A comparative study of financial performance evaluation of NSE-CNX Banks Using Weighted CAMELS Model

Mr. Nagji U. Chavda
(Ph.D. Scholar),
Supervisor Instructor – Govt. ITI Junagadh

Dr. Pankaj K.Trivedi
Associate Professor,
K.K. Parekh Commerce College-Amreli

Abstract

"CAMELS" model as a tool is very effective, efficient and accurate to be used as a performance evaluator in banking industries and to anticipate the future and relative risk. "CAMEL" ratios are calculated in order to focus on financial performance. The CAMELS stands for Capital adequacy, Asset quality, Management, Earning and Liquidity and Sensitivity. In the research, Researcher has sampled 8 NSE-CNX Indian Nationalized Banks in which four Banks from Public Sector and other four Banks from Private Sector for this study. This research study attempts to give the Rank to the sampled Bank based on superior performance during previous year by using the new methodology of evaluating the Banks financial Soundness i.e. Weighted CAMEL model.

Keywords: NSE-CNX Banks, *Weighted CAMELS Model*

I. INTRODUCTION

Generally financial performance of banks and other financial institution measured by using combination of financial ratio analysis, benchmarking, measuring performance against budget or mix of these methodologies. In simple accounting terms, performance to banks refers to the capacity in generating sustainable profitability. Banks need a way to evaluate performance and consider some important financial ratios and find the strengths and weaknesses. Traditional method of applying financial ratios to evaluate bank's state of performance has been long practiced, with practitioners using CAMELS rating to measure their banks' performance. CAMELS bank rating is used by bank's management to evaluate financial health and performance. Weighed CAMEL model is new methodology by giving weight to each parameter of CAMEL model whereas in previous study only CAMEL Model is used to find out the Banking performance.

In this study, five categories of ratios according to CAMELS system are applied and are summarized in relative model of that category to define CAMELS system in any group of ratios. Those categories as Gunsel, N., (2005) & Nimalathasan, B., (2008) & Peterson, (2006) and Sarker (2005) pointed, are:

Capital (C) The first variable group is the indicators of capital and relevant indicators those present capital, the ratio of capital to assets and show organization strengths.

Asset Quality (A) Asset quality ratios are one of the main risks that banks face. As loans have the highest default risk, an increasing number of non-performing loans shows a deterioration of asset quality.

Management Quality (M) As management is a qualitative issue, such as the ability for risk taking, it is usually difficult to measure the quality of management. The management quality of a bank can be measured by some important ratios those are used in CAMELS model.

Earning Ability (E) Earning is the most important performance measurement of banks. The ratios of earning and relative financial ratios are calculated in this study.

Liquidity (L) Liquidity risk measures an institution's ability to meet unanticipated funds that are claimed by depositors. Liquidity ratios are expected to be both positively and negatively related to the likelihood of failure those are set in model.

Sensitivity (S) Sensitivity ratios those are related to risk and covering power of organization are defined and calculated to finalize bank's performance model because risk indicators is very important and highlighted in CAMELS model.

II. LITERATURE REVIEW

Manpert Core (2017) conducted a study on the removal of identity and its impact on the non-monetary payment system. He said that the non-monetary system in the economy has many less fruitful, time-consuming, less expensive, less paper transactions etc., he expected that the future transaction system in all sectors is a non-cash transaction system.

Suita Singal (2017) conducted research on identity removal and e-banking in India. A case study was conducted to ascertain the level of awareness among rural India's population of e-banking facilities and the amount of increase after removal of identity. A sample of 100 samples was used with the ANOVA test to show that the rural population is very different with the urban population in the level of awareness as well as the level of use of electronic banking services. It has been shown that young urban males have greater awareness and use of electronic banking. The study would also help banks improve their e-banking facilities.

Sanjami and Nazir (2010) assessed the financial performance of two major banks in Northern India, the Punjab National Bank and the Jammu and Kashmir Bank. The results highlighted that the position of banks under study is sound and satisfactory with regard to capital adequacy, asset quality management capacity and liquidity.

Gupta and Kauer (2008) conducted this study with the primary objective of evaluating the performance of Indian private sector banks based on the model of beauty and rated the top five banks and five. They rated 20 new banks and 10 new private banks based on the CAMEL model. They have considered the financial statements for a period of five years, i.e. 2003-2007.

Bahani analyzed (2006) the performance of new private sector banks by assisting the CAMEL model. A sample of four leading private sector banks - the Industrial Credit and Investment Corporation of India, the Housing Development Finance Corporation, the Indian Trust Agency and the Industrial Development Bank of India.

Norazi and Evans (2005) investigated whether CAMEL (S) ratios could be used to predict bank default. The results indicate that the adequacy ratio, asset quality, management, profits, liquidity and size of the bank are statistically significant in explaining the Bank's failure.

S & S (2003) examined the liquidity, solvency and efficiency of Japanese banks using the CAMEL valuation methodology for a representative sample of Japanese banks for the period 1993-1999. They assessed the adequacy of capital, assets, quality of management, profitability and liquidity.

III. RESEARCH METHODOLOGY

RESEARCH OBJECTIVES

- To analyze and Compare financial performance of NSE-CNX Banks employing CAMEL Model for the year 2016-17
- Giving Ranks to each Bank using weighted CAMEL Model

STATEMENT OF PROBLEM

In this study, researcher wants to analyze the financial performance of the NSE-CNX Banks by using the Weighted CAMEL model for the year 2016-17.

SCOPE AND LIMITATIONS OF STUDY

The scope of this study is limited up to NSE-CNX Indian Nationalized banks only, while the time period of the study was limited to only one years Banks Financial data.

IV. DATA ANALYSIS

RANKING METHODOLOGY

For this study, Researcher has used Secondary source of Data Such as Banks Websites, Banks Journals, and Annual Reports of Bank etc. Data tabulation and analysis tools are used to apply Weighted CAMEL Model in each Bank.

In Weighted CAMEL approach, Weight is assigned to each parameter of CAMEL Model according to its significance. Above all Banks Ratios are analyzed using the Weighted CAMELS Components Ratings.

1) <u>C – CAPITAL ADEQUACY</u>

Capital Adequacy Ratio (CAR) or Capital to Risk Assets Ratio (CRAR)

Weights for CAMELS Component Ratings

CAMELS Component	Weight
C	25%
A	20%
M	25%
E	10%
L	10%
S	10%

As per the latest RBI norms, banks in India should have a CAR of 9%. It is arrived at by dividing the Tier I and Tier II capital by risk weighted assets. Tier I capital includes equity capital and free reserves. Tier II capital comprises sub-ordinate debt of 5-7 year tenure. The main reason for the rise in Risk Weighted Assets and decline in CAR is constant increase in advances over the last few years.

Years	SBI	CORP	PNB	BOB	ICICI	AXIS	HDFC	YES
2016-17	13.11	11.32	11.66	13.17	17.39	14.95	14.6	17.07
WEIGHT	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
WEIGHTED VALUE	3.2775	2.83	2.915	3.2925	4.3475	3.7375	3.65	4.2675

The above data, ICICI Bank have maximum Capital Adequacy Ratio whereas Corporation Bank has minimum Ratio. Thus we can conclude that ICICI Bank have best performance among all the Banks.

2) <u>A – ASSET QUALITY</u>

Gross NPAs to Total Assets:

Gross NPAs are gross provisions on NPAs and Total Assets considered are net of revaluation reserves. The quality of loan is one of the crucial aspects of that decide the health of banks. This ratio indicates the percentage of gross NPAs to total assets. Ratio does not give any tolerable or desirable limit. But it should be below 10 %.

Years	SBI	CORP	PNB	BOB	ICICI	AXIS	HDFC	YES
2016-17	4.15	6.88	7.69	6.15	5.46	3.54	0.68	0.94

WEIGHT	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
WEIGHTED VALUE	0.83	1.376	1.538	1.23	1.092	0.708	0.136	0.188

The above data, PNB Bank have maximum Ratio whereas HDFC Bank has minimum Gross NPA to Total Assets Ratio. Thus, we can Inference that, PNB Bank has best performance among all the Banks.

3) M – MANAGEMENT

Management is the most important ingredient that ensures sound functioning of banks. With increased competition in the Indian banking sector, efficiency and effectiveness have become the rule as banks constantly strive to improve the productivity of their employees. The major improvements in the style of management and productivity have come about in the all sectors of banks. Today, it is not uncommon to see the extended working hours, flexible time schedules, outsourcing marketing, etc. to attract and retain customers. The parameters used to assess the quality of management gives the measurement of the efficiency and effectiveness of management.

Return on Net Worth (RONW): Net Profit / Net Worth X 100

It is a measure of the profitability of a company. PAT is expressed as a percentage of Average Net Worth. This ratio expresses the net profit in terms of net worth. This ratio is an important yardstick of performance for equity shareholders since it indicates the return on the funds employed by them. Though, YES Bank has highest Ratio in terms of Return on Net worth.

Years	SBI	CORP	PNB	BOB	ICICI	AXIS	HDFC	YES
2016-17	6.69	4.65	3.47	3.43	10.11	6.59	16.26	15.09
WEIGHT	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
WEIGHTED VALUE	1.6725	1.1625	0.8675	0.8575	2.5275	1.6475	4.065	3.7725

So far as RONW Ratio is concerned, HDFC Bank has maximum Ratio whereas BOB have minimum Ratio. Thus, So far as RONW Ratio is concerned HDFC Banks is at top position.

4) E – EARNINGS QUALITY

Investing additional funds forms an important part of the banking function along with lending. In the recent past, banks have been criticized for making most of their money from treasury operation and other investment rather than from core lending operation.

Return on Assets: Net Income / Average Assets

This ratio measures return on assets employed or the efficiency in utilization of the assets. It is arrived at by dividing the Net Income by Average Assets, which is the average of total assets in the current year and previous year. The profitability of the firm is measured by establishing relation of net profit with the total assets of the organization. This indicates the efficiency of utilization of assets in generating revenue. The HDFC Bank in all years is more able to utilize their assets as effectively, compare with remaining Banks, which can be seen from the chart and figures arrived on.

Years	SBI	CORP	PNB	BOB	ICICI	AXIS	HDFC	YES
2016-17	0.38	0.22	0.18	0.19	1.26	0.61	1.68	1.54
WEIGHT	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
WEIGHTED VALUE	0.038	0.022	0.018	0.019	0.126	0.061	0.168	0.154

The above two year Financial Data, HDFC Bank has maximum Return on Assets Ratio and PNB have minimum Ratio. Thus, In ROA ratio, HDFC Bank achieve the first rank among all Bank

5) L–LIQUIDITY:

Liquid assets as a percentage of total assets measures of the liquidity position of the bank to meet the amount of total assets. We have seen in chart that liquidity situation of Bank of Baroda Bank is quite good.

Years	SBI	CORP	PNB	BOB	ICICI	AXIS	HDFC	YES
2016-17	6.36	10.11	12.26	21.65	9.81	8.36	5.67	9.09
WEIGHT	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
WEIGHTED VALUE	0.636	1.011	1.226	2.165	0.981	0.836	0.567	0.909

In the Liquid Assets to Total Assets ratio concern, BOB has maximum ratio and HDFC has minimum ratio. Thus, we can conclude that the BOB has a best performance in Liquid Assets to Total Assets ratio consideration.

Comparative Statement of Weighted Camel Model

WEGHTED VALUE OF CAMEL COMPONENT							
BANK	C	A	M	E	L	TOTAL WEIGHTED VALUE	RANK
SBI	3.2775	0.83	1.6725	0.038	0.636	6.454	7
CORP	2.83	1.376	1.1625	0.022	1.011	6.4015	8
PNB	2.915	1.538	0.8675	0.018	1.226	6.5645	6

BOB	3.2925	1.23	0.8575	0.019	2.165	7.564	4
ICICI	4.3475	1.092	2.5275	0.126	0.981	9.074	2
AXIS	3.7375	0.708	1.6475	0.061	0.836	6.99	5
HDFC	3.65	0.136	4.065	0.168	0.567	8.586	3
YES	4.2675	0.188	3.7725	0.154	0.909	9.291	1

Thus, after applying weighted CAMEL Model, The result clearly indicates that the Yes Bank got first rank out of all the Sampled Banks which have 9.291 Weighted Score, ICICI Bank is at 2nd and HDFC Bank stands at 3rd Position. Corporation Bank stands at last position indicating the poor performance during the Last year by getting 6.4015. SBI Stands at second last position among all the 8 Sampled Banks. PNS Stands at 6th position indicating poor performance according to the Weighted CAMEL Model for the Last year financial data.

XII. FINDINGS AND CONCLUSION

- ICICI Bank has maximum Capital Adequacy Ratio whereas Corporation Bank has minimum Ratio.
- PNB Bank has maximum Ratio whereas HDFC Bank has minimum Gross NPA to Total Assets Ratio. Thus, we can Inference that, PNB Bank has best performance among all the Banks.
- In RONW Ratio concerned, HDFC Bank has maximum Ratio whereas BOB have minimum Ratio.
- HDFC Bank has maximum Return on Assets Ratio and PNB have minimum Ratio.
- In the Liquid Assets to Total Assets ratio concern, BOB has maximum ratio and HDFC has minimum ratio. Thus, we can conclude that the BOB has a best performance in Liquid Assets to Total Assets ratio consideration.
- In weighted CAMEL Model, Yes Bank got first rank out of all the Sampled Banks which have 9.291 Weighted Score, ICICI Bank is at 2nd and HDFC Bank stands at 3rd Position. Corporation Bank stands at last position indicating the poor performance during the Last year by getting 6.4015. SBI Stands at second last position among all the 8 Sampled Banks. PNS Stands at 6th position indicating poor performance according to the Weighted CAMEL Model for the Last year financial data.

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