

**Analysis and Evaluation:  
Performance of Bank Through CAMEL Model,  
A Case Study of Selected Public and Private Banks in India.**

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## ABSTRACT

Performance evaluation of the banking sector is a powerful measure and indicator to test the stability of financial activities of an economy. In this study an attempt has been made to assess the performance & financial stability of selected Private and Public Banks in India of the year 2018. CAMEL techniques have been used to look at the financial strength of the chosen banks. Composite Rankings and Average has been implemented here to attain conclusion through the comparative and significant analysis of various parameters of CAMEL. HDFC bank is ranked first under the CAMEL analysis followed by Axis bank. ICICI occupied the third position. The fourth position is occupied by SBI, fifth by Bank of Baroda and the last position is occupied by Bank of India amongst all the selected banks.

**KEYWORDS:** *Private Banks, Financial Performance, CAMEL Model, Public Bank, Ranking*

## INTRODUCTION

Banking sector is an essential element of financial system plays a key function in the economic development of nations and it allows in stimulation of Capital formation, innovation and monetization in addition to facilitation of monetary policy. Indian banking industry has gone through many adjustments during the liberalization process.

Indian banking sector has been dominated by public sector banks since 1969 when all principal banks were nationalized by the Indian authorities. However, after liberalization in authorities banking policy in the 1990s old and new private region banks have grown faster and larger over the last 20 years by using the latest technology, offering contemporary innovations and monetary tools and techniques. Private region

banks have seen development in asset quality and efficiency parameters, whereas public sector banks have seen downfall in each area (Baru, 2010). Sound financial fitness and overall performance assessment of a financial institution is great for the depositors, shareholders, employees and the whole economy of a country because it determines banks' abilities to compete in the sector and has a critical role for the improvement of the sector. As a end result to this statement, efforts have been crafted from time to time, to measure the economic role of each bank and manage it correctly and effectively (Mohiuddin, 2014). It is of outstanding significance to assess the general overall performance of banks by implementing a regulatory banking supervision framework. One of such measures of supervisory knowledge is the CAMEL rating system which was placed into effect firstly in the U.S. in 1979, and now it's been proven to be a beneficial and efficient tool in response to the financial disaster in 2008 by the U.S. authorities.

## LITERATURE REVIEW

**Mathuva (2009)** examined the relationship between Cost Income Ratio (CIR), Capital Adequacy Ratio (CAR) and profitability for the period 1998 to 2007. The study found that capital adequacy had differential impact on the profitability of the bank. **Mishra (2012)** analysed the performance of 12 public and private sector banks for the period 2000-2011 by using CAMEL approach. It was concluded that private sector banks were growing at faster pace as compared to public sector banks. Union bank and SBI had displayed low economic soundness. **Mishra (2013)** assessed the performance and financial soundness of State Bank Group using CAMEL approach. The study concluded that there is a requirement to improve its position in respect to asset quality and capital adequacy. **Erol (2013)** compared the performance of Islamic banks against conventional banks in Turkey during the period of 2001-2009. The results showed that Islamic banks performed better in profitability and asset management ratios compared to conventional banks but slow in sensitivity to market risk criterion. **Rostami (2015)** analysed the impact of each parameter of CAMELS model on the performance of Iranian banks. Q-Tobin's ratio was used as performance indicator in this study. It was found that there was significant relation between each category of camel model and Q-Tobin's ratio as bank's performance ratio. **Majumdar (2016)** measured the financial performance of 15 banks in Bangladesh for the period 2009-2013. CAMEL model had been used to examine the financial soundness of selected banks. Composite Ranking, average and ANOVA test had been applied to the data. The study concluded that there had been significant difference in the performance of selected banks. The study suggested that banks should take required steps to recover their shortcomings. **Ramya (2017)** analyses the financial performance of State Bank of India for the study period 2012-2016 through the use of CAMEL approach. It was concluded that there is a need to take necessary steps to improve the position of SBI in the context of few parameters i.e., debt-equity, operating profit, and non-interest income to total income.

**Singh (2017)** examined the capital adequacy performance of private and public sector banks in India for a period of 2006-2015. The study found that all the banks had sound capital adequacy position except Central Bank of India.

## OBJECTIVE

This paper aims to evaluate the overall performance of selected Private and Public Banks. It also aims to find out the factors that affect the financial performance of the listed banks in India.

## METHODOLOGY

The current study is Descriptive cum exploratory in nature as it tries to get information keeping the current status of the phenomena and to describe “what exists” with respect to variables. Top banks i.e., HDFC Bank, ICICI Bank, Axis Bank, SBI, BOB, BOI; as per their market capitalization are selected from the listed banks on BSE. This study is totally based on secondary data which is assembled from annual reports of selected banks, distinct databases and Reserve Bank of India. CAMEL approach has been used to determine the financial strength of the chosen banks. Certain ratios have been calculated under each acronym of CAMEL and Composite Rankings, Average, and Covariance are applied here to attain conclusion through the comparative and significant analysis of distinct parameters of CAMEL.

## DATA and VARIABLES

This research examines the performance of selected Public & Private Banks with the help of CAMEL Model, SBI, BOB, BOI, AXIS, ICICI, HDFC these banks are evaluated under this research. Secondary Sources of data composition have been used, viz. journals, IBA bulletin, statistics released by Reserve bank of India and annual reports released by the banks.

## EVALUATION

In this phase we can examine the financial soundness of the chosen banks primarily based totally at the CAMEL framework. Only the ones signs are decided on which might be suitable for the take a look at. The choice of signs is primarily based totally on their analytical significance, availability of facts for compilation, calculation and its relevance for the take a look at. The following desk suggests the chosen signs for the take a look at below every acronym of CAMEL: -

## ANALYSIS

TABLE 1. Analysis of different Variables

Capital Adequacy	Assets Quality	Managerial Efficiency	Earning Capabilities	Liquidity
Capital Adequacy Ratio	Net NPA to Net Advance	Return on Equity (ROE)	Return on Assets	Cash Deposit Ratio
Capital Adequacy Ratio tier 1	Secured Advance to total Advance	Business Per Employee	Net Interest Margin	Credit Deposit Ratio
Capital Adequacy Ratio tier 2	Term loans to Total Advance	Profit per Employee	Operating Profit to Total Assets	Investment Deposit Ratio
		Return on Net Worth	Non-Interest Income to total assets	

## CAPITAL ADEQUACY

Capital Adequacy suggests whether or not the bank sufficient capital to take in sudden losses.

It is needed to hold depositors' self-assurance and stopping the bank from going bankrupt (Reddy, 2012). "Meeting statutory minimum capital necessary is the important problem in finding the capital adequacy, and maintaining an better enough degree of capital is a important component" it infer the componential of corporation that legal responsibility can be privileged. If there's any lack of loans it'll be a super chance for banks to satisfy the call for in their depositors. Therefore, to save you the bank from failure, it's far vital to hold a sizeable degree of capital adequacy (Chen, 2003). As according to regulatory norms, Indian scheduled commercial banks are required to hold a CAR of 9% even as Indian public sector banks are emphasized to hold a CAR of 12%

TABLE 2. CAPITAL ADEQUACY OF DIFFERENT BANKS

Parameters		HDFC	ICICI	Axis Bank	SBI	BOB	BOI
Capital Adequacy Ratio	Mean	14.82	18.42	16.57	12.60	12.13	12.94
	RANK	3	1	2	5	6	4
Tier 1 Capital	Mean	13.25	15.92	13.04	10.360	10.46	9.73
	RANK	2	1	3	5	4	6
Mean		1.57	2.50	3.53	2.24	1.67	3.21

<b>Tier Capital</b>	<b>2</b>	<b>RANK</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>2</b>
<b>Composite</b>	Average	3.66	1.67	2	4.66	5	4	
	Rank	<b>3</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>6</b>	<b>4</b>	

## ASSET QUALITY

The quality of assets is a main character to find the degree of financial capabilities. The primary objective to examine the assets quality is to discover the composition of nonperforming assets (NPAs) as a percentage of the total assets.

TABLE 3 ASSET QUALITY OF BANKS

Parameters		HDFC	ICICI	Axis Bank	SBI	BOB	BOI
<b>Net NPA to Net Advance</b>	Mean	0.32	0.45	0.50	1.81	0.56	1.24
	RANK	<b>1</b>	<b>2</b>	<b>3</b>	<b>6</b>	<b>4</b>	<b>5</b>
<b>Secured Advance to total Advance</b>	Mean	74.49	75.25	71.23	81.38	81.78	80.43
	RANK	<b>5</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>3</b>
<b>Term loans to Total Advance</b>	Mean	71.17	70.21	65.67	57.940	44.71	45.28
	RANK	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>5</b>
<b>Composite</b>	Average	2.33	2.66	4	4	3.33	4.33
	Rank	<b>1</b>	<b>2</b>	<b>4.5</b>	<b>4.5</b>	<b>3</b>	<b>6</b>

**RESULT:** From the above table, it is witnessed that assets quality of HDFC bank is much better as compare to another bank. ICICI got second place in assets quality followed by Bank of Baroda, Axis, SBI and Bank Of India respectively. Net NPA to Net Advance ratio (Minimum value gives lowest rank) infers that HDFC (0.32) is in the better condition whereas SBI is in bad condition. Where Secured Advance to total Advance represent that maximum value 81.78 obtained by the Bank Of Baroda whereas Axis bank has lowest rank with the value of 71.23. Term loans to Total Advance showed that HDFC have highest value (71.17) which is more volatile in comparison to other.

TABLE 4. Managerial Efficiency of selected banks

Parameters		HDFC	ICICI	Axis Bank	SBI	BOB	BOI
Return on Equity	Mean	17.87	6.61	18.70	-3.210	-5.81	-18.23
	RANK	2	3	1	4	5	6
Business Per Employee	Mean	150.80	107.80	122.54	167.00	176.60	182.90
	RANK	4	6	5	3	2	1
Profit per Employee	Mean	2.00	1.07	1.05	-0.24	-0.4	-1.23
	RANK	1	2	3	4	5	6
Return on Net Worth	Mean	18.49	11.51	18.71	14.11	17.99	14.64
	RANK	2	6	1	5	3	4
Composite	Average	2.25	4.25	2.5	4	3.75	4.25
	Rank	1	5.5	2	4	3	5.5

## OVERALL RANKING

TABLE 5. Overall ranking of the selected banks based on the CAMELS parameters

Banks	HDFC	ICICI	Axis Bank	SBI	BOB	BOI
Capital Adequacy	3	1	2	5	6	4
Assets quality	1	2	4.5	4.5	3	6
Managerial efficiency	1	5.5	2	4	3	5.5
Earning Quality	2	3	1	4	5	6
Liquidity	2.5	2.5	1	4	5.5	5.5
AVERAGE	1.9	2.8	2.1	4.3	4.5	5.6
Rank	1	3	2	4	5	6

The overall ranking of the banks considering all the sub criteria rankings under CAMEL analysis of 2018 is presented in the above tables. The group ranking of all the banks considered for the purpose of study is taken and average out to reach at the overall grand ranking. HDFC bank is ranked first under CAMEL analysis followed by Axis bank. ICICI bank got the 3<sup>rd</sup> Rank. Fourth position is occupied by SBI followed by Bank of Baroda. Bank of India got the last position.

## CONCLUSION AND SUGGESTION

According to the CAMEL Model, HDFC is on the top of the list when compared with other banks under examination based on all of the parameters. While HDFC Bank performs well in terms of asset quality, management efficiency, and earnings ability, it falls short on capital adequacy. In comparison to other banks in the study, Bank of India ranks last because of its poor overall performance in terms of Capital Adequacy, Earnings Ability, and Liquidity, despite performing better in terms of capital adequacy. As a result, the Bank of India must expand its role, particularly in vulnerable areas. Therefore, the associated coverage makers Minimum-rating banks should take necessary steps and use the findings in this study to find solutions to their weaknesses. This will lead them to perform and be distinct in the market.

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