

# A Selective Study: Camels Analysis of Indian Private Sector Banks

C. DUDHE

University of Debrecen, Faculty of Economics and Business, Department of Finance,  
csdudhe87@gmail.com

*Abstract. Banking sector is one of the fastest growing sectors in India. Today's banking sector becoming more complex. Evaluating Indian banking sector is not an easy task. There are so many factors, which need to be taken care while differentiating good banks from bad ones. Performance evaluation of the banking sector is an effective measure and indicator to check the soundness of economic activities of an economy. The contribution of RBI and other policy maker, the banking industry has witnessed regulatory requirements like BASEL III norms. These regulatory changes have influenced prominent improvement in efficiency and performance of the Indian Scheduled Commercial Banks in the past few years. In the present study an attempt was made to evaluate the performance & financial soundness of select Private Sector Banks like ICICI, HDFC AND YES bank using CAMEL approach from 2013 to 2017 as well one way anova method. It is observed that on an average ICICI was at the top most position. It is also observed that yes Bank was at the bottom most position in selected CAMEL ratios.*

## 1. Introduction

Banking is becoming an increasingly global industry, which knows no geographical boundaries. The Indian Banking Sector has witnessed phenomenal growth over the last five decades, especially after the nationalization of the Indian Banks in 1969. Looking at the last twenty-five years, the banking sector has definitely come a long way. The phase of development of the banking sector is a good reflection of the development of the economy. Evaluation of financial performance of the banking sector is an efficient measure and indicator to judge the soundness of economic activities of an economy. Industrial development, modernization of agriculture, expansion of internal trade and foreign trade are the factors which mainly determine the economic development of an economy. A robust financial system is essential for the growth of a strong and vibrant economy. In the globalized economic scenario for economic development of an economy, the role and importance of prudent banking system cannot be underestimated. The banking sector, being a fundamental component of financial system is the backbone of the modern economic system. Banks are one of the oldest financial institutions in the financial system, which play a crucial role in the mobilization of deposits and disbursement of credit among the various sectors of the economy. A sound banking system acts as fuel injection which stimulates economic efficiency by mobilizing savings and allocating them to high return investment. In the 1980s, CAMEL rating system was first introduced by U.S. supervisory authorities as a system of rating for on-site examinations of banking institutions. Under this system, each banking institution subject to onsite examination is evaluated on the basis of five (now six)

critical dimensions relating to its operations and performance, which are referred to as the component factors. These are Capital, Asset Quality, Management, Earnings and Liquidity used to reflect the financial performance, financial condition, operating soundness and regulatory compliance of the banking institution. A sixth component relating to Sensitivity to market risk has been added to the CAMEL rating to make the rating system more risk-focused.

(Parvesh kumar Oct. 2016) Research studies emphasized the function of financial sector in economic development and expressed that there is a strong correlation between economic growth and development of financial system. (Sanjeev Oct 2016) Another study highlighted that financial sector performs as supply leading role in transferring of resources from traditional, low growth sector to high growth sector and stimulates an entrepreneurship response in the high growth sector. From the above discussion it is cleared that the role of banking system is vital and crucial for the capital formation in the country and it necessitates that banks must be more closely watched for their economic efficiency and performance. In the recent past the banking regulators and policy makers have recommended bank supervision by using CAMELS (capital adequacy, asset quality, management quality, earnings, liquidity and sensitivity) rating model to assess and examine the performance and financial soundness of the bank.

## 2. Review of Literature

The evaluation of financial performance of banking sector has been assessed by various researchers, academicians and policy makers in different time periods. A simplistic review of some of the important studies is presented here which fulfills the need for the present study. Narsimham Committee set up by the Government of India had recommended various financial and banking sector reforms which laid more emphasis on improvement in performance and profitability of banks.

Mous (2005) studied bankruptcy prediction models of banks using financial ratios of profitability, liquidity, leverage, turnover and total assets in decision tree models and multiple discriminant models, and found that the decision tree approach performed better.

Siva and Natarajan (2011) empirically tested the applicability of CAMEL norms and its consequential impact on the performance of SBI Groups. The study concluded that annual CAMEL scanning helps the commercial bank to diagnose its financial health and alert the bank to take preventive steps for its sustainability.

Wirnkar and Tanko (2008) studied banking performance of major Nigerian banks using the CAMEL framework. Very recently, Sangmi and Nazir (2010) have studied banking performance of two Indian banks using the CAMEL framework. Also, Agarwal and Sinha (2010) have studied the performance of microfinance institutions in India using the CAMEL framework.

Chaudhry and Singh (2012) analysed the impact of the financial reforms on the soundness of Indian Banking through its impact on the asset quality. The study identified the key players as risk management, NPA levels, effective cost management and financial inclusion.

Prasuna (2003) analysed the performance of Indian banks by adopting the CAMEL Model. The performance of 65 banks was studied for the period 2003-04. The author concluded that the competition was tough and consumers benefited from better services quality, innovative products and better bargains.

### 3. Objective

The following objectives are taken for the study

- 3.1 To evaluate the selected private sector banks from each of the important parameter of CAMEL model:
  - 3.1.1 Capital Adequacy
  - 3.1.2 Asset Quality
  - 3.1.3 Management capability
  - 3.1.4 Earnings capacity and
  - 3.1.5 Liquidity

### 4. Research methodology

- **Sampling**

In the present research study, 03 Banks are selected for sample. Banks are:

Private Sector Banks:

- 1) ICICI Bank
- 2) HDFC Bank
- 3) YES Bank

- **Period of Study**

Data for the last five years i.e. 2013 to 2017 are considered for the study.

- **Data Collection**

Secondary data were used to the study. The data required for the study was gathered from the annual reports of the respective banks through their website.

- **Limitation of study**

Due to the unavailability of the data for factor S, i.e. sensitivity to market risk, the data has been analysed using the rest of the 5 factors using ratios.

### 5. Hypothesis

**Ho:** There is no significant difference in financial performance of selected private sector banks as assessed by CAMELS model.

### 6. Result

**6.1 Capital Adequacy:** Capital adequacy is assumed to be a crucial reflector of the financial soundness of a bank. In order to survive, it is indispensable to protect the stakeholder confidence and preventing its bankruptcy. Capital is assumed to be a cushion that offers protection to stakeholder' and

it enhances the stability and efficiency of bank. Capital adequacy represents the overall financial position of a bank. It reflects whether the bank has sufficient capital to bear unexpected losses in the future and bank leverage.

Banks	Capital Adequacy Ratio		Debt Equity Ratio		Coverage Ratio		Advances to Assets		Govt. secu. to total Investment		Group rank	
	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank
ICICI BANK	17.5	1	0.07	1	1.69	1	74.22	1	15.79	3	1.4	1
HDFC BANK	15.96	3	0.06	2	1.68	2	62.07	2	75.98	1	2	2
YES BANK	16.36	2	0.05	3	1.44	3	54.97	3	33.53	2	2.6	3

Table 1. Capital Adequacy

Table-1 shows that ICICI is on the top position with group average of 1.4 with rank 1, followed by HDFC 2 . Yes bank stands at the lowest position with group average with rank of 3.

**6.2 Asset Quality:** The quality of assets is significant aspect to assess the degree of financial strength of a bank. The principal purpose to measure the assets quality is to determine the composition of non-performing assets (NPAs) as a percentage of the total assets. The quality of credit portfolio expresses the profitability of banks.

Banks	Net NPA to Net Advance (%)		Net NPA to Total Assets (%)		Total Inv. to Total Assets		Group Rank	
	Average	Rank	Average	Rank	Average	Rank	Average	Rank
ICICI BANK	2.35	1	2.08	1	34.47	1	1.00	1
HDFC BANK	0.26	2	0.17	2	27.15	3	2.33	2
YES BANK	0.26	2	0.14	3	33.59	2	2.33	2

Table 2. Asset quality

Table-2 shows that ICICI is on the top position with group average of 1 with rank 1, followed by HDFC and YES BANK with same position with group average 2.33 with rank 2.

**6.3 Management Soundness:** Management efficiency is another indispensable constituent of the CAMELS model that guarantees the growth and endurance of a bank. Management efficiency signifies adherence with prescribed norms, capability to counter to changing environment, leadership and administrative capability of the bank.

Banks	Operating Expenses		Net Interest Income		Credit Deposit Ratio		Return On Net Worth (%)		Group Rank	
	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank
ICICI BANK	1.76	3	2.95	2	101.69	1	12.21	3	2.25	2
HDFC BANK	2.56	1	4.2	1	82.5	2	17.54	2	1.50	1
YES BANK	1.77	2	2.82	3	80.28	3	19.15	1	2.25	2

Table 3. Management soundness

Table-3 shows that HDFC is on the top position with group average of 1.50 with rank 1, followed by ICICI and YES BANK with same position with group average 2.25 with rank 2.

**6.4 Earnings and Profitability:** High earnings quality should reflect the firm's current operating performance and a good indicator of future operating performance. The quality of earnings is an extremely significant parameter which expresses the quality of profitability and capability of a bank to sustain quality and earning consistently. It primarily reflects the profitability of bank and enlightens consistency of future earnings. The following ratios are required to assess earning quality:

Banks	Return On Assets		Cost to income ratio		Operating Profit to Total Assets		NIM to Total Assets (%)		Group Rank	
	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank
ICICI BANK	1.64	2	38.15	3	1.59	3	3.33	2	2.5	2
HDFC BANK	1.85	1	46.15	1	1.87	1	4.04	1	1	1
YES BANK	1.63	3	40.27	2	1.63	2	2.72	3	2.5	2

Table 4. Earnings and profitability

Table-4 shows that HDFC is on the top position with group average 1 with rank 1, followed by ICICI and YES BANK with same position with group average 2.50 with rank 2.

**6.5 Liquidity:** The adverse effect of increased liquidity for financial Institutions stated that although more liquid assets enhances the ability to raise cash on short-notice, but also reduce management's ability to commit credibly to an investment strategy that protects investors. Liquidity is another noteworthy aspect which expresses the financial performance of banks. Liquidity means the ability of the bank to honor its obligations toward depositors. Bank can preserve adequate liquidity position either by increasing current liabilities or by converting its assets in to cash quickly. It also denotes the fund available with bank to meet its credit demand and cash flow requirements.

Banks	Liquid Assets to total Assets (%)		Liquid Assets to Total Deposits (%)		Group Rank	
	Average	Rank	Average	Rank	Average	Rank
ICICI BANK	0.07	1	0.43	1	1	1
HDFC BANK	0.06	2	0.12	3	2.5	2
YES BANK	0.05	3	0.29	2	2.5	2

Table 5. Liquidity

Table-5 shows that ICICI is on the top position with group average 1 with rank 1, followed by HDFC and YES BANK with same position with group average 2.50 with rank 2.

**6.6 Overall Ranking:** In order to assess the overall performance of selected private Sector Banks, composite rating and results are calculated and presented in above Table-6 for the study period 2013-2017. It is found that under the capital adequacy parameter ICICI at the top position, while YES at lowest position. Under the asset quality parameter, ICICI held the top rank while HDFC and YES bank at same position with 2 rank. Under management efficiency parameter, it is observed that top rank is taken by HDFC while ICICI and YES bank at same position with 2 rank. In terms of earning quality parameter, HDFC got the top rank, while ICICI and YES at same position with rank 2. Under the liquidity parameter ICICI stood at the top rank, whereas HDFC and YES bank at same position. The study found that Industrial Credit Investment Corporation of India (ICICI) is at the first position with overall composite ranking average of 1.4 followed by Housing Development Financial Corporation (HDFC) with overall composite ranking average of 1.6. Yes Bank holds the bottom rank with overall composite ranking average of 2.2.

	C	A	M	E	L	Average	Rank
ICICI Bank	1	1	2	2	1	1.4	1
HDFC Bank	2	2	1	1	2	1.6	2
YES Bank	3	2	2	2	2	2.2	3

Table 6. Overall Ranking

**6.7 Anova Result:** One-way ANOVA test applied for determining whether there is any significant difference between the means of The results of ANOVA test highlighted the calculated values of F-ratio is less than the tabulated value (for 2,12 d.f. at 5% ). It means there is no statistically significant difference between the mean values of CAMEL ratios, hence null hypothesis accepted. It also signifies that there is no significant difference in performance of selected private sector banks (PSBs) assessed by CAMEL model. CAMEL ratios on the data shown in Table-6. The results of one-way ANOVA test are presented in following Table-.

Anova Result					
Source of variation	Sum of Square	Degree of Freedom	Mean Square	F-value	Sig
Between Groups	1.717	2	0.859	2.871	0.096
Whithin Groups	3.588	12	0.299		
Total	5.305	14			

Table 7

## 7. Conclusion:

CAMELS model is important tool to evaluate the relative financial strength of a banking system and to suggest suitable remedies to improve the deficiencies. CAMELS model is a ratio-based model to appraise the performance of banks. Due to fundamental changes in the banking sector in the recent years, the central banks all around the world have improved their supervision quality and techniques. In evaluating the function of the banks, many of the developed countries are now following uniform financial rating system (CAMEL RATING) along with other existing procedures and techniques. The above study is a humble effort to describe the various ratios which are helpful for the assessment of financial performance of banking sector. The ratios described in the present study are used by various researchers for the evaluation of banks performance in their respective studies. Different banks are ranked according to the ratings obtained by them on the five parameters. In the present study we used five important parameters like Capital Adequacy, Assets Quality, Management Efficiency, Earning Quality and Liquidity for assessing financial performance of the selected private sector banks in India and to determine the factors that predominantly affect the financial performance of the Indian banking sector with efficiently and accurately.

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