X_{it}^{k} + \varepsilon_{it}$$

Where

$$\varepsilon_{it} = v_i + u_{it}$$

Π_{it} is the profitability of bank *i* at time *t*, with $i = 1,\ldots,N;\ t = 1,\ldots, T$, *c* is a constant term, X_{its} are k explanatory variables and ε_{it} is the disturbance with v_i the unobserved bank-specific effect and u_{it} the idiosyncratic error.

The efficiency of fund management is calculated as the amount of interest expenses required for generating one rupee interest income. The primary function of banks is to accept deposits on which they are liable to pay interest and lend the mobilised funds to earn interest income. Banks also mobilise funds through borrowings on which they pay interest and make investments on which they earn interest income. Thus, the net interest income of banks is dependent on how efficiently they are deploying the costly funds mobilised by them. The efficiency of fund management was calculated by the ratio – interest expenses/interest income. A decrease in this ratio, *i.e.*, the interest expenses required for generating one rupee interest income comes down, implies an improvement in the fund management. Accordingly, profitability would increase, with the decrease in this ratio. Thus, the expected sign of the coefficient is negative.

Operating expenses to total assets ratio would have a negative impact on profits, as profits come down with the increase in operating expenses. Thus, we expect a negative coefficient for this variable. Income from sources other than net interest income, *i.e.*, other income, is expected to impact the profitability positively. Thus, we expect a positive coefficient for this variable.

Credit risk is calculated by the ratio provisions to total advances of banks. An increase in this ratio indicates that the credit risk involved in the lending activities of banks is higher. Or in other words, an increase in this ratio indicates the deterioration in the quality of credit origination. As the quality of credit origination comes down the amount of non-performing assets increases, thus, impacting upon the profitability negatively, first through the increased requirement for provisioning and second through the reduction in the interest income. Thus, we expect a negative coefficient for this variable.

The cyclical output has been calculated using the Hodrick-Prescott (HP) Filter method. We expect a positive coefficient for this variable as the profits of the banking sector tend to move along with cycles. It is documented in the literature that during an upturn of the cycle, with increased economic activity, banks also tend to lend more. The generation of non-performing assets will also be low during an upturn as the economy is performing well. However, during a downturn, with the decelerating economic growth, the bank lending would come down and also the generation of non-performing assets would pick up. This would reduce the profitability of banks during a downturn. Thus, according to the theoretical expectations, we expect a positive coefficient for this variable.

We have taken the whole sale price index as a proxy for inflation. Higher inflation indicates a tighter interest rate scenario, in which the bank lending would slow down due to inadequate response from the real sector to the high cost loans. Thus, as inflation increases the profitability of the banking system would come down. Accordingly, we expect a negative coefficient for this variable.

The Hausman test statistic was significant at 5 per cent level indicating that there are unobserved bank specific effects determining the profitability of individual banks. Hence, we have reported results of the fixed effects model in this study.

The regression results are presented in Table 6.

The regression result shows that efficiency of fund management is the most important factor determining profitability in the banking

Table 6: Determinants of Profitability in the Banking Sector

Explanatory Variables	Coefficients	t-value
Intercept	4.8227	15.25140*
Efficiency of Fund Management	-4.8085	-14.34199*
Credit Risk	-0.0993	-12.08159*
Cyclical Output	8.18E-07	5.539659*
Other Income	0.7783	17.96789*
Operating Expenses	-0.6715	-11.30420*
Inflation	-0.0452	-2.360831*
R-Squared : 0.66		
Adjusted R-Squared: 0.62		
DW Statistic: 1.62		

*: Significant at one per cent level.

sector. We have noted in the previous section that FBs have the least cost deposits as compared with other bank groups. Further, borrowings were cheaper than deposits and unlike other bank groups, FBs have diversified their sources of funds with relatively low dependence on deposits and correspondingly higher dependence on borrowings. Thus, FBs report very low cost of funds alongside a high return on funds. Thus, FBs gain on account of their efficient fund management.

Income from sources other than net interest income also determine profits to a large extent. As alluded to earlier, foreign banks raise considerable portion of income through other sources, especially net profit on exchange transactions.

The operating expenses is another factor which has a bearing on the profitability of the banking sector. As noted in the previous section, FBs report the highest operating expenses to total assets ratio among the bank groups in India. Thus, we found that even with the highest operating expenses to total assets ratio, FBs report higher profits than the other bank groups. However, when we assess the operating expenses in terms of income, FBs are well placed than the other bank groups in India. Further, as noted in the previous section, not only the income of FBs is high but also well diversified with a considerable portion of income coming from sources other than net interest income.

Generally, non-performing assets are high in foreign banks implying that foreign banks take higher credit risk than other banks, which has a negative impact on their profitability. However, it may be noted that the impact of this factor is less as compared with other determinants.

The positive coefficient of the cyclical component of GDP indicates that the profitability of the banking sector moves in tandem with the business cycles, however, the impact is low as compared with other determinants. We also found that with the increase in inflation, the profitability of the banking sector decreases.

Section VI
Concluding Observations

The present study probed the question: why FBs are more profitable than other bank groups in India? The analysis in the study indicates that the access to low cost funds by FBs is the most important factor which is making a difference to the profitability of FBs *vis-à-vis* other bank groups in India. The cost of deposits for FBs is the lowest among the bank groups in India. However, the deposits were costlier in comparison with borrowings for all the bank groups including FBs. In this context, it is important to note that the dependence of FBs on deposits is relatively lower than the other bank groups. Another major factor determining the profitability of FBs is diversification of income achieved by them. The other income to total income ratio is higher for FBs than other bank groups. FBs raised almost 9 per cent of their total income through net profit on exchange transactions. As a result, FBs are able to meet their entire operating expenses through their other income. To ascertain the determinants of profitability in the banking sector, the study has done a panel data regression analysis. The regression results showed that efficiency of fund management measured as the amount of interest expenses required for generating one rupee interest income determined profits to a large extent. The operating expenses and other income are other important factors determining profitability in the banking sector. In terms of fund management and other income, FBs were well ahead of domestically owned banks in India, thus, providing a cue about the higher profitability of FBs in comparison with domestically owned banks. However, profitability is only one factor which is important while preparing the roadmap for the presence of FBs in India. The roadmap may take a holistic view by considering aspects such as soundness of FBs, financial performance of their parent banks, global financial inter-linkages and also their contribution in achieving social objectives of banking in India.

Notes

[1] SCBs consist of public sector banks, old private sector banks, new private sector banks and foreign banks.

[2] These provisions up to the ceiling of 1.25 per cent of risk weighted assets can form a part of the total capital of the bank.

[3] Since the Statistical Tables Relating to Banks classify a considerable portion of expenditure (29.4 per cent) under 'others', it was impossible to make a detailed analysis of the composition of operating expenses of foreign banks.

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