

PERFORMANCE OF PRIVATE SECTOR BANKS IN INDIA –CAMEL ANALYSIS

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ABSTRACT

An efficient banking system is recognized as basic requirement for the economic development of any economy.. The Indian banking sector is distinguished by the co-existence of different ownership groups, such as public, private, domestic and foreign. The performance of banks has become a major concern of planners and policy makers in India, since the gains of real sector economy depend on how efficiently the financial sector performs the function of financial intermediation. The present study measures the financial health of top private sector banks by comparing with top performing public sector banks operating in India using CAMEL Analysis. Each criteria was measured using various ratios using data relating to five years from 2013-14 to 2017-2018.

1. Introduction

A sound financial system is indispensable for a healthy and vibrant economy. Cross country experience suggests that development of the economy necessarily requires the existence of healthy, efficient and competitive financial sector. An efficient banking system is recognized as basic requirement for the economic development of any economy. Economists have expressed a variety of opinions on the effectiveness of the banking systems in promoting or facilitating economic development. A weak banking sector may destroy the long term sustainability of an economy and be a trigger for a financial crisis which can lead to total economic crisis. Central banks and governments are paying increasing attention to monitor the health and efficiency of financial institutions and various prudential regulations were introduced by the monitoring institutions in different countries to maintain the financial soundness of the banking system both at the national level and at the international level. from the regulators" point of view, if banks become better functioning entities, it is expected to mirror in safety and soundness of financial system and ultimately lead to increase in the rate of economic growth. The performance of banks has become a major concern of planners and policy makers in India, since the gains of real sector economy depend on how efficiently the financial sector performs the function of financial intermediation.

2 Review of Literature

A number of studies has been made to assess the financial soundness of the banks. Now it is well understood that the financial soundness depends not only on profitability but also on various aspects. Some of them are as follows-

Purohit and Bothra (2018) studied the performance of SBI and ICICI Bank using CAMEL parameters. They found that SBI has to improve in management efficiency, earning quality and liquidity and ICICI to improve in capital adequacy and asset quality

Prasuna analyzed the performance of 65 banks using CAMEL model. He concluded that customers are benefited from the competition among the banks

Gupta (2014) evaluates the performance of public sector banks in India using CAMEL approach for a period of five years from 2009 to 2013 and brings out that Andhra Bank stood at first position followed by Bank of Baroda and United bank of India secured the least position. Meena (2016) assesses the performance of different public sector and private sector banks by using CAMEL model. He concluded that the management of NPAs is the weakest area of private sector and public sector banks.

B. S. Badla & Richaverma (2008) "Earning quality of scheduled commercial banks in India-Bank wise and structure wise analysis-Paper presents earning quality ratio of banks worked out on lines of CAMEL model. It is found that foreign banks have edge over domestic banks in terms of operating profits to Average working funds, Spread to total assets and Non-interest income to total income

Anurag & Priyanka (2012) compare the financial performance of SBI and ICICI Bank. The study found that SBI is performing well and is financially sound (growth in net profit, total income, advances and net worth is high) than ICICI Bank but in the context of deposits and expenditure ICICI bank has better managing efficiency than SBI (CD ratio, ratio of other income to total income and net profit margin better in ICICI).

2.1 Research gap

Although so many studies regarding performance of private and public sector banks have been made, CAMEL analysis on banks of all groups especially old private sector banks has not been made. That's why this study include the top performing private sector bank from old private sector has been made.

3. Need of the study

In the recent years the financial system especially the banks have undergone numerous changes in the form of reforms, regulations & norms. Many studies have been done to analyze the performance of public and private sector banks on profitability determinants and the financial indicators. The present study

is undertaken to highlight the comparative analysis on financial performance of selected top public sector and private sector banks in India through CAMEL Analysis Model. In India, on the recommendations of Padmanabham Working Group (1995) committee, RBI adopted this approach in 1996. At present, two Supervisory Rating Models CAMELS (capital adequacy, asset quality, management quality, earnings, liquidity and sensitivity to market risk or systems & control) and CACS (capital, asset quality, compliance and systems & control) are being used in India for rating of the Indian Commercial Banks and Foreign Banks operating in India respectively.

4. Objectives of the Study

1. To analyse the financial performance of selected Public sector and Private Sector banks in India on different parameters of camel model.
2. To examine the overall relative performance of selected Public sector and Private Sector banks in India .

5. Research Methodology

The present study is descriptive and analytical in nature.

5.1 Data Collection

The present study is based on Secondary data collected from the annual financial statements of banks, Websites of banks, National Institute of Bank Management (NIBM), Indian Banks Association (IBA), Reserve Bank of India (RBI) etc.,

5.2 Sample

For the present study four top performing banks were selected, two from public sector and two from private sector. SBI was selected being leading public sector bank from state bank group and Canara bank being the top performing bank from other nationalised bank group. HDFC was selected from new generation private sector banks and Federal bank was selected from old private sector banks.

5.3 Time Period of the study:

The study covers a period of five financial years i.e. from 2013-14 to 2017-18.

5.4 Analytical Tools:

To look at the financial soundness of the selected Public and Private sector banks in India, internationally accepted CAMEL rating parameters have been applied. CAMEL is an acronym for five parameters (capital adequacy, assets quality, management soundness, earnings and liquidity). CAMEL rating is a subjective model which assesses financial strength of a bank, whereas CAMEL ranking indicates the banks comparative position with reference to other banks. Ratios and averages have been used for analysis. Averages are calculated using MS-Excel.

6. Empirical Results and Discussion

6.1 Financial performance of selected public and private sector banks in India on different parameters of CAMEL model

6.1.1 Capital Adequacy

Capital Adequacy is a key indicator of financial wellbeing of a bank. Capital Adequacy Ratio (CAR) is the ratio of a bank's capital in relation to its risk-weighted assets and current liabilities. It is decided by central banks and bank regulators to prevent commercial banks from taking excess leverage and becoming insolvent in the process. It describes whether the bank has adequate capital to meet unexpected losses.. Capital adequacy of a bank can be measured by using following ratios:

Capital adequacy ratio	(Tier 1 Capital + Tier 2 Capital) / Risk weighted Assets	a measure of the amount of a bank's core capital expressed as a percentage of its risk weighted Assets. Higher the ratio better it is
Advance to assets ratio	Total advances/ Total assets	Aggressiveness of a bank in lending, resulting in better profitability. Higher the ratio better it is
Government securities to total investment	Govt.Securities/Total investment	The higher the Government securities to investment ratio, the lower the risk involved in bank's investments

Table 1 capital adequacy

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	12.44	12	13.12	13.11	12.60	12.65	3
CAN	10.63	10.56	11.08	12.86	13.22	11.67	4
FED	15.14	15.46	13.93	12.39	14.70	14.32	2
HDFC	16.07	16.79	15.53	14.55	14.82	15.55	1

Table 2 Advance to assets ratio

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	0.66	0.63	0.63	0.55	0.56	0.606	3
CAN	0.61	0.6	0.59	0.59	0.619	0.602	4
FED	0.58	0.62	0.61	0.64	0.66	0.622	2
HDFC	0.62	0.62	0.66	0.64	0.62	0.632	1

Table 3 Govt. Securities to total investment

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	0.76	0.76	0.77	0.77	0.80	0.772	2
CAN	0.85	0.76	0.77	0.77	0.89	0.808	1
FED	0.66	0.82	0.79	0.77	0.79	0.766	3
HDFC	0.78	0.72	0.77	0.76	0.78	0.762	4

Table 4 Composite Capital Adequacy

BANK	Capital Adequacy Ratio		Advance to total Assets		Govt.securities to total investment		Group Rank	
	RATIO	RANK	RATIO	RANK	RATIO	RANK	AVG	RANK
SBI	12.65	3	0.606	3	0.772	2	2.67	3
CAN	11.67	4	0.602	4	0.808	1	3	4
FED	14.32	2	0.622	2	0.766	3	2.3	2
HDFC	15.55	1	0.632	1	0.762	4	2	1

A minimum Capital to risk-weighted Assets Ratio (CRAR) prescribed by Reserve Bank of India for banks with regard to credit risk, market risk and operational risk on an ongoing basis is 9 % as against Basel norms of 8 %.

Ranking of the Banks under study on the basis of CAR as per Table-1 indicates that HDFC bank ranks on the top position with highest CAR of 15.55, followed by Federal bank with a value of 14.32. Advance to assets ratio as per Table-2 indicates that that HDFC bank bags the top position with highest advance to assets ratio of 0.632, followed by Federal bank having value of .622. Ranking of the Banks under study on the basis of Govt Securities to total investment as per Table 3 indicates that Canara bank stands on the top position with highest Govt Securities to total investment value of 0.808 , followed by SBI

Result of the group averages of three ratios of capital adequacy is expressed in Table-4 which indicates that HDFC bank at top in this category with group average of 2 followed by Federal bank, with average of 2.3.HDFC bank became the top due to better performance of the bank in Advances to Assets ratio, and capital adequacy ratio.

6.1.2 Asset quality

Asset Quality is an evaluation of a particular **asset**, stating the amount of credit risk associated with it. Asset quality assesses the soundness of financial institutions against loss of value in the assets . The level and severity of non-performing assets, adequacy of provisions, distribution of assets etc impacts the asset quality. The ratios used to assess asset quality are:

Net NPAs to Net advances	Lower ratio is a sign of credit efficiency of bank
Total Investment to total assets	Higher ratio adversely affects the profitability of banks, hence lower ratio is better
Net NPAs to total assets	Lower the ratio, better is the performance of bank

Table 5 Net NPA to Net Advance

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	2.57	2.12	3.81	3.71	5.73	3.588	3
CAN	1.98	2.65	6.42	6.33	7.48	4.972	4
FED	0.74	0.73	1.64	1.28	1.69	1.216	2
HDFC	0.27	0.25	0.28	0.33	0.40	0.306	1

Table 6 Total Investment to Total Assets

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	0.24	0.26	0.24	0.3	0.30	.27	3
CAN	0.26	0.27	0.26	0.26	0.23	.26	2
FED	0.32	0.25	0.27	0.25	0.22	.26	2
HDFC	0.25	0.28	0.23	0.25	0.23	.25	1

Table 7 – Net NPA to Total Assets

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	.013	.01	.023	.028	.032	0.106	3
CAN	.012	.016	.038	.037	.046	0.149	4
FED	.004	.005	.01	.008	.011	0.038	2
HDFC	0.002	.002	.002	.002	.002	0.002	1

Table 8 Composite asset quality

BANK	Net NPAs to Net advances		Total investment to total assets		NET NPA TO TOTAL ASSETS		Group Rank	
	RATIO	RANK	RATIO	RANK	RATIO	RANK	AVG	RANK
SBI	3.588	3	.27	3	0.106	3	3	3
CAN	4.972	4	.26	2	0.149	4	3.3	4
FED	1.216	2	.26	2	0.038	2	2	2
HDFC	0.306	1	.25	1	0.002	1	1	1

Ranking of the Banks under study on the basis of Net NPA to Net advances as per Table-5 demonstrates that HDFC bank ranked on the top position with lowest Net NPA to Net Advances ratio of 0.306, followed by Federal bank having value of 1.216. Total investment to total assets ratio [Table-6] indicates that HDFC bank is on the top position with lowest Total investment to total assets ratio of 0.25, followed jointly by Federal bank and Canara bank having values of 0.26. Net NPA to Total Assets as per Table-7 provides that HDFC ranked on the top position with lowest Net NPA to Total assets ratio of 0.002, followed by Federal bank with a value of 0.038 .

Group averages of three ratios of Asset Quality [Table-8] makes it clear that HDFC bank is at Top in this category with group average of 1 followed by Federal bank with average of 2 due to better performance of these private sector banks in all three ratios of Asset Quality.

6.1.3 Management efficiency

The management efficiency signifies the ability of banks top management to take right decisions which helps a bank to achieve sustainable growth. It sets vision and goals for the business and checks out that it achieves them. The ratios in this element encompass subjective analysis to determine the efficiency and effectiveness of management. The ratios used to evaluate management efficiency are:-

Total advances to total deposits	Indicates the ability of the bank to convert deposits into high earning advances. Higher ratio is better
Business per Employee	Efficiency of the employees to generate business (total advances and total deposits). The higher the ratio, better it is.
Profit per Employee	Efficiency of the employees to generate profit for the bank. Higher ratio is better.

Table 9 Total advance to total Deposits

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	0.86	0.82	0.85	0.77	0.72	0.804	2
CAN	0.72	0.70	0.68	0.69	0.73	0.704	4
FED	0.73	0.72	0.72	0.73	0.82	0.744	3
HDFC	0.82	0.81	0.85	0.86	0.84	0.836	1

Table 10 Composite Management Efficiency

BANK	Total advances to total deposits		Business per Employee		Profit per Employee		Group Rank	
	Ratio	Rank	Ratio	Rank	Ratio	Rank	Avg	Rank
SBI	0.804	2	140.1	2	.37	3	2.33	2
CAN	0.704	4	144.8	1	0	4	3	4
FED	0.744	3	129.5	3	0.7	2	2.67	3
HDFC	0.836	1	115.66	4	1.46	1	2	1

Total Advances to Total Deposits ratio [Table-9] indicates that HDFC bank is ranked on the top position with highest Total Advances to Total Deposits ratio of 0.836 followed by SBI and Federal bank having values of 0.804 and .744. As per Table10 business per employee of Canara bank is the maximum. Thus Canara bank bags the top position with highest Business per employee ratio of 144.8 followed by SBI with 140.1. Profit per employee as shown in Table-11 brings out that ICICI secures the highest position with highest Profit per employee ratio of 1.46 , followed by Federal bank with 7.

The result of the group averages of Management Efficiency is expressed in Table-12 which indicates that HDFC bank is ranked at Top with group average of 2 followed by SBI with average of 2.33. Public sector banks have shown better performance in Business per employee and total advance to total deposits category under management efficiency parameters.

6.1.4 Earning Quality

Interest income to total income	Represent the share of interest income in total income.
Operating profits to total assets	Higher ratio is better
Operating profits to total assets	Indicates operating income of the bank per rupee invested in total assets. Higher ratio is better.
Net interest margin to total assets	Excess of interest earned over interest expended relative to total assets
Return on assets	Efficiency with which bank uses its assets to generate net income.

Table 11 Interest income to total income

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	.83	0.81	0.81	0.77	0.83	0.81	4
CAN	0.91	0.91	0.9	0.85	0.86	0.89	2
FED	.91	.89	.90	.89	0.89	0.90	1
HDFC	0.84	0.84	0.85	0.85	0.84	0.85	3

Table 12 Operating profit to total assets

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	1.91	2.1	1.96	2.01	1.93	1.98	2
CAN	1.5	1.34	1.3	1.57	1.59	1.46	4
FED	2.03	2.07	1.60	1.84	1.81	1.87	3
HDFC	3.22	3.22	3.21	3.21	3.38	3.25	1

Table 13 NIM to total assets

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	2.93	2.86	2.6	2.44	2.43	2.65	3
CAN	1.98	1.86	1.77	1.74	2.03	1.88	4
FED	3.06	2.86	2.83	2.91	2.83	2.90	2
HDFC	4.14	4.14	4.15	4.13	4.16	4.14	1

Table 14 Composite Earning Quality

BANK	Interest income to total income		Operating profit to total assets		NIM to total assets		Group Rank	
	Ratio	Rank	Ratio	Rank	Ratio	Rank	Avg	Rank
SBI	0.81	4	1.98	2	2.65	3	3	3
CAN	0.89	2	1.46	4	1.88	4	3.3	4
FED	0.90	1	1.87	3	2.90	2	2	2
HDFC	0.85	3	3.25	1	4.14	1	1.67	1

Interest income to total income shown in Table 13 indicates that Federal bank on the top position with highest interest income to total income ratio of 0.90, followed by CANARA bank and HDFC, having values of 0.89 and 0.85 respectively. Operating profit to total assets as per Table-14 brings out that HDFC Bank secures the top position with highest operating profit to total asset ratio of 3.25, followed by SBI with a value of 1.98. Table 15 provides that Net interest margin to total assets ratio of HDFC Bank is the highest with 4.14 followed by Federal bank with 2.9.

6.1.5 Liquidity:

Liquidity is the capability of banks to meet its financial obligations. Too low liquidity hampers the capacity of banks to meet its current financial liabilities. On other hand, too high liquidity indicates that banks are not making the proper use of their cash and hence blocking the way of profitability. Thus a proper equilibrium is necessary in liquidity to balance high profit as well as liquidity. The ratios suggested to measure liquidity under CAMEL Model are:-

Liquid assets to total assets	Higher ratio is better
Liquid assets to demand deposits	Higher ratio is better
Liquid assets to total deposits	Higher ratio is better

Table 15 Liquid Assets to total Assets

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	.07	.077	.069	.079	.06	.07	2
CAN	.091	.089	.103	.101	.081	.09	1
FED	.061	.058	.057	.065	.067	.06	3
HDFC	0.081	.062	.055	.057	.116	.07	2

Table 16 Liquid Assets to Demand Deposits

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	1.19	1.36	1.2	1.45	1.01	1.24	3
CAN	2.53	2.45	2.86	2.61	2.0	2.49	1
FED	1.34	1.18	1.17	1.32	1.36	1.27	2
HDFC	0.64	0.49	0.44	0.42	1.03	0.60	4

Table 17 Liquid Assets to total Deposits

BANK	2014	2015	2016	2017	2018	AVG	RANK
SBI	.091	.102	.091	.105	.071	0.09	3
CAN	.107	.103	.118	.119	.095	0.11	1
FED	.082	.07	.07	.08	.082	0.08	4
HDFC	0.108	.081	.071	.076	.156	0.10	2

Ranking of the Banks under study on the basis of Liquid assets to total assets is shown in Table-17, which indicates that Canara Bank is ranked on the top position with highest Liquid Assets to total asset ratio of 0.09, followed jointly by SBI and HDFC with .07

Ranking of the Banks under study on the basis of Liquid Assets to Demand Deposits is shown in Table-18, which indicates that Canara bank is ranked on the top position with highest Liquid Assets to Demand Deposit ratio of 2.49 followed by Federal bank with a ratio of 1.27.

Ranking of the Banks under study on the basis of Liquid assets to total deposits is shown in Table-19, which indicates Canara Bank is ranked on the top position with highest Liquid Assets to total asset ratio of 0.11, followed by HDFC with a ratio of 0.10

Result of the group averages of three ratios of Liquidity is expressed in Table-20, which indicates that Canara bank ranked the top in this category followed jointly by SBI and HDFC with group average of 2.67. Canara bank performed well in all the three parameters of this category

Table 18 Composite Ranking

BANK	C	A	M	E	L	AVG	Rank
SBI	2.67	3	2.33	3	2.67	2.73	4
CAN	3	3.3	3	3.3	1	2.72	3
FED	2.3	2	2.67	2	3	2.39	2
HDFC	2	1	2	1.67	2.67	1.87	1

6.2 Composite Ranking (Overall Performance) of Selected Public and Private sector Banks

Composite Ranking of the all the four banks under study on the basis of CAMEL Analysis is shown in Table-21 on the basis of performance in last five Financial years 2014-2018. The Table depicts that HDFC and Federal Bank have performed well than SBI and Canara bank in almost all the parameters of CAMEL analysis .

7. Findings and Suggestions

The study brings out that HDFC and Federal bank and are occupying the top positions in the overall performance. Canara bank has ranked top in liquidity and SBI has got second better performer in management efficiency and liquidity. HDFC is the top performer in 4 parameters of CAMEL analysis namely capital adequacy, Asset quality, Management efficiency and earning capacity. Federal bank secured second position in capital adequacy, asset quality and earning capacity. Amongst public sector banks, Canara bank has shown better performance in liquidity parameter and has to improve in earning quality, maintaining asset quality and improving management efficiency. SBI has performed better in management efficiency and liquidity parameter but has to improve asset quality and management efficiency. On the whole private sector banks are better performers than public sector banks as per CAMEL analysis.

8. Conclusion

Banking system of a country influences its economy significantly. Reserve bank of India adopted CAMEL rating system in 1996 along with other existing techniques and procedures in order to evaluate the performance of the banks. The paper makes an attempt to examine and compare the performance of the four different sector banks of India. The analysis is based on the CAMEL model. Out of 15 ratios used in the CAMEL model the average figures of HDFC is the best for 9 ratios and Federal bank became the top in 1 ratio and second best in 8 ratios. Thus it is established that private sector banks are performing well than public sector banks.

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