



Special Issue of First International Conference on Management, Science and Technology (ICMST 2021)

## A Comparative Study on Financial Performance of banking sectors

Dr. S. Vijayalakshmi<sup>1</sup>, S. Jahnavy<sup>2</sup>

<sup>1</sup>Head, Department of B. Com (PA), PSGR Krishnammal College for Women, Coimbatore. India.

<sup>2</sup>B. Com (PA), PSGR Krishnammal College for Women, Coimbatore, Tamil Nadu. India.

jahnavys@gmail.com<sup>2</sup>

### Abstract

Banking sector plays a serious role within the country's economy. The Indian banking industry is one of the quickest growing industry in India. The Indian industry has witnessed radical changes and massive growth throughout the previous couple of years. "CAMEL" ratio is calculated so as to target money performance. The CAMEL stands for Capital adequacy, Asset quality, Management, Earnings and Liquidity. The present paper explains the performance of selected banks (HDFC bank and BOB). Last 5 years are taken for this study i.e., 01/04/2015 – 31/03/2020. The study is predicated on secondary information sources and for this purpose, relevant information is collected from the Annual Report of the individual banks for the above-named study period.

**Keywords:** Banking sector, CAMEL, HDFC bank, BOB, Annual Report, Capital Adequacy, Asset Quality.

### 1. Introduction

A sound and efficient banking system is a boon to the developing economy. The banking system in India should be more effective to meet new challenges and technologies of everyday life. It has come up with public sector banks, private sector banks and cooperative banks for different purposes. RBI being India's central bank and regulatory body under the jurisdiction of ministry of finance, is responsible for the issue and supply of Indian currency and the regulation of the Indian Banking system. It works for the promotion of economic development. RBI was nationalized in 1949. Currently, in this study CAMELS rating system is taken up as a tool to analyse the financial performance of "BANK OF BARODA and HDFC BANK".[1-5]

### 2. Objective

❖ To compare the financial performance of Bank of Baroda and HDFC Bank using CAMEL ratios.

❖ To analyse the *capital adequacy* and *asset quality* of the chosen banks.

### 3. Statement of the problem

In the recent years, the financial system particularly the banks have undergone various changes in the type of reforms, laws & norms. CAMELS' framework for the performance analysis of banks is an addition to the present. The try here is to envision however various ratios are used and understood to reveal a bank's performance and the way this explicit model encompasses a good vary of parameters creating it a widely used and accepted model in today's state of affairs.

### 4. Scope of the study

To study the importance of using CAMELS framework for performance analysis in banking system. The camel model would be useful for the govt authorities to diagnose the monetary performance of the banks through its six

components and counsel them steps for its property.

**5. Research methodology**

**5.1 Research type**

Here, the research type would be descriptive research through comparative study i.e., analysis of banks financial statements to understand the position of one bank in comparison with another. The present study has aimed at comparing the performance of banks through camel framework.

**5.2 Area of study**

The study environment will be the Banking industry. 2 banks have been taken for the study. Bank of Baroda (second top public bank) and HDFC Bank (first top private bank) have been chosen.

**5.3 Period of the study**

The period taken up for the study would be 5 years, viz. .1.4.2015 to 31.3.2020.

**5.4 Data source**

Secondary data has been considered for the study, which has been collected from the annual reports and audited financial statements of the banks.

**6. Limitations of the study**

- ❖ Only five years have been considered for the study.
- ❖ Only two banks have been taken up for the study.

**7. Review of literature**

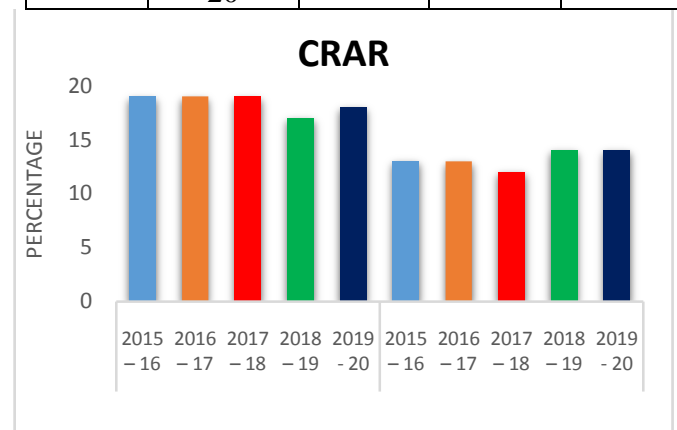
Hari Krishnan Karri, Kishore Meghan, Bharti Meghani Mishra (2015) - A comparative study on financial performance of public sector banks in India: An analysis of CAMEL model. Analysed the performance of two leading public sector banks by applying CAMEL model. The study concluded that transparency and good governance would work as principle guiding force in the present scenario. Sahila Chaudhry Sultan Singh (2012) – Impact of Reforms on the Asset Quality in Indian Banking. Studied the financial reforms on the soundness of the 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.[6-11].

**8. Analysis and Interpretation**

**Table.1.Capital Risk Adequacy Ratio**

(in percentage) (source: secondary data)

PARTICULARS		Capital ratio Tier 1	Capital ratio Tier 2	CRAR
<b>HDFC BANK</b>	2015 – 16	13.00	2.00	19.00
	2016 – 17	13.00	2.00	19.00
	2017 – 18	13.00	2.00	19.00
	2018 – 19	16.00	1.00	17.00
	2019 - 20	17.00	1.00	18.00
<b>BOB</b>	2015 – 16	11.00	2.00	13.00
	2016 – 17	11.00	2.00	13.00
	2017 – 18	10.00	2.00	12.00
	2018 – 19	12.00	2.00	14.00
	2019 - 20	11.00	3.00	14.00



**Chart.1. CRAR**

**8.1 Interpretation**

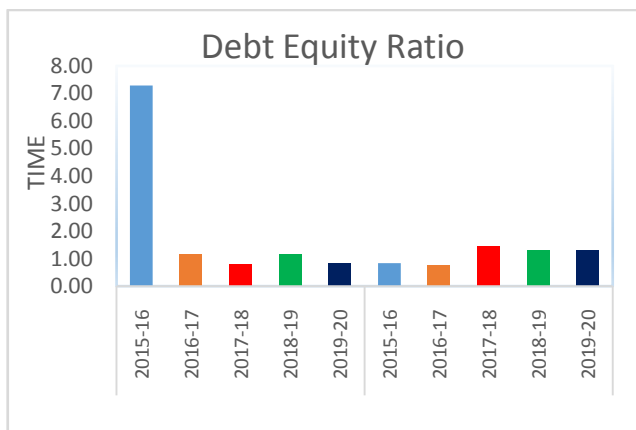
Indian scheduled commercial banks are required to maintain a CRAR of 9% while Indian public sector banks are emphasized to maintain a CRAR of 12%. In case of HDFC bank, CRAR has been constant from march 2016 to march 2018 and it has been declined in 2019 and in 2020 it has increased to 18.00. In case of BOB, there has been a very slight but steady increase over the 5 years. On comparing, we find that both banks have interchanging fared better than the others in the

consecutive years and that currently HDFC bank has a higher CRAR.

**Table.2. Debt Equity Ratio**  
(in crores)

PARTICULARS		Borro wings	Net worth	Debt Equity Ratio
HDFC BANK	2015-16	530184.74	72677.80	0.72:1
	2016-17	123104.97	106294.99	0.12:1
	2017-18	117085.12	149206.35	0.78:1
	2018-19	123104.97	106294.99	1.15:1
	2019-20	144628.53	170986.02	0.84:1
BOB	2015-16	33471.70	40198.98	0.83:1
	2016-17	30611.44	40303.25	0.75:1
	2017-18	62571.97	43394.77	1.44:1
	2018-19	67201.29	50983.09	1.31:1
	2019-20	93069.30	71856.21	1.29:1

(source: secondary data)



**Chart.2. Debt Equity Ratio**

**8.2 Interpretation**

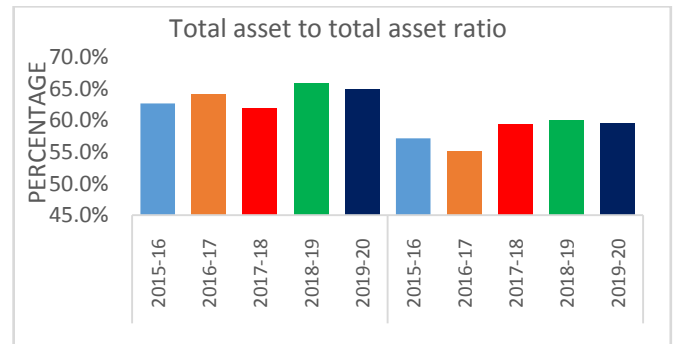
This ratio indicates the proportion of shareholder’s equity and debt used to finance a company’s asset. HDFC bank showed a sudden fall from 0.72 to 0.12 in 2017 – 2018 and continued to increase gradually in the upcoming years. BOB’s debt equity showed a higher ratio of 1.44 in 2018-2019 and maintains it with a slight rise and fall for 2019

and 2020. On analyzing, BOB depends more on debt capital and has a higher ratio than HDFC bank.

**Table.3. Total Advance to Total Asset Ratio**  
(in crores)

PARTICULARS		Borro wings	Net worth	Total asset to total asset ratio
HDFC BANK	2015-16	4645939589	7407960728	62.71%
	2016-17	5545682021	8638401917	64.19%
	2017-18	6583330908	10639343234	61.87%
	2018-19	8194012167	12445406906	65.83%
	2019-20	9937028781	15305112589	64.92%
BOB	2015-16	383770.1803	6713764769	57.16%
	2016-17	383259.2231	6948754235	55.15%
	2017-18	427431.8313	7199997716	59.36%
	2018-19	468818.7362	7809874049	60%
	2019-20	690120.7340	11579155151	59.60%

(source: secondary data)



**Chart.3. Total Advance to Total Asset**

**8.3 Interpretation**

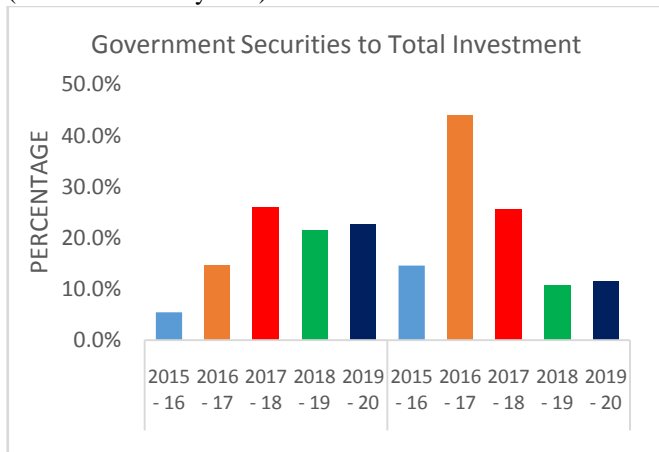
This ratio shows a bank’s aggressiveness in lending which ultimately result in better profitability. HDFC bank shown an increasing trend in its total assets as well as total advances over the 5 years. BOB’s ratio was decreasing from 57.16% to 25.15%. but it managed to maintain a constant percent over the next 3 years. HDFC bank maintained a greater advance to asset ratio,

indicating aggressive lending policy and greater profit motive.

**Table.4.Government Securities to Total Investments**  
(in crores)

PARTICULAR		Govt security	Total investment	Govt security to total investment
<b>HDFC BANK</b>	2015-16	8948.60	163885.76	5.46%
	2016-17	31413.37	214463.33	14.6%
	2017-18	62745.05	242200.24	25.90%
	2018-19	62745.05	290587.87	21.5%
	2019-20	89162.10	391826.65	22.7%
<b>BOB</b>	2015-16	17554.95	120450.52	14.57%
	2016-17	56950.91	129630.54	43.93%
	2017-18	41792.29	163184.53	25.61%
	2018-19	19677.63	182298.08	10.79%
	2019-20	31500	274614.61	11.47%

(source: secondary data)



**Chart.4. Government Securities to Total Investment Interpretation**

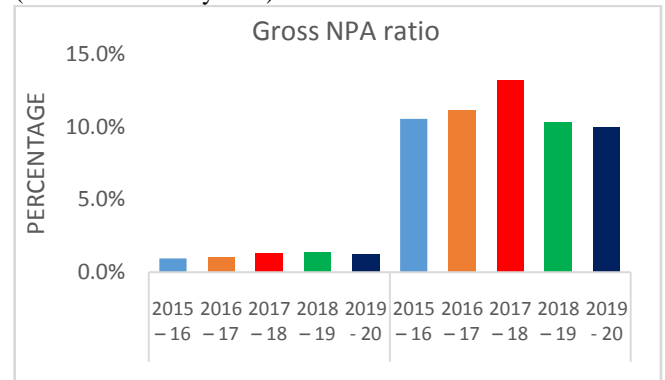
This ratio depicts the risk-taking ability of the bank. Higher the ratio, lower will be the risk in bank's investment. HDFC bank's ratio gradually increases till 2017 – 2018. And it increases to 22.7% in 2019 - 2020 after a slight fall to 21.5% in 2018 – 2019. In the case of BOB, in the year 2016 – 2017 it showed a sudden increase from 14.57% to 43.93%, but at once showed a decrease to 10.79% in 2018 – 2019. Again, it started up with a

rise to 11.47% in 2019 – 2020. HDFC bank maintained a higher ratio assuring lower risk in its investments over the 5 years.

**Table.5.Gross NPA ratio**  
(in crores)

PARTICULAR		Gross NPA	Total advance	Gross NPA ratio
<b>HDFC BANK</b>	2015-16	4392.83	4645939.589	0.94%
	2016-17	5885.66	5545682.021	1.05%
	2017-18	8606.97	6583330.908	1.30%
	2018-19	11224.16	8194012.167	1.36%
	2019-20	12649.97	9937028.781	1.27%
	<b>BOB</b>	2015-16	40521.04	38770.18
2016-17		42719	383259.22	11.14%
2017-18		56480	427431.83	13.21%
2018-19		48232.76	468818.73	10.28%
2019-20		69381.43	690120.73	10%

(source: secondary data)



**Chart.5. Gross NPA**

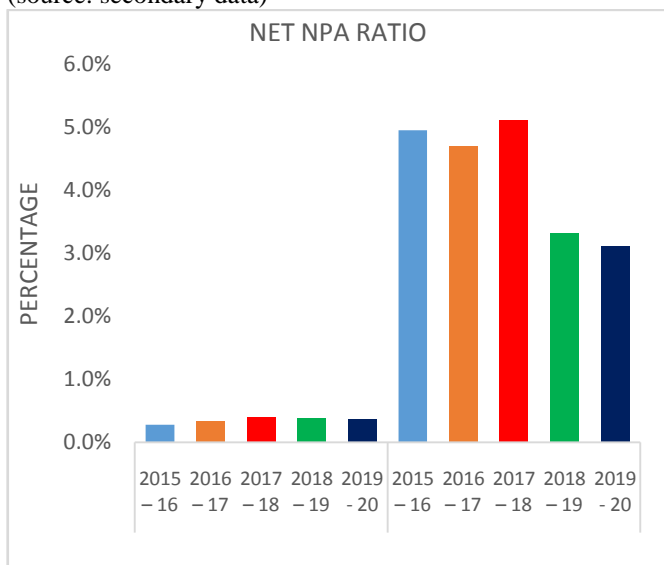
**8.4 Interpretation**

It is the ratio to check whether the bank's gross NPA's are increasing quarter on quarter or year on year. HDFC bank shows an average of 1.18% of gross NPA to total advances over the 5 years. BOB's average covers around 11.03% for the 5 years. Comparing both, BOB shown a high gross NPA to total advances, thereby indicating a lesser efficiency in recovering its debt and lesser cautions while offering loans.

**Table.5. NET NPA ratio**  
(in crores)

PARTICULAR		NET NPA	NET ADVAN CES	NET NPA RATIO
<b>HDFC BANK</b>	2015 – 16	1320.37	4645939589	0.28%
	2016 – 17	1843.99	5545682021	0.33%
	2017 – 18	2601.02	6583330908	0.40%
	2018 – 19	3214.52	8194012167	0.39%
	2019 - 20	3542.36	9937028781	0.36%
<b>BOB</b>	2015 – 16	19046.46	383770.18	4.96%
	2016 – 17	18080	383259.22	4.71%
	2017 – 18	23483	427431.83	5.119%
	2018 – 19	15609.50	468818.73	3.33%
	2019 - 20	21576.00	690120.73	3.12%

(source: secondary data)



**Chart.6. NET NPA**

**8.5 Interpretation**

Net NPA reflects the performance of banks. Higher the ratio, higher will be the credit risk. HDFC bank showed an increased percentage from 2017- 2018 and 2018 – 2019. But after that it showed a slight fall in its performance indicating lesser risk. BOB showed an increased percent over the 5 years than HDFC though there is a fall in the last 2 years. HDFC holds the lesser risk position when compared to BOB.

**9. Findings**

**9.1 Capital Adequacy Ratio**

- ❖ Even though HDFC bank showed a decreased in its percentage, it has a higher CRAR than BOB.
- ❖ In the case of debt capital, BOB depends more on the debit capital and has a higher ratio than HDFC bank.
- ❖ HDFC bank maintained a higher aggressive lending policy than BOB.
- ❖ HDFC bank maintained a higher ratio than BOB assuring loser risk in its investments.
- ❖ In short, HDFC bank maintains a better capital base than BOB and well adequate for the requirements.

**9.2 Asset Quality**

- ❖ BOB shown lesser efficiency in recovering its debts.
- ❖ HDFC is in the lesser risk position when compared to BOB.
- ❖ The asset quality of HDFC bank is more satisfying than BOB

**10. Suggestion**

- ❖ BOB would have tried to be conservative for better capital base to be adequate for the requirements of RBI.
- ❖ HDFC bank would have maintained more assets than BOB. But its investment in government securities shows the risk bearing capacity.

**Conclusions**

This study is on the comparative financial performance of BOB and HDFC bank using camel analysis. Both the banks are in a stable and safe position. On comparing, HDFC bank has better asset quality and capital adequacy than BOB. From the present study, HDFC bank is a better performer than BOB in terms of capital adequacy, compared to BOB. The significance of CAMEL ratios and its rating methodology can be published as a part of the annual report of the banks to get a better understanding of the following position, their management efficiency by the invertor and the public.

**References****Journals**

- [1]. Hari Krishnan Karri, Kishore Meghan, Bharti Meghani Mishra (2015); Vol. 4, No.8; Arabian Journal of Business and Management Review (OMAN Chapter)
- [2]. K. V. N Prasad and Dr. A. A. Chari (2011) – A study on financial performance of public and private sector banks. International Journal of Financial Management. Volume 2 Issue 1
- [3]. Brahma Chaudhuri (2018) – A Comparative Analysis of SBI and ICICI: Camel Approach. International Journal of Research in Management, Economics and Commerce. ISSN 2250-057X, Impact Factor: 6.384, Volume 08, Issue 1, Page 151-156.
- [4]. Sahila Chaudhry Sultan Singh (2012) – Impact of Reforms on the Asset Quality in Indian Banking. International Journal of Multidisciplinary Research. Vol.2 Issue 1, ISSN 2231 5780.
- [5]. C. Vanlalzawna (2016) – A study of financial performance evaluation of banks in India. Dissertation Submitted to Mizoram university Master of Philosophy in Management.
- [6]. Amanjot Kaur Sodhisimran Waraich (2016) – Fundamental Analysis of Selected Public and Private Sector Banks in India. Fundamental Analysis of Selected Public and Private Sector Banks in India. ISSN: 0971-1023.
- [7]. Dr. Sunita Sharma<sup>1</sup>, Rajesh Kothari<sup>2</sup>, D.S. Rathore<sup>3</sup>, Jagdish Prasad<sup>4</sup> (2012) – Causal Analysis of Profitability and Non-Performing Asset of Selected Indian Public and Private Sector Banks. Journal of Critical Reviews ISSN- 2394-5125 Vol 7, Issue 9, 2020.

**Website**

- [8]. <https://www.moneycontrol.com/financial/hdfc/bank/balance-sheetVI/HDF01>
- [9]. <https://www.moneycontrol.com/financial/bank/ofbaroda/balance-sheetVI/BOB>
- [10]. <https://www.hdfcbank.com>
- [11]. <http://www.bankofbaroda.com>