

Financial Performance of Commercial Banks: A Comparative Study

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ABSTRACT

Bankers are the custodians and purveyors of public money. They have the policy framework for accepting and lending. They have the responsibility and target of lending to the different sectors of the economy and overall development of the economy. This requires the sound financial health of the banks by ensuring liquidity, safety, profitability, solvency and other principles of sound bank management. The effective and efficient management of financial sources can be measured through financial performance of the banks. The financial performance can be evaluated through various ratio analyses. Banks collect deposits from public and channelize funds for different sectors of the economy as per the guidelines of RBI. It has to win the confidence of the customers, shareholders and the government through its financial activities. After the liberalization banks face more competitions from private and foreign banks. The success of the banks can be measured through performance analysis by considering various determining factors. Ratio analysis is one such tool to measure the performance of commercial banks. It is helpful to take decisions on weak areas based on ratios.

Key words: Banks, Funds, Financial performance, Ratios, and RBI

INTRODUCTION

Banking industry in India developed to a large extent between nationalization and liberalization of economy. After the liberalization since 1991 banking system in India had the challenge of achieving efficiency and productivity because of the entry of foreign and private banks. To ensure sound banking system, Government of India also initiated control mechanisms through capital adequacy requirements and safety norms. The ultimate objective of private and foreign licensing is to bring Indian banking system to the global standard. Bankers are the custodians and purveyors of public money. They have the policy framework for accepting and lending. They have the responsibility and target of lending to the different sectors of the economy and overall development of the economy. This requires the sound financial health of the banks by ensuring liquidity, safety, profitability, solvency and other principles of sound bank management. The effective and efficient management of financial sources can be measured through financial performance of the banks. The financial performance can be evaluated through various ratio analyses.

Objective of the study:

- a. To understand the concept of measurement of various ratios for performance evaluation
- b. To study various ratios to measure financial performance of banks

REVIEW OF LITERATURE

Bourke, (1989) Liquidity risk, arising from the possible inability of a bank to accommodate the increase of withdrawal demands or to fund increases on the loan demands, is considered an important determinant of bank profitability. Normally speaking, higher liquidity should be positively associated with better financial performance of the banks. **Bhayani et al. (2007)** had attempted to investigate how the proportion of transformation cost is higher than that of transaction cost in the banks under study. Transaction cost plays an important role in the profit ability of banks. Therefore, if the management of co-operative banks tries to reduce the transaction cost, it will improve their banks' profitability. **Samad (2007)** examined the operation of foreign and domestic banks in the process of industrialization and economic development of Bangladesh.

The comparison of the financial ratios of foreign and domestic banks indicates that there are significant differences in operation between them. **Kumbirai, M. and Webb, R. (2010)** their study revealed that overall bank performance increased considerably in the first two years of the analysis. A significant change in trend is noticed at the onset of the global financial crisis in 2007, reaching its peak during 2008-2009. This resulted in falling profitability, low liquidity and deteriorating credit quality in the South African Banking sector. **Din Sangm (2010)** Sound financial health of a bank is the guarantee not only to its depositors but is equally significant for the shareholders, employees and whole economy as well. As a sequel to this maxim, efforts have been made from time to time, to measure the financial position of each bank and manage it efficiently and effectively

Theoretical background: The following are the formulas of various ratios.

- **Cash to Deposits** ratio measures the cash in hand at the bank in a particular year in relation to the deposits of the customers. The greater value of this ratio makes the bank less stressful on the liquidity front. This ratio can be computed with the help of the following formula

$$\text{Cash-Deposit Ratio} = \frac{\text{Cash in Hand + Balances with RBI}}{\text{Deposit}} \times 100$$

- **Credit-Deposit ratio** measures the efficiency of the management in converting the available deposit into advances. The efficiency is positively related to the value of the ratio.

$$\text{Credit-Deposit Ratio} = \frac{\text{Total Advances}}{\text{Total Deposit}} \times 100$$

- **Investment - Deposit Ratio** measures the efficiency of the management in converting the available deposit into investments. The efficiency is positively related to the value of the ratio.

$$\text{Investment-Deposit Ratio} = \frac{\text{Total Investment}}{\text{Total Deposit}} \times 100$$

- **(Credit + Investment) - Deposit Ratio** is calculated by dividing the amount of total earning assets (Advance + Investments) by the amount of total deposit. It measures the management efficiency and quality of assets.

$$\text{(Credit + Investment) - Deposit Ratio} = \frac{\text{Total Advances + Total Investment}}{\text{Total Deposit}} \times 100$$

- The total **deposit to total liability ratio** measures the total deposit as a percentage of total liabilities. The higher this ratio indicates that a bank received high deposit and its liquidity is high.

$$\text{Deposit to Total Liabilities Ratio} = \frac{\text{Total Deposit}}{\text{Total Liabilities}} \times 100$$

- The **term deposits to total deposit ratio** measures the term deposit as a percentage of total deposits. If the ratio is higher, it indicates that a bank received more term deposits and its liquidity is high.

$$\text{Term Deposit to Total Deposit Ratio} = \frac{\text{Term Deposit}}{\text{Total Deposit}} \times 100$$

- **Ratio of Priority Sector Advances to Total Advances** measures priority sector advances as a percentage of total advance. The higher value of this ratio means that there is more advance for priority sector as a portion of total advance.

$$\text{Priority Sector Advances to} = \frac{\text{Priority Sector Advances}}{\text{Total Advances}} \times 100$$

- **Ratio of Term Loan to Total Advances** measures the term loan outstanding as a percentage of total advances. If this ratio is higher, it indicates that a bank is loaned up and its liquidity is low. The higher the ratio, the more risky a bank may be to higher defaults.

$$\text{Term Loan to Total Advances Ratio} = \frac{\text{Term Loan}}{\text{Total Advances}} \times 100$$

- **The secured advances to total advances ratio** measures the secured advance as a percentage of total advances. The higher this ratio means it indicates a bank loaned up and its liquidity is low.

$$\text{Secured Advances to Total Advances} = \frac{\text{Secured Advances}}{\text{Total Advances}} \times 100$$

Total Advances

- **Investments in non-approved securities to the total investments ratio** measures investments in non-approved securities as a percentage of total investments. It measures the risk-taking ability of the bank.

**Advances Secured by Tangible
Assets + Advances covered by
Bank or Govt. Guarantees**

Investments in Non-Approved = ----- x 100

**Securities to Total Investment Ratio
Total Investments**

- **Ratio of Interest Income to Total Assets** This ratio is an indicator of the rate at which a commercial bank earns income by lending the funds to the public. The higher ratio is an indicator of efficient management of banks' total assets.

Interest Income to Total Assets Ratio = ----- x 100

Total Income

Total Assets

- **Ratio of Net Interest Income to Total Assets (Net interest margin)** ratio is the difference between interest earned from lending the funds by the bank and the interest paid on deposit and borrowings. The banks should keep their interest low on deposits and high on advances for greater net interest margin. The net interest margin would determine the earning capacity of the bank.

Net Interest Margin to Total Assets Ratio = ----- x 100

**Interest Income –
Interest Expenses**

Total Assets

- **Ratio of Non-Interest Income to Total Assets** represents income earned by way of commission, brokerage, service charges and other miscellaneous receipts. Efforts should be made to closely monitor this ratio so that the burden can be reduced and bank profitability can be increased.

Non Interest Income to Total Assets Ratio = ----- x 100

Non-Interest Income

Total Assets

- **Ratio of Intermediation Cost to Total Assets** ratio measures the intermediation cost as a percentage of total assets. This ratio indicates the amount of intermediation costs expended per unit of assets.

Intermediation Cost to Total Assets Ratio = ----- x 100

Operating Expenses

Total Assets

- **Wage Bill to intermediation cost ratio** measures payment to the provision for employee as a percentage of intermediation cost. The higher ratio indicates that it adversely affects the net profit.

Wage Bills to Intermediation Cost Ratio = ----- x 100

**Payment to and Provisions
for Employees**

Operating Expenses

- **Ratio of Wage Bills to Total Expenses** measures payment to and provisions for employees as a percentage of total Expenses. The higher value of ratio indicates that it adversely affects the net profit.

Wage Bills to Total Expenses Ratio = ----- x 100

**Payment to and Provisions
for Employees**

Total expenses

- **Ratio of wage bills to total income** measures payment to and provisions for employees as a percentage of total income.

Wage Bills to Total Income Ratio = ----- x 100

**Payment to and Provisions
for Employees**

Total Income

- **Burden to Total Assets ratio**, the difference between non-interest expenses and non-interest income of bank is called burden. It measures the burden as a percentage of total assets. Profit of the bank is the difference between spread and burden. If the burden is more, it adversely affects profit.

Burden to Total Assets Ratio = ----- x 100

Operating Expenses – Other Income

Total Assets

- **Ratio of burden to Interest Income** measures the burden as a percentage of interest Income. Higher value of ratio adversely affects profit.

$$\text{Burden to Interest Income Ratio} = \frac{\text{Operating Expenses} - \text{Other Income}}{\text{Interest Income}} \times 100$$

- **Ratio of Operating Profits to Total Assets** is arrived at by dividing the operating profit by the total assets. The earning quality of the bank is directly proportional to this ratio.

$$\text{Operating Profit to Total Assets Ratio} = \frac{\text{Operating Profit}}{\text{Total Assets}} \times 100$$

- **Return on assets (ROA)** gives an indication as to how much profit a business unit is able to generate per unit of its assets. Higher value of this ratio is indicative of higher profitability.

$$\text{Return on Assets Ratio} = \frac{\text{Net Profit}}{\text{Average Assets}} \times 100$$

- **Return on equity** indicates among of profits that a business unit is generating for its equity investor. The ratio is widely used by equity investors in their decision-making. Higher value of the ratio is indicative of higher profitability and productivity.

$$\text{Return on Equity Ratio} = \frac{\text{Net Profit}}{\text{Capital} + \text{Reserves and Surplus}} \times 100$$

- **Cost of deposits** measures the interest paid on deposits. The banks should keep their interest low on deposit. It determines the earning capacity of the bank.

$$\text{Cost of Deposits Ratio} = \frac{\text{Interest Paid on Deposits}}{\text{Deposits}} \times 100$$

- **Cost of borrowings** measures the interest paid on borrowings from the RBI and the other agencies. The lower value of this ratio indicates better performance.

$$\text{Cost of Borrowings Ratio} = \frac{\text{Interest Paid on Borrowings from RBI and Other Agencies}}{\text{Borrowings}} \times 100$$

- **Cost of funds** measures the interest paid on deposits and borrowings as a percentage of deposits plus borrowings. The lower value of this ratio indicates better performance.

$$\text{Cost of Funds Ratio} = \frac{\text{Interest Paid on Deposits} + \text{Interest Paid on Borrowings from RBI and Other Agencies}}{\text{Deposits} + \text{Borrowings}} \times 100$$

- **Return on advances** measures the interest earned on advance and bills. The higher value of this ratio indicates more earning of the bank from lending.

$$\text{Return on Advances Ratio} = \frac{\text{Interest Earned on Advances and Bills}}{\text{Advances}} \times 100$$

- **Return on investments** measures the interest earned on investments. The higher value of this ratio indicates more earning of the bank from investments.

$$\text{Return on Investments Ratio} = \frac{\text{Interest Earned on Investments}}{\text{Investments}} \times 100$$

- **Return on advances adjusted to cost of funds** measures the net return on advances.
Return on Advances Adjusted = Return on Advances – Cost of Funds to Cost of Funds Ratio
- **Return on investments adjusted to cost of funds** measures the net return on investments.
- **Return on Investments Adjusted = Return on Investments – Cost of Funds to Cost of Funds Ratio**

Ratio analysis of commercial banks: The following table depicts various ratios of SBI, public sector, private sector, foreign banks and other small financial banks in India.

Ratios	YEARS	SBI & ASC	PUBLIC SECTOR BANKS	PRIVATE SECTOR BANKS	FOREIGN BANKS	SMALL FINANCE BANKS
Cash - Deposit Ratio	2016-17	6.22	5.99	6.18	8.04	9.30
	2015-16	4.93	5.59	5.67	5.18	-
	2014-15	7.06	5.46	6.08	5.97	-
Credit - Deposit Ratio	2016-17	72.29	68.78	86.54	71.39	164.37
	2015-16	71.38	74.72	90.30	79.24	-
	2014-15	82.07	76.12	86.36	80.85	-
Investment - Deposit Ratio	2016-17	36.44	31.62	33.34	51.50	62.08
	2015-16	32.40	30.03	37.18	61.30	-
	2014-15	29.79	28.59	36.42	62.31	-
(Credit + Investment) - Deposit Ratio	2016-17	108.73	100.40	119.88	122.89	226.45
	2015-16	114.94	104.75	127.48	140.54	-
	2014-15	111.86	104.71	122.79	143.16	-
Ratio of deposits to total liabilities	2016-17	77.78	82.99	71.22	57.51	35.93
	2015-16	75.65	81.65	68.25	56.33	-
	2014-15	78.25	82.89	70.47	53.67	-
Ratio of demand & savings bank deposits to total deposits	2016-17	43.68	37.38	43.06	37.63	29.59
	2015-16	40.60	32.68	39.31	34.87	-
	2014-15	39.46	30.99	38.34	34.65	-
Ratio of priority sector advances to total advances	2016-17	25.21	32.15	28.85	28.93	84.75
	2015-16	25.69	31.05	28.83	27.34	-
	2014-15	25.43	29.31	27.77	27.30	-
Ratio of term loans to total advances	2016-17	56.12	52.64	68.06	37.51	85.98
	2015-16	53.20	52.58	68.58	38.18	-
	2014-15	51.21	52.53	67.07	39.82	-
Ratio of secured advances to total advances	2016-17	83.56	86.51	79.65	45.15	61.13
	2015-16	81.24	86.59	80.54	42.36	-
	2014-15	82.54	87.18	83.00	43.66	-
Ratio of investments in non-approved securities to total investments	2016-17	21.75	18.00	26.66	16.46	2.74
	2015-16	18.30	17.23	23.83	14.61	-
	2014-15	19.52	15.92	26.15	11.52	-
Ratio of interest income to total assets	2016-17	7.13	7.20	8.27	6.33	10.07
	2015-16	7.72	7.74	8.63	6.67	-
	2014-15	8.21	8.12	8.81	6.71	-
Ratio of net interest income to total assets (Net Interest Margin)	2016-17	2.93	2.12	3.38	3.41	5.08
	2015-16	2.60	2.23	3.41	3.59	-
	2014-15	2.81	2.35	3.37	3.54	-
Ratio of non-interest income to total assets	2016-17	1.36	1.20	1.88	1.95	2.12
	2015-16	1.20	0.92	1.73	1.60	-
	2014-15	1.12	0.91	1.72	1.99	-
Ratio of intermediation cost to total assets	2016-17	1.85	1.64	2.25	2.08	5.13
	2015-16	1.87	1.63	2.22	2.07	-
	2014-15	2.00	1.60	2.23	2.17	-
Ratio of wage bills to intermediation cost	2016-17	58.22	58.34	39.35	40.34	57.98
	2015-16	59.71	59.61	40.59	42.48	-
	2014-15	61.70	61.20	41.27	42.68	-
Ratio of wage bills to total expense	2016-17	58.22	14.26	12.39	16.79	29.40
	2015-16	15.97	13.60	12.11	17.07	-
	2014-15	16.40	13.19	11.99	17.32	-
Ratio of wage bills to total	2016-17	12.72	11.40	8.71	10.16	24.41

income	2015-16	12.52	11.23	8.69	10.61	-
	2014-15	12.91	10.77	8.73	10.62	-
Ratio of burden to total assets	2016-17	0.49	0.44	0.37	0.13	3.01
	2015-16	0.67	0.71	0.49	0.47	-
	2014-15	0.80	0.70	0.51	0.17	-
Ratio of burden to interest income	2016-17	6.94	6.09	4.42	2.13	29.93
	2015-16	8.68	9.21	5.67	7.01	-
	2014-15	10.10	8.40	5.75	2.61	-
Ratio of operating profits to total assets	2016-17	1.90	1.68	3.02	3.27	2.07
	2015-16	1.93	1.51	2.92	3.13	-
	2014-15	2.00	1.70	2.86	3.36	-
Return on assets	2016-17	-0.02	-0.10	1.30	1.62	1.13
	2015-16	0.42	-0.07	1.50	1.45	-
	2014-15	0.66	0.46	1.68	1.84	-
Return on equity	2016-17	-0.69	-2.05	11.87	9.12	5.41
	2015-16	6.78	-3.47	13.81	8.00	-
	2014-15	10.56	7.76	15.74	10.24	-
Cost of deposits	2016-17	5.76	5.70	5.59	4.24	4.04
	2015-16	6.18	6.19	6.08	4.46	-
	2014-15	6.28	6.43	6.39	4.61	-
Cost of borrowings	2016-17	2.89	4.80	6.56	4.26	8.64
	2015-16	3.47	5.27	6.27	4.00	-
	2014-15	4.90	5.90	6.41	4.87	-
Cost of funds	2016-17	5.40	5.62	5.76	4.24	6.49
	2015-16	5.85	6.11	6.11	4.36	-
	2014-15	6.13	6.39	6.39	4.68	-
Return on advances	2016-17	8.29	8.44	9.99	8.77	14.92
	2015-16	8.79	9.02	10.46	8.95	-
	2014-15	9.35	9.50	10.90	9.27	-
Return on investments	2016-17	7.61	7.49	7.49	6.89	4.26
	2015-16	7.97	7.80	7.49	7.28	-
	2014-15	8.00	7.64	7.16	7.73	-
Return on advances adjusted to cost of funds	2016-17	2.79	2.82	4.23	4.53	8.43
	2015-16	2.94	2.92	4.35	4.60	-
	2014-15	3.22	3.12	4.51	4.59	-
Return on investments adjusted to cost of funds	2016-17	1.89	1.87	1.73	2.65	-2.23
	2015-16	2.12	1.70	1.37	2.92	-
	2014-15	1.87	1.25	0.77	3.05	-

Source: RBI 2018.

The above table reveals the ratios pertaining to different aspects relating the last three years from 2014-15, 2015-16 and 2016-17. Some of the highlights are as follows

- The cash deposit ratio of SBI and its associates was 7.06 in the year 2014-15 which was reduced to 6.22 in the year 2016-17, in public sector banks the ratio was increased from 5.46 to 5.99, in private sector banks it is increased from 6.08 to 6.18, in foreign banks it increased from 5.97 to 8.04 and in small finance banks it is 9.30. It clearly signifies that the liquidity positions of banks are increased in all banks compared to SBI and its associates.
- Cash deposit ratio of SBI and its associates decreased from 82.07 to 72.29 from 2014-15 to 2016-17, in public sector banks it is decreased from 76.12 to 68.78, in private sector banks it is increased from 86.36 to 86.54, in foreign banks it is decreased from 80.85 to 71.39 and in small financial banks it is 164.37. This clearly shows private sector banks and small financial banks were more effective in creating advances out of deposits compared to all other banks.

- Investment deposit ratio which signifies the efficiency of banks in using the deposits collected for investment to generate revenue. From the table it clearly reveals that efficiency is increased in SBI and its associates and in public sector banks compared to private sector banks and foreign banks which shows decreasing trend.
- The management efficiency and quality of assets are measured through its total earning assets and total deposits. Table clearly specifies the decreasing trend in all the banks except small finance banks.
- The total deposits and liability ratio is less in private and foreign banks compared to SBI and its associates and public sector banks. The ratio is decreased in SBI and its associates and public sector banks and increased in foreign and private banks
- Ratio of demand and savings bank deposits to total deposits specifies the deposits and liquidity position in banks. In the above table it clearly state that the percentage of total deposits and liquidity position is increased from 2014-15 to 2016-17 in all the banks.
- Priority sector lending is varying from 25 percent to 84.75 percent in all the banks. The ratio is increasing in public, private and foreign banks compared to SBI and its associates.
- In the above table the Ratio of term loans to total advances shows more than 50 in SBI and its associates, public sector and private sector. In foreign banks, the ratio is less than 40. Which indicates the proportion of risky advances were more in banks except in foreign banks. Hence majority of the banks in the banking system experiencing defaults in loans and advances.
- Investments in non-approved securities to the total investments ratio shows low ratio in public sector banks and in foreign banks. The ratio is more in SBI and its associates and in private sector banks. The ratios clearly indicate risk-taking ability of the bank. SBI and its associates and the private sector banks have more risk taking ability compared to other banks.
- Ratio of Interest Income to Total Assets indicates high ratios in private sector banks compared to all other banks. The table clearly indicates that private banks are more efficient in management of banks total assets.
- In the above table Net interest margin ratio is high in private sector banks and in foreign banks compared to SBI and other public sector banks. This indicates the earning capacity of all the banks. Private and foreign banks are more efficient in earning capacity.
- Return on assets in the above table less or negative in SBI and public sector banks. it is positive in private sector banks and in foreign banks. Profitability is more in private and foreign banks. Similarly the return on equity ratio clearly indicates higher profitability and productivity in private and foreign banks

CONCLUSION

Banking sector plays crucial role in the economic development of the country. Banks collect deposits from public and channelize funds for different sectors of the economy as per the guidelines of RBI. It has to win the confidence of the customers, shareholders and the government through its financial activities. After the liberalization banks face more competitions from private and foreign banks. the success of the banks can be measured through performance analysis by considering various determining factors. Ratio analysis is one such tool to measure the performance of commercial banks. It is helpful to take decisions on weak areas based on ratios.

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