Original Research Paper

MANAGEMENT

Performance Analysis of Select Public Sector Banks in India

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ABSTRACT

A study is made on performance analysis of select public sector banks by choosing seven banks on the basis of high deposit volume and total assets. The objective is to analyse the performance of these banks, selected by Judgement Sampling Technique, by using various ratios under CAMELS Model. Data analysis and interpretations were made with reference to Asset Quality by analysing ten years profit and loss account and balance sheets of these banks from 2006 through 2015 under CAMELS Model. One Way ANOVA technique has been used as part of statistical analysis and to test the hypothesis to conclude that there is significant difference exists in performance of these banks. The findings, suggestions, limitations of the study and conclusions have been given accordingly.

KEYWORDS | Public Sector Banks, Asset Quality and Performance

1.0 INTRODUCTION

The banking system in India is significantly different from that of other nations because of the country's unique geographic, social and economic characteristics. India has a large population and land size, a diverse culture, and extreme disparities in income, which are marked among its regions. The objective of this research therefore is to evaluate the competitiveness of the banking sector on the basis of their performances so far and to test if the reforms have allowed the banking sector to better perform its functions. Based on the operations of Public Sector Banks, a research study has been undertaken to understate the competiveness in terms of profitability and non-performing Assets management.

2.0 REVIEW OF LITERATURE

Most of the studies show the evidence of affirmative gesture of reform process on the efficiency of Indian banking sector. While most of the studies provided the evidence of PSBs performing better than its counterpart, private and foreign banks, few other studies have found the PSBs as underperforming compared to other group of banks. The differences in the findings of various studies in Indian context have attributed to many factors including the selection of time period, sample size, selection of inputs and outputs variables and the orientation of efficiency measurement. **V.V. Divatia and T.R. Venkatchalam (1978):** In their Article titled, "Operational efficiency and profitability of public sector banks", studied and analyzed operational efficiency and profitability and suggested to create a composite index. They applied the size of bank as represented by its total deposit as a base for evaluation of its performance.

3.0 OBJECTIVES OF THE STUDY

- To analyse the performance of selected Public Sector Banks using CAMELS model by calculating ratios on Capital Adequacy, Assets Quality, Management Efficiency, Earning Quality and Liquidity, with a specific thrust on Assets Quality.
- To suggest measures, on the basis of the study results, to improve further the financial performance of the banks under study.

4.0 RESEARCH METHODOLOGY

Public sector banks operating in India are representing the sample units. For the in-depth analysis, the sample size is taken as **Select Seven Public Sector Banks(SSPSBs)** viz. **State Bank of India (SBI), Punjab National Bank (PNB), Bank of Baroda (BOB), Bank of India (BOI), Canara Bank (CB), Bank of Maharashtra (BOM) and Oriental Bank of Commerce (OBC),** chosen on the basis of the **Highest deposit volume and Total Assets. Judgment Sampling Technique** has been used and involves selection of cases which we judge as the most appropriate ones for the given study. Secondary data collection was used for the analysis.

5.0 DATA ANALYSIS AND INTERPRETATION

Data were collected through Reserve Bank of India monthly bulletins, annual reports and banks' websites. Banks Balance Sheets and Profit and Loss Accounts for the years 2006 -2015 (10 years) have been used to analyse the (SSPSBs). Under CAMELS Model, a specific analysis is made for SSPSBs under Asset Quality on the basis of calculation of ratios viz. Net NPA to Total Assets Ratio, Net NPA to Advances Ratio and Total Investments to Assets Ratio.

5.1 Net NPA to Total Assets Ratio:

It is the most standard measure to judge the assets quality, measuring the net nonperforming assets as a percentage of net advances. Net NPAs = (Gross NPAs) – (Net of provisions on NPAs - interest in suspense account).

Table No.1-Net NPA to Total Assets Ratio

Year	SBI	PNB	BOB	BOI	CB	BOM	OBC
2015	1.35	2.56	1.13	2.18	1.61	2.83	2.09
2014	1.74	1.81	0.92	1.29	1.23	1.33	1.77
2013	1.40	1.52	0.77	1.31	1.29	0.34	1.45
2012	1.18	0.98	0.35	0.95	0.91	0.53	1.39
2011	1.01	0.55	0.22	0.55	0.70	0.81	0.58
2010	1.03	0.34	0.21	0.81	0.68	0.94	0.53
2009	1.01	0.11	0.20	0.28	0.69	0.46	0.40

2008	1.03	0.39	0.28	0.33	0.51	0.53	0.60
2007	0.93	0.45	0.38	0.44	0.57	0.71	0.29
2006	1.00	0.15	0.46	0.87	0.67	1.07	0.28
Avg.	1.17	0.88	0.49	0.90	0.89	0.95	0.94
S.dev	0.25	0.82	0.33	0.58	0.37	0.72	0.67
CV	22%	93%	67%	64%	41%	76%	71%
CAGR	3.4%	37.1%	10.5%	10.8%	10.2%	11.4%	25.1%

Source: Annual Reports; CV – Coefficient of Variation; CAGR – Compounded Annualised Growth Rate

Interpretation: The ratio of net NPA to Total assets shows variations in all the banks. The ratio for SBI is more stable than others as evidenced by CV. CAGR is the highest for PNB and the lowest for SBI.

5.2 Net NPA to Advances Ratio:
Table No.2-Net NPA to Advances Ratio

Year	SBI	PNB	BOB	BOI	CB	BOM	OBC
2015	2.12	4.05	1.89	3.36	2.65	4.19	3.32
2014	2.57	2.84	1.52	2.00	1.98	2.03	2.81
2013	2.10	2.34	1.28	2.06	2.18	0.52	2.25
2012	1.82	1.52	0.54	1.47	1.46	0.84	2.21
2011	1.63	0.85	0.35	0.91	1.11	1.32	0.98
2010	1.72	0.53	0.34	1.31	1.06	1.64	0.87
2009	1.79	0.17	0.31	0.44	1.09	0.79	0.65
2008	1.78	0.64	0.47	0.52	0.84	0.87	0.99
2007	1.56	0.76	0.65	0.74	0.94	1.21	0.49
2006	1.88	0.29	0.87	1.49	1.12	2.03	0.49
Avg.	1.90	1.40	0.82	1.43	1.44	1.54	1.51
STd.devi	0.30	1.28	0.56	0.88	0.61	1.06	1.04
CV	16%	92%	68%	62%	43%	69%	69%
CAGR	1.4%	34.0%	9.0%	9.5%	10.0%	8.4%	23.7%

Source: Annual Reports; CV – Coefficient of Variation; CAGR – Compounded Annualised Growth Rate

Interpretation:
The ratio of net NPA to Advances shows variations in all the banks. The highest average ratio is 1.90 (SBI), the lowest ratio is 0.82 (BOB). The ratio for SBI is more stable than others as evidenced by CV. CAGR is the highest for PNB and lowest for SBI.

5.3 Total Investment to Total Assets Ratio:
Table No.3-Total Investment to Total Assets Ratio

Year	SBI	PNB	BOB	BOI	CB	BOM	OBC
2015	0.24	0.25	0.17	0.65	0.27	0.25	0.30
2014	0.22	0.26	0.18	0.65	0.26	0.27	0.28
2013	0.22	0.27	0.22	0.64	0.30	0.27	0.29
2012	0.23	0.27	0.19	0.65	0.27	0.26	0.29
2011	0.24	0.25	0.20	0.61	0.25	0.29	0.31
2010	0.27	0.26	0.22	0.62	0.27	0.30	0.26
2009	0.29	0.26	0.23	0.64	0.27	0.31	0.26
2008	0.26	0.27	0.24	0.64	0.28	0.26	0.26
2007	0.26	0.28	0.24	0.60	0.28	0.29	0.27
2006	0.33	0.28	0.31	0.58	0.28	0.36	0.29
AVG	0.26	0.27	0.22	0.63	0.27	0.29	0.28
Sd.dev	0.03	0.01	0.04	0.02	0.01	0.03	0.02
CV	13%	4%	19%	4%	5%	12%	6%
CAGR	-3.4%	-1.3%	-6.4%	1.2%	-0.4%	-4.0%	0.4%

Source: Annual Reports; CV – Coefficient of Variation; CAGR – Compounded Annualised Growth Rate

Interpretation:
The ratio of Total Investments to Total Assets ratio shows variations in all the banks. The highest average ratio is 0.63 (BOI), the lowest ratio is 0.22 (BOB). PNB and Canara Bank have more stable ratios than others as evidenced by CV. The CAGR is the lowest for BOB. The following table shows the group average and group rank of Asset quality

Table No.4 - CAMEL RATINGS (2006-2015): ASSET QUALITY

No	BANKS	Net NPA to Total Assets	RANK	Net NPA to Total Advances	RANK2	Total Investment to Assets	RANK3	GROUP AVERAGE	GROUP RANK
1	SBI	1.17	7	1.90	7	0.26	2	9.67	5
2	PNB	0.88	2	1.40	2	0.27	3	6.00	2
3	BOB	0.49	1	0.82	1	0.22	1	3.00	1
4	BOI	0.90	4	1.43	3	0.63	7	10.33	6
5	CB	0.89	3	1.44	4	0.27	4	7.67	3
6	BOM	0.95	6	1.54	6	0.29	6	10.67	7
7	OBC	0.94	5	1.51	5	0.28	5	9.33	4

Interpretation:
Since, the overall rank is based on low to high average scores, BOB got the top position and BOM secured the last position.

The top position is achieved by BOB on the basis of Net NPA to Total Assets and Net NPA to Total Advances. SBI secured the lowest rank under Net NPA to Total Assets and Net NPA to Total Advances.

The top position is achieved by BOB on the basis of Total Investment to Assets. The lowest position is secured by BOI.

5.4 STATISTICAL ANALYSIS:
TESTING THE DIFFERENCES IN THE PERFORAMANCE SHOWN BY CAMEL MODEL:

ONE WAY ANOVA:
To test whether there is any significant difference between the banks in relation to Net NPA to Total Assets, Net NPA to Total Advances, Total Investments to Assets, one way ANOVA is employed. Suitable hypothesis is framed to test the same.

Hypothesis: There is no significant difference in the performance of seven select Public Sector Banks assessed by the CAMELS Model.

Table No.5
Test of Homogeneity of Variances

SSPSBs	Levene Statistic	df1	df2	Sig.
Net NPA to Total Assets	5.857	13	126	.000
Net NPA to Total Advances	6.286	13	126	.000
Total Investment to Assets	2.505	13	126	.004

Inference:
As the P value of the levene statistic is less than 0.05, the homogeneity is violated. That is there are significant differences in the ratios among SSPSBs. **Hence, the hypothesis is rejected. That is there is significant difference in the performance of the SSPSBs as shown by CAMEL model.**

6.0 FINDINGS AND SUGGESTIONS

There is significant difference in performance of SSPSBs. Accounting Standards and Prudential Frameworks must be mutually consistent with international standards. Technology is a key driver in the banking industry, which creates new business models and processes, and also revolutionizes distribution channels. It should also avoid wasteful expenditure that might arise on account of inappropriate technology.   Performance can further be improved by adopting e-banking intensively and recruiting specialised staff. Mergers and Acquisitions would avoid unhealthy competitions among these banks and improve their performance and efficiencies. The performance of banks can be improved by reducing the NPA, by complying with international accounting standards and by following effective integrated risk management. Moreover, the policy makers should give thrust for opening more branches, more ATMs, more usage of internet and mobile banking, e-wallets and plastic cards like debit and credit cards in rural and semi-urban areas.

7.0 LIMITATIONS

The study is limited to only seven select Public Sector Bank and their balance sheets which could have undergone window dressing. Comparing more banks with transparency in preparing annual results by declaring real NPA figures would interchange the rankings of the banks.

8.0 CONCLUSIONS

From the study, it is concluded that performance of seven select Public Sector Banks differs based on their asset portfolio.   The study substantiates the facts when other variables of CAMELS Model are also analysed.

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