
A Financial Performance of Indian Banks Using CAMELS Rating System

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Abstract

Undoubtedly, the banking system in India has witnessed the fastest growth in comparison to other governing sectors of the Indian economy. The solvency and sustenance of banks do not only concern the depositors but equally to the other participants viz., the employees, the customers, the shareholders and the country as a whole. The banking system's assistance in smooth functioning of trade and commerce across the globe indicates an imperative need for its timely and regular monitoring. The study aims at analysing the financial and operating performance of the Indian Banking Sector.

The HDFC and ICICI as the largest private banks and State Bank of India (SBI) and Syndicate Bank as the largest public sector banks are selected for this purpose. The evaluation is done using CAMELS rating system as recommended by Padmanabhan Committee. The various ratios, noted below, are considered for the study based on CAMELS acronym in the following order.

Capital Adequacy ratios

Asset Quality ratios

Management Capability ratios

Earnings Quality ratios

Liquidity ratios and

Sensitivity to market risk

The period, considered, is from 2010 – 2019. The descriptive statistics is used to analyse the results thereof. Correlation and t -test are executed to test the hypothesis.

Keywords – CAMELS rating system, State Bank of India, ICICI Bank , Syndicate Bank HDFC Bank, Performance Evaluation, Ratio analysis.

1. INTRODUCTION

Post liberalisation i.e. after 1991, the bank's role in the country's development and the growth of its Economy has increased enormously. Therefore, it is aptly considered as the backbone of our economy. The humble beginning has only witnessed outstanding achievements in the recent past. The growth of banks in remote areas has been quintessential for all inclusive growth of the Indian economy. Banking sector has brought in revolutionary changes particularly; the way trade and commerce activities are carried on and conducted. Right, from online shopping to international trade, banks have become a concrete mediator. Hence, this imperative and highly acknowledged system has to be evaluated for its soundness and sustainability. This paper seeks to evaluate two major and top banks each from both public and private sector.

Genesis: The emergence of CAMEL rating system for evaluation of bank's performance is traced to early 1970s by the authorities concerned, in U.S.A. The Uniform Financial Institutional Rating System (UFIRS) which was adopted by the United States banking system in the year 1979 was later popularly referred to as CAMEL (Cox & Cox, 2006).

The ever changing markets have tightened the evaluation further by including management of market risk. Therefore, the term CAMEL is replaced with CAMELS (Broz. 1979). The Bank of International Settlement (BIS) suggested the CAMELS rating system to be used for the assessment of the Banks in terms of their strengths and weaknesses.

Padhmanabhan Committee, in 1995, recommended the CAMELS ratings comprising of six factors to gauge the performance of the Indian Banks. It has recommended a slightly different model to evaluate the foreign banks handling their operations in India. The CACS model includes Capital Adequacy, Asset Quality, Compliance, Systems and Controls. But a revision to this model was affected, and the importance of liquidity in determining the performance of the banks was realised. The current model, after necessary revision, is named as CALCS duly incorporating the term liquidity.

The acronym CAMELS approach for evaluation stands for the following:

- C – Capital Adequacy
- A – Asset Quality
- M – Management Efficiency
- E- Earnings
- L- Liquidity
- S- Sensitivity to Market Risk

The CAMELS measure was evolved and implemented in the U.S in 1979. It was a regulatory and supervisory measure to evaluate and control the performance of the banks. Its usefulness and need was meticulously observed as a mechanism for supervision by the U.S government, post the 2008 financial crisis.

2. REVIEW OF LITERATURE

Bhayani, S.J. (2006) examined four popular banks of private sector using CAMEL parameters. The study concluded that the IDBI and UTI had increased in profitability and efficiency. Of the four sample size, the results of IDBI were the best.

Suresh. V. (2008) conducted an elaborate study of the significant factors viz., profitability and financial performance of nationalised banks and SBI and its associates for a 10 year period from 1998- 2007 using CAMEL model. The result was further analysed using descriptive statistics and Trend Analysis for interdependence.

Elizabeth M. Samuel (2008) examined the commercial banks of India. The data collected was for a five year period from to. The result of the non -parametric test revealed that the banks conform the capital adequacy requirement as per the stipulated Basel norms. The asset quality was equally sound but the earnings and liquidity were not satisfactory.

Praveen Kumar (2014) All the prominent parameters of CAMELS approach were followed in the study conducted on Indian Banks. The result indicated that based on Asset Quality, the private banks are way ahead than the public sector banks. Accordingly, based on capital adequacy ratio (CAR) private sector banks excelled the public sector banks. When business per employee, as a parameter, was considered the public sector banks performed better.. Based on liquidity parameter, private banks are relatively better than public sector banks. The Data Envelopment Analysis (DEA) found HDFC, ICICI, SBI are the best decision making units (DMUs).

Karthikeyan P, Shangari B (2014) have researched the six top most private sector banks based on CAMEL rating system. The banks, for the study, were selected based on net profit, total assets and market capitalisation attained in 2013. Thereafter, the CAMEL approach was executed and analysed for the period from 2009 to 2013. It was concluded that the HDFC bank was the most sought after and efficient bank in the private sector

Hari Krishna Karri, Kishore Meghani, Bharati Meghani Mishra (2015) analysed and compared the financial performance between Bank of Baroda and Punjab National Bank using CAMEL model. The analysis was further supported by a statistical measure called t-test. On close observation, it came to the fore that the performance of Bank of Baroda was rated as marginally higher than Punjab National Bank.

Dipesh B Nathwani (2015) examined three banks each from the public sector and the private sector. The public sector banks were State Bank of India, Bank of Baroda and Punjab National Bank. The private sector banks were Axis Bank, HDFC Bank and ICICI Bank. The data pertaining to these banks was collected for a 10 year period starting from 2005 to 2015. The CAMEL model was elaborated in terms of various ratios with regard, to overall

profitability. The result of the study indicated that the banks in the public sector were less profitable than the banks in the private sector.

Maninderkaur, Ritu Priya (2017) analysed the two public sector banks namely Bank of Baroda and Punjab National Bank with 'CAMELS model'. The data was collected from 2012 to 2016. The t –test measure was used for further analysis. The result suggested that the Punjab National Bank was less performing in terms of profitability than the Bank of Baroda. The result was consistent with the earlier literature found on similar studies.

G.L Meena (2016) analysed the commercial banks using CAMELS approach. In the study the independent variable chosen was "return on assets "and its impact was noticed on the dependant variables.

Mohammad Kamrul Ahsan (2016) examined the Islamic Banks in Bangladesh. The result showed that all those three banks that were examined were in good shape in all aspects covered in the acronym CAMELS.

Muralidhar P. and Chokka Lingam (2017) studied five nationalised banks for a five year period from 2011 to 2016. The result showed Central Bank of India to have attained the first position in three out of the six aspects covered in CAMELS acronym.

Banu M (2019) conducted a study to examine operational efficiency of public, private and foreign banking sectors. The result emphasized a strong relationship among all the three banking sectors with regard to return on investments, equity and advances on the profitability position. The cash-deposit ratio and credit-deposit ratio have shown a positive influence on the short-term liquidity, while the net interest margin and investment ratios have not shown any response on the solvency position across the three banking sectors.

3. RESEARCH METHODOLOGY

Statement of the problem

Banks play an instrumental and proactive role in developing economies. Particularly, in a developing nation like India private sector banks have performed well in comparison to the public sector banks. Banu Meraj and Vepa Sudha (2018) examined the effect of non-performing assets in these banks. They found out that in the private sector banks the standard assets grow at an average compounded growth rate of 2.26 times, the substandard assets at 1.53 times, doubtful assets at 3.56 times and loss of assets at 3.18 times. It was also observed that private sector banks have lower levels of non-performing assets than the public sector banks.

Objectives

1. To analyse the financial performance of two public sector banks with the two major private sector banks by using CAMELS Model.
2. To assess the banks and rank them in the order of their meritorious performance.

Hypothesis:

Ha1: there is no significant difference in financial performance of select banks.

Ha2: there is significant difference between in financial performance of select banks

Scope of the study

The study is undertaken to examine the two major public sector banks and the two major private sector banks.

Period of the Study:

10 years - March 2010 to March 2019

Statistical Tools Used: Ratio Analysis, Descriptive Statistics, Correlation and t-test.

Sample Size:

A sample size of four banks are considered. State Bank of India and Syndicate Bank are from the public sector banks and ICICI Bank and HDFC Bank are from the private sector banks that have been taken as sample. Judgement sampling technique is followed for choosing the sample due to viability of data.

Limitations of the study

The present study covers a period of ten years, its results cannot be generalised

Data Collections:

Secondary data is used to conduct the study. The annual reports of Syndicate Bank, SBI Bank, ICICI Bank and HDFC Bank were analysed. Banking bulletin, newspapers, websites magazines and various journals are referred. Empirical research design is adopted throughout.

The following ratios considered for the CAMELS rating system:

Capital adequacy

Capital adequacy ratio reflects the ability of the bank to sustain in case of unexpected losses. The CAR is often monitored by the regulators. This enables the regulators to check whether the money maintained by the depositors is safe as well as the banks' ability to overcome the losses, if any.

Capital Adequacy Ratio (CAR)

$$\text{CAR} = (\text{T2} + \text{T1}) / \text{Risk weighted Assets}$$

T2- Tier 2 Capital comprises of hybrid debt, subordinated debts, undisclosed reserves and general loss reserves.

T1- Tier 1 capital includes paid-up capital, disclosed free reserves, statutory reserves from the sum of which the other items namely equity investments, intangible assets and current and brought forward losses if any, are subtracted.

Minimum 9% of CAR is necessary for the banks to maintain as per the guidelines provided by RBI

B. Advances/Loans Fund ratio: $\frac{\text{Loans}}{\text{Deposits}}$

C. Total Debt / Owner's Fund $\frac{\text{Long-term Debt}}{\text{Equity Shareholders Fund}}$

Asset Quality Ratios

This parameter evaluates the default or the credit risk involved with a particular asset of the banks.

Percentage of Net NPA: $\frac{\text{Net NPA}}{\text{Net Advances}}$

In this measure the provisions of non-performing assets are subtracted from the gross non-performing assets to arrive at the net NPA.

Percentage of Gross NPA: $\frac{\text{Gross NPA}}{\text{Net Advances}}$

The deductions in the form of provisions are not considered and the gross figures are used. The lower the ratio the better it is.

Management Capability Ratios

These ratios are subjective in nature. This parameter stands for the efficiency and the effectiveness with which a bank is being managed. The following ratios help to identify those banks that are not up to the mark and are poorly managed.

A. Net Profit Margin: $\frac{\text{Net Income}}{\text{Sales}}$

This ratio shows how much profit is earned for each rupee spent.

B. Return on Long-term Funds:
$$\frac{\text{Profit before Interest and Tax}}{\text{Capital Employed}}$$

This ratio assesses how well a company has utilised its resources to generate profits.

C. Return on Net worth:
$$\frac{\text{Net Income}}{\text{Shareholder's equity}}$$

This ratio discloses to what extent the invested the amount of shareholder's wealth has resulted in income.

D. Profit per Employee:
$$\frac{\text{Net Profits}}{\text{Number of Employees}}$$

This ratio gives a detailed account of the contribution of the human resource towards the profits. Higher ratios are preferable.

E. Business per Employee:
$$\frac{\text{Total Deposits and Advances}}{\text{Number of Employees}}$$

This ratio shows how effectively the work force of the bank is utilised. The larger ratios indicate favourable performance of the employees.

Earnings Quality Ratios

It is imperative for the bank to earn profits in order to remain in the business and earning potential signifies this. The following ratios are included in this category to determine and protect the market share for the bank in order to maintain its presence.

A. Interest Income/ Total Funds:
$$\frac{\text{Interest Received}}{\text{Long-term Fund+ Shareholder's Fund}}$$

B. Interest Expended/ Total Funds:
$$\frac{\text{Interest Paid}}{\text{Long-term Fund+ Shareholder's Fund}}$$

C. Operating Expenses/ Total Funds:
$$\frac{\text{Operating Expenses}}{\text{Long-term Fund+ Shareholder's Fund}}$$

D. Net Profit/ Total Funds:
$$\frac{\text{Net Profit}}{\text{Long-term Fund+ Shareholder's Fund}}$$

E. Total Income/ Capital Employed:
$$\frac{\text{Interest Income + Non-Interest Income}}{\text{Long-term Fund+ Shareholder's Fund}}$$

Liquidity Ratios

The success of a bank is determined mostly by its ability to honour shorter term obligations. The problems of liquidity or the inability of the bank to comply with immediate obligations pose a threat to its very existence and eventually risk its reputation.

$$\text{A. Credit - Deposit ratio} = \frac{\text{Total Advances}}{\text{Total Deposits}}$$

This ratio explains whether the total deposits or the resources of the bank are being used to extend loans or advances. However, a low ratio results in indicating that the bank is not employing its resources optimally.

$$\text{B. Investment -Deposit ratio} = \frac{\text{Investments in Govt. Securities \& other securities}}{\text{Deposits}}$$

This ratio shows how much of the deposits mobilized is used for investment in government securities or instruments.

$$\text{C. Cash- Deposit ratio} = \frac{\text{Total of cash in hand \& bal. with RBI}}{\text{Total Deposit}}$$

Cash deposit ratio discloses how much of the total deposits mobilised is being used for the lending activity. Accepting deposits and lending loans is the core activity of the banks.

Sensitivity to Market Risk Ratios

Unfavourable changes in the interest rate, foreign exchange rate and the prices of stocks can have negative effect on the income earnings potential of banks. The following ratios indicate the vulnerability of the banks to such changes.

$$\text{A. Interest Income/ Total Funds:} \quad \frac{\text{Interest Income}}{\text{Long-term Fund+ Shareholder's Fund}}$$

$$\text{B. Interest Expended / Interest Earned:} \quad \frac{\text{Interest Expended}}{\text{Interest Earned}}$$

Table No. 1**Capital Adequacy Ratio (CAR) of select banks**

Year	SBI	SYNDICATE	ICICI	HDFC
Mar '10	13.39	12.7	19.41	17.44
Mar '11	11.98	13.04	19.54	16.22
Mar '12	13.86	12.24	18.52	16.52
Mar '13	12.92	12.59	18.74	16.8
Mar '14	12.96	11.41	17.7	16.07
Mar '15	12	10.54	17.02	16.79
Mar '16	13.12	11.16	16.64	15.53
Mar '17	13.11	12.03	17.39	14.55
Mar '18	12.6	12.24	18.42	14.82
Mar '19	12.72	14.23	16.89	17.11
AVG G	12.87	12.22	18.03	16.19
SD	0.58	1.04	1.05	0.96
Rank	3	4	1	2

Analysis and Discussion

It is observed that selected banks maintain the CAR at predetermined rate of 9 % established by RBI. It was found that ICICI and HDFC banks hold rank 1 and 2 respectively with significantly good consistency, whereas the public sector SBI and Syndicate bank hold 3rd and 4th rank respectively and were found to be satisfactory with consistency. The capital adequacy ratio helps to maintain the long term solvency position to safe guard the deposit holders' interest in the banks.

Table No. 2**Analysis of Asset Quality of select banks**

Year	SBI	SYNDICATE	ICICI	HDFC
Mar '10	1.72	1.07	1.06	0.27
Mar '11	1.63	0.97	1.11	0.3
Mar '12	1.82	0.96	0.73	0.2
Mar '13	2.1	0.76	0.77	0.2
Mar '14	2.57	1.56	0.97	0.2
Mar '15	2.12	1.9	1.61	0.2
Mar '16	3.81	4.48	2.67	0.28
Mar '17	3.71	5.21	4.89	0.33
Mar '18	5.73	6.28	4.77	0.4
Mar '19	3.01	6.16	2.06	0.39
AVG G	2.82	2.94	2.06	0.28
SD	1.29	2.31	1.58	0.08
RANK	3	4	2	1

Analysis and Discussion

The Asset Quality evaluated by using the Net Non-Performing Assets to Net advances ratio, the bank is required to implement necessary credit risk management techniques and strictly follow the provisions to cover the loss arising due to NPA. As per the guidelines of RBI it should be less than 3 percent for effective management of asset quality. The table 2 presents the analysis HDFC bank secured first rank by significantly performing better in maintaining the average asset quality as well as consistency, followed by ICICI, SBI and Syndicate banks.

Table No.3**Analysis of Management efficiency of select banks**

Year	SBI	SYNDICATE	ICICI	HDFC
Mar '10	24.15	30.97	8	25.01
Mar '11	15.97	31.44	7.7	22.52
Mar '12	33.95	38.02	19.62	20.62
Mar '13	24.54	40.82	19.68	26.41
Mar '14	17.06	26.15	15.45	29.35
Mar '15	25.14	27.11	23.24	20.15
Mar '16	14.76	-12.93	10.85	20.12
Mar '17	18.56	2.28	9.7	24.74
Mar '18	-14.5	-168.23	6.58	21.91
Mar '19	-19.94	6.76	0.69	17.99
AVG G	13.97	2.24	12.15	22.88
SD	17.43	62.31	7.10	3.46
RANK	2	4	3	1

Analysis and Discussion

The analysis management efficiency was evaluated by taking the average of profit margin, return on long term funds and net worth, business per employee and profit per employee. The HDFC bank is found to have the higher ratio with consistency in performance whereas the SBI ranked 2nd in management efficiency but with less consistency in performance. The ICICI bank ranked 3rd in efficiency and moderate in consistency. On the other hand, Syndicate Bank ranked 4th with high inconsistency in efficiency and performance:

Table No. 4**Analysis of Earning Quality of select banks**

Year	SBI	SYNDICATE	ICICI	HDFC
Mar '10	13.66	4.87	5.23	5.72
Mar '11	12.21	4.67	4.51	5.13
Mar '12	12.62	5.43	5.05	5.72
Mar '13	13.1	5.28	5.21	6.15
Mar '14	13.14	4.86	5.16	5.95
Mar '15	13.07	4.80	5.24	5.75
Mar '16	13	4.56	5.1	5.91
Mar '17	12.75	4.76	4.95	5.61
Mar '18	12.98	4.11	4.4	5.29
Mar '19	12.44	4.05	4.32	5.41
AVG G	12.9	4.74	4.92	5.66
SD	0.41	0.44	0.36	0.31
RANK	1	4	3	2

Analysis and discussion

It deals with the analysis of Earnings Quality by taking into consideration average of interest income to total funds, interest extended to total capital employed total income to total funds and net profit to total funds. It is found that SBI ranked first in performing the earning quality followed the HDFC, ICICI and Syndicate bank. A conclusion is drawn that public sector banks were performing better and on par with private banks

Table No. 5**Analysis of Liquidity of select banks**

Year	SBI	SYNDICATE	ICICI	HDFC
Mar '10	39.95	36.52	51.35	39.88
Mar '11	40.77	37.33	53.85	40.42
Mar '12	40.13	36.97	55.82	41.29
Mar '13	40.01	36.37	55.61	41.37
Mar '14	40.51	37.17	54.35	40.95
Mar '15	40.29	37.50	54.67	41.1
Mar '16	40.98	36.57	52.05	40.71
Mar '17	40.91	35.84	46.82	41.05
Mar '18	39.37	36.31	44.59	42.17
Mar '19	38.43	37.39	43.41	42.1
AVG G	40.13	36.80	51.25	41.10
SD	0.78	0.55	4.64	0.70
RANK	2	1	4	3

Analysis and Discussion

The liquidity analysis of banks, average of credit deposit ratio, investment deposit and cash deposit ratio. The management of liquidity is of a paramount significance in banks. It focuses operational efficiency and utilization of funds. The credit deposit ratio indicates the credit extension and deposits mobilisation. Banks dependence on deposit funds may lead to liquidity crunch hence lower ratio may be preferred to better performance. It is found that the Syndicate bank ranks first with high consistency followed by SBI, HDFC and ICICI.

Table No. 6**Analysis of Sensitivity analysis of select banks**

Year	SBI	SYNDICATE	ICICI	HDFC
Mar '10	3.82	2.63	4.08	6
Mar '11	2.86	2.97	2.34	4.22
Mar '12	3.38	3.01	2.44	4
Mar '13	3.06	2.76	2.74	4.28
Mar '14	2.93	2.38	2.91	4.14
Mar '15	2.86	2	3.07	4.14
Mar '16	2.6	1.97	3.11	4.25
Mar '17	2.46	2.08	2.92	4.21
Mar '18	2.45	2.11	2.8	4.16
Mar '19	2.49	2.1	2.94	4.18
AVG G	2.89	2.40	2.94	4.36
SD	0.44	0.41	0.47	0.58
RANK	2	1	3	4

Analysis and Discussion

The effective system and control mechanism measured by the sensitivity of assets to total funds, the interest expended to interest earned ratio, the lowest ratio is preferred due to market interest rate fluctuations create volatility in earnings of the bank. It is observed that Syndicate bank is ranked first followed by SBI, ICICI and HDFC:

Table No. 7**Analysis of financial performance of select banks by CAMELS analysis**

Year	SBI	SYNDICATE	ICICI	HDFC
Mar '10	16.12	14.79	14.86	15.72
Mar '11	14.24	15.07	14.84	14.80
Mar '12	17.63	16.11	17.03	14.73
Mar '13	15.96	16.43	17.13	15.87
Mar '14	14.86	13.92	16.09	16.11
Mar '15	15.91	13.98	17.48	14.69
Mar '16	14.71	7.64	15.07	14.47
Mar '17	15.25	10.37	14.45	15.08
Mar '18	9.77	-17.86	13.59	14.79
Mar '19	8.19	11.78	11.72	14.53
AVG G	14.26	10.22	15.23	15.08
SD	2.96	10.23	1.78	0.596
RANK	3	4	1	2

Analysis and Discussion

The performance of select banks by using the average CAMELS ratio. It is observed that ICICI secured first rank followed by HDFC, SBI and Syndicate banks. Thus, the private sector banks seemed to be better placed than the public sector banks in matters of consistency in performance.

Table No. 8**Test of significance of performance of select banks**

One-Sample Test						
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
SBI	15.227	9	.000	14.26400	12.1449	16.3831
SYNDICATE	3.158	9	.012	10.22300	2.9002	17.5458
ICICI	27.017	9	.000	15.22600	13.9511	16.5009
HDFC	79.890	9	.000	15.07900	14.6520	15.5060

Ho1: there is no significant difference in financial performance of Select banks by using the CAMELS analysis

Ha1: there is significant difference in financial performance of Select banks by using the CAMELS analysis

Analysis and discussion

The t-test performed on selected banks' mean performance. It is observed that the t test value is found higher than the critical value at 0.05 level of significance, hence mean value of selected banks indicated significantly better performance. It is also noted that performance of public sector banks significantly differed in comparison to private sector banks in few CAMELS ratios. The overall performances of private sector banks stands out to be better than public sector.

Table No. 9

The relationship between select public and private sector banks

Correlations		SBI	SYNDICA TE	ICICI	HDFC
SBI	Pearson Correlation	1	.597	.856**	.358
	Sig. (2-tailed)		.069	.002	.309
	N	10	10	10	10
SYNDICA TE	Pearson Correlation	.597	1	.434	.284
	Sig. (2-tailed)	.069		.210	.427
	N	10	10	10	10
ICICI	Pearson Correlation	.856**	.434	1	.340
	Sig. (2-tailed)	.002	.210		.336
	N	10	10	10	10
HDFC	Pearson Correlation	.358	.284	.340	1
	Sig. (2-tailed)	.309	.427	.336	
	N	10	10	10	10
**. Correlation is significant at the 0.01 level (2-tailed).					

Ho2: there is no significant relationship between performance of public sector and private sector banks

Ha2: there is significant relationship between performance of public sector and private sector banks

Analysis and discussion

The correlation coefficients among the four select banks namely SBI, Syndicate ICICI and HDFC banks. It is found that test of significance in correlation between SBI and ICICI bank reject the null hypothesis. It means there is a positive relationship of better performance between SBI and ICICI banks. Whereas the other banks' test result accepts the null hypothesis, it is observed that the relationship between HDFC and Syndicate Banks' is positive but not interdependent on each other.

4. CONCLUSION

It was found that in terms of the capital adequacy and asset quality, private sector banks significantly performed better than public sector banks. Whereas, in terms of managerial efficiency and earnings, it was found that the banks of both the sectors turned out to be satisfactory performers. Further in terms of liquidity and sensitivity analysis, public sector banks overtook the private sector banks. It is, therefore, concluded that public sector banks maintained long term solvency position. These banks depend on capital funds than deposit funds, hence they could maintain liquidity: thereby facing challenges of NPAs. Whereas, private sector banks maintained the significant capital adequacy and asset quality, which give boosting to long term solvency position and better profitability of the banks but the private sector banks heavily depend on deposit funds which cause the signalling for illiquidity than greater impact on profitability of the bank's performance. Barre et al (2002) has put forth the need for using CAMELS rating system. As, it has become a necessary evaluating instrument for banking regulation. It may also be noted that the use of advanced technology and development of innovative financial products can help the public sector banks to foster its growth on par with their counterparts. Hiring of professionally qualified, technically sound and well-trained people is also necessitated to enhance the performance of the public sector banks.

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