

Efficiency and Profitability of State Bank of India and its Associate Banks in India

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Abstract. Financial Soundness and profitability of the banking sector in India has implicit primeval importance due to intense competition, and changing banking reforms. The quality in the working of financial sector truly impacts the profitability of the banks which as a whole impacts the economy and GDP of a country. This study attempts to measure the relative performance of State Bank of India and Its Associate Banks in India. For this study, we have used the State Bank of India and its five associate banks. We know that in the service sector, it is difficult to quantify the output because it is intangible. Hence different proxy indicators are used for measuring productivity of banks. The profitability of the banks are examined on the basis of the following parameters: Return on Assets, Return on Equity, Net Non Performing Assets, Interest Income to Total Assets, Net Interest Margin, Establishment expenses, Capital to Risk Assets Quality ratio. Here an attempt has been made to examine the financial soundness of SBI & its Associate banks in terms of efficiency and profitability.

Keywords: Indian Banking Industry, Efficiency, Profitability, Performance.

1 Introduction

SBI- This consists of the State Bank of India (SBI) and Associate Banks of SBI. The Reserve Bank of India (RBI) owns the majority share of SBI and some Associate Banks of SBI. It is a public sector institution (government owned), with a huge customer base all over India. It has five associate banks operating under its SBI name. It has over thirteen thousand branches across India and in some selected international countries and a 56,000 ATM network across India.

Soundness is a key factor in any financial sector. One of the major measures of economic development and financial growth of a country has been the soundness of its banks. Soundness of the banking sector is synonymous with efficiency, productivity, profitability, stability and a shock free environment. Achieving stability in banking is only the beginning of a sound banking system. The main goal of banks today is to maintain stability and make sure they are impervious to external shocks while at the same time being internally sound and sensible. Hence, it is

important to measure soundness across various banks in the country, identify the weaker sections of the banking sector, devise appropriate strategies and policies to lift these sections and eventually create an environment that leads banks to converge in soundness and result in a consistently stable system.

The public sector banks have emerged strong across all key indicators as the global financial turmoil and slowing domestic economy put the banking sector on a test. The public banks have not only reduced the lending rates but have also managed to record higher average net profit and lower NPAs level than their private sector banks. The Public Sector Banks have shown good performance over the private sector banks as far as the financial operations are concerned. The Public Sector Banks have also shown comparatively good result. However, the only problem of the Public Sector Banks these days are the increasing level of the non performing assets. The non performing assets of the Public Sector Banks have been increasing regularly year by year. The efficiency of a bank is not always reflected only by the size of its balance sheet but by the level of return on its assets.

2. Review of Literature

Samwel Kakuku Lopoyetum (2005) in his article elaborated that the profitability performance of the UCBs can be improved by strengthening the magnitude of burden ratio. The spread ratio can be increased by increasing the interest receipts faster than the interest payments. The burden ratio can be lowered by decreasing the manpower expenses, other expenses and increasing other incomes.

Singh Ram Pratap and Chatterjee Biswajit (2009) compared the performance of 40 Indian Commercial Banks regarding deposit mobilization in the reform period. The paper made use of a non-parametric approach that is Data Envelopment Analysis (DEA). It used the Window Analysis developed by Klopp. Time span used for the present study was five years that is 2001-02 to 2005-06. One important objective of the study has been to see whether bank ownership mattered in respect of deposit mobilization. The analysis suggested that the Public Sector Banks had fallen behind the in-sample Private Sector Commercial Banks in terms of deposit mobilization.

Pat (2009) made an assessment of the RBI's Report on "Trend and Progress of Banking" in India, 2007-08, which reported a relatively-healthy position of the Indian banking system. He noted that the various groups of banks reported improvements in net profits, return on assets and return on equity. Two basic indicators of sound banking system, namely, capital to risk weighted assets and quality of assets, also revealed considerable improvements over the years.

Chaudhary and Sharma (2011) performed comparative analysis of services of Public Sector Banks and Private Sector Banks and stated that the increased competition and information technology reduced processing costs, eroded the product and geographic boundaries, and less restrictive governmental regulations had all played a major role for Public Sector Banks in India to forcefully compete with Private and Foreign Banks.

3. Objectives of the Study

- To compare the profit earning of the State Bank of India and its Associate Banks from the year 2009 to 2013.
- To investigate the factors affecting the profit earning of the selected banks during the period.

4. Research Methodology

Research Design: This present study is conducted by following a Descriptive Design.

Sample Size: For the in-depth analysis of the profitability, one major public sector bank and five of its associate banks are selected from the year 2009 to 2013.

Data Collection: Data was collected through Reserve Bank of India monthly bulletins, annual reports, banks websites etc.

Data Analysis: Suitable descriptive statistics and statistical techniques are used for data analysis like ratios and coefficient correlation.

5. Data Analysis and Interpretation

RATIOS

Net Interest Margin (NIM) to Total Assets: NIM is the difference between the interest income and the interest expended. It is expressed as a percentage of total assets. A higher spread

indicates the better earnings given the total assets. A negative net interest margin indicates that interest expenses exceed investment returns and that the company therefore has a net negative return. A positive net interest margin indicates the opposite. $\text{Net Interest Margin} = (\text{Interest Received} - \text{Interest Paid}) / \text{total Assets}$

Table 1

Year	SBI	SBB&J	SBH	SBM	SBP	SBT
2009-10	0.02	0.02	0.01	0.02	0.01	0.02
2010-11	0.02	0.02	0.02	0.02	0.02	0.02
2011-12	0.03	0.02	0.02	0.02	0.02	0.01
2012-13	0.02	0.02	0.02	0.02	0.02	0.02
Mean	0.022	0.02	0.017	0.02	0.017	0.017
SD	0.005	0	0.005	0	0.005	0.005
CV	22.22%	0%	28.55%	0%	28.57%	28.57%

Source: Reserve Bank of India

As shown in table NIM of State Bank of India(SBI) is more than others i.e. 0.0225 which shows that interest earned by SBI bank is much more than expended and other banks are earning less interest. The chart shows that there is no variation in case of State Bank of Bikaner & Jaipur and State Bank Mysore bank and more variation in State Bank of Patiala and State Bank of Travancore bank.

Interest Income to Total Assets: Interest income is considered as prime source of revenue for banks. The interest income to total income reflects the capability of the bank in generating income from its lending business.

Table 2

Year	SBI	SBB&J	SBH	SBM	SBP	SBT
2009-10	7.57	8.25	8.71	8.83	9.02	8.84
2010-11	7.04	7.66	7.91	8.29	8.2	8.05
2011-12	7.15	8.19	8.05	8.37	8.23	8.02
2012-13	9.26	9.46	8.32	9.03	9.03	8.79
Mean	7.75	8.39	8.24	8.63	8.62	8.42
SD	1.02	0.76	0.35	0.35	0.46	0.45
CV	13.26%	9.07%	4.27%	4.14%	5.47%	5.35%

Source: Reserve Bank of India

As shown in table Interest Income to total assets, the ratio is high in case of three banks i.e. SBM, SBP and SBT and variation is least in case of SBM and maximum in case of SBI.

Net NPAs to Total Assets: This ratio reflects the efficiency of bank in assessing the credit risk and recovering the debts. In this ratio, the Net NPAs are measured as a percentage of Total Assets. The lower the ratio reflects, the better is the quality of advances.

Table 3

Year	SBI	SBB&J	SBH	SBM	SBP	SBT
2009-10	1.72	0.78	0.55	1.02	1.04	0.91
2010-11	1.63	0.83	0.87	1.38	1.21	0.98
2011-12	1.82	1.92	1.3	1.93	1.35	1.54
2012-13	2.1	2.27	1.61	2.69	1.62	1.46
Mean	1.817	1.45	1.082	1.755	1.305	1.222
SD	0.203	0.758	0.467	0.727	0.245	0.323
CV	11.20%	52.35%	43.14%	41.42%	18.79%	26.45%

Source: Reserve Bank of India

As per table State Bank of India has more net non performing assets than other banks at 1.8175 and followed by State Bank of Mysore at 1.755 and variation is least in case of State Bank of Travancore and much higher variation in State Bank of Bikaner and Jaipur.

Return on Assets: Return on assets is the ratio of annual net income to average total assets of a business during a financial year. It measures efficiency of the business in using its assets to generate net income. $ROA = \text{Net income} / \text{Total assets}$

Table 4

Year	SBI	SBB&J	SBH	SBM	SBP	SBT
2009-10	0.88	0.93	1.03	1.06	0.79	1.26
2010-11	0.71	0.96	1.22	1.03	0.88	1.12
2011-12	0.88	0.99	0.99	0.67	0.93	0.65
2012-13	0.91	0.96	1.15	0.66	0.68	0.66
Mean	0.845	0.96	1.0975	0.855	0.82	0.922
SD	0.091	0.0244	0.106	0.219	0.109	0.314
CV	10.78%	25.52%	9.62%	25.70%	13.39%	34.04%

Source: Reserve Bank of India

As shown in table ROA is highest in case of State Bank of Hyderabad followed by State Bank of Bikaner & Jaipur by 0.96 and State Bank of Travancore 0.9225 , 0.855, 0.845 and 0.82

respectively and variation is more in case of State Bank of Travancore and least in case of State Bank of Bikaner and Jaipur. This return is related with overall profitability.

Return on Equity: It is a measure of the profitability of a bank. In calculation of this ratio, Profit after tax is expressed as a percentage of equity. $ROE = \text{Net Income} / \text{Shareholders Fund}$

Table 5

Year	SBI	SBB&J	SBH	SBM	SBP	SBT
2009-10	7.05	20.87	21.46	18.47	18.2	30.64
2010-11	14.8	22.02	20.39	18.06	16.01	26.88
2011-12	12.62	20.91	24.35	15.77	16.65	23.09
2012-13	18.59	21.98	15.72	9.62	17.95	13.93
Mean	13.265	21.445	20.48	15.48	17.2025	23.635
SD	4.821	0.641	3.587	4.083	1.045	7.166
CV	36.35%	2.99%	17.51%	26.37%	6.07%	30.32%

Source: Reserve Bank of India

As shown in table ROE is maximum in case of State Bank of Travancore 23.635 followed by 21.445 of State Bank of Bikaner and Jaipur and State Bank of Bikaner and Jaipur has least variation in this and State Bank of India is having more variation.

Net Profit to Total Assets: This ratio reflects the return on assets employed or the efficiency in utilization of assets. It is calculated by dividing the net profits with total assets of the bank. Higher the ratio reflects better earning potential of a bank in the future. $\text{Net Profit Margin} = \text{Net Profit} / \text{Total Revenue}$

Table 6

Year	SBI	SBB&J	SBH	SBM	SBP	SBT
2009-10	183209	9037	17207	9374	13077	9723
2010-11	253356	11403	23194	11738	12564	11760
2011-12	315735	14896	26530	10596	17629	12487
2012-13	310817	17129	27884	13311	16194	13510
Mean	265779	13116.3	23703.8	11254.8	14866	11870
SD	61903.6	3598.39	4758.49	1676.59	2442.5	1601.25
CV	23.29%	27.43%	20.07%	14.89%	16.43%	13.49%

Source: Reserve Bank of India

As per table State Bank of India enjoys more net profit than other banks at 265779 and followed by State Bank of Hyderabad at 23703.8 and variation is also least in case of State Bank of Travancore and much higher variation in State Bank of Bikaner and Jaipur.

Capital Adequacy Ratio: Capital adequacy ratio is the ratio which determines the bank's capacity to meet the time liabilities and other risks such as credit risk, operational risk etc.

Table 7

Year	SBI	SBB&J	SBH	SBM	SBP	SBT
2009-10	13.39	13.3	14.9	12.42	13.26	13.74
2010-11	11.98	11.68	14.25	13.76	13.41	12.54
2011-12	13.86	13.76	13.56	12.55	12.3	13.55
2012-13	12.92	12.16	12.36	11.79	11.12	11.7
Mean	13.037	12.725	13.767	12.63	12.522	12.882
SD	0.802	0.968	1.086	0.823	1.056	0.948
CV	6.15%	7.61%	7.89%	6.51%	8.43%	7.35%

Source: Reserve Bank of India

In this case State Bank of Hyderabad has the capacity to meet the time liabilities and other risks such as credit risk; operational risk etc. at 13.7675 followed by State Bank of India at 13.0375 and variation is more in case of State Bank of Patiala and least in State Bank of India.

Establishment Expenses

Table 8

Year	SBI	SBB&J	SBH	SBM	SBP	SBT
2009-10	0.014	0.011	0.008	0.011	0.008	0.011
2010-11	0.014	0.013	0.01	0.012	0.011	0.011
2011-12	0.014	0.012	0.01	0.012	0.009	0.01
2012-13	0.013	0.012	0.01	0.011	0.01	0.009
Mean	0.01375	0.012	0.0095	0.0115	0.0095	0.01025
SD	0.0005	0.00082	0.001	0.00058	0.00129	0.00096
CV	3.63%	6.80%	10.52%	5.02%	13.58%	9.34%

Source: Reserve Bank of India

As shown in table establishment expenses are maximum in case of SBI at 0.01375 followed by 0.012 of State Bank of Bikaner and Jaipur and SBI has least variation in this and State Bank of Hyderabad is having more variation.

Burden

Table 9

Year	SBI	SBB&J	SBH	SBM	SBP	SBT
2009-10	-183209	-9036.98	-17207	-9373.98	-13077	-9722.98
2010-11	-253356	-11403	-23194	-11738	-12564	-11760
2011-12	-315735	-14896	-26530	-10596	-17629	-12487
2012-13	-310817	-17129	-27884	-13311	-16194	-13510
Mean	-265779	-13116.2	-23703.7	-11254.7	-14866	-11870
SD	61903.55	3598.388	4758.489	1676.59	2442.502	1601.251
CV	-23.29%	-27.45%	-20.07%	-14.89%	-16.43%	-13.49%

Source: Reserve Bank of India

As shown in table burden of SBI is maximum -265779 followed by SBH -23703.7 burdens is directly concerned with profitability. SBT is least variable and SBB&J is more variable which states that SBT bank's profitability doesn't change much.

Correlation Co-Efficient Matrix

Correlation Co-efficient Matrix: SBI Bank

	NIM	ROE	ROA	CRAR	NP	BURDEN	EST EXP	NPA	IN
NIM	1.000								
ROE	-0.679	1.000							
ROA	-0.385	0.595	1.000						
CRAR	-0.152	0.190	0.831	1.000					
NP	0.786	-0.659	-0.308	0.159	1.000				
BURDEN	-0.786	0.659	0.308	-0.159	-1.000	1.000			
EST EXP	0.982	-0.547	-0.368	-0.178	0.768	-0.768	1.000		
NPA	0.901	-0.785	-0.652	-0.437	0.604	-0.604	0.859	1.000	
IN	-0.643	0.350	-0.103	-0.489	-0.906	0.906	-0.655	-0.319	1.000

The table shows that capital adequacy ratio and return on assets have positive association (.831) and return on equity and return on assets are negatively associated with net profit and net interest margin and capital adequacy ratio are positively associated with net profit which is significant at 5 percent level. This table shows that establishment expenses is positively associated with Net Interest Margin at .981 and highly negatively associated with return on equity, return on assets and burden at -0.54735,-0.36849,and -0.7678 further establishment expenses is also positively correlated with net profit which is significant 5 percent level. It also shows that nonperforming assets have a positive relation with net interest margin at .900878 and net profit at 0.859229. Net interest margin, return on assets, capital adequacy ratio, net profit,

establishment expenses are negatively associated with Interest Income at 5 percent whereas burden is positively associated with interest income.

6. Conclusion and Findings

- i. The foregoing analysis for SBI has revealed that the overall profitability is high because their Net Interest Margin is more compared to its associate banks i.e. spread. The deposits are being utilized in good manner as they are giving credit on it and profitability is well associated.
- ii. The CRAR is well maintained within its limits. From the data discussion it has been observed that SBI the largest and strongest bank operating in India, next to RBI (Reserve Bank of India) has been found to have incurred heavy establishment expenses, due to sever adoption of IT enabled services in all its banking transactions which in turn affected its profitability. Moreover, from the elaborate literature reviews it has been understood that mounting NPAs (Non-Performing Assets) of the banks prove critical to its profitability status.
- iii. SBI has incurred heavy establishment and operation expenses, its NPA is comparatively high and its ROA is less than other bank groups. A poor NPA (Non-Performing Assets) status directly influences ROA (Return of Assets) of banks. Timely recovery of NPA in turn will help the bank to increase its NIM (Net Interest Margin (Spread), profitability and ROA positions. The bankers are suggested to either hire a building on lease for a longer time periods or to own buildings in order avoid rent expenses and to reduce its establishment cost.

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