

# A Study on Management Efficiency Ratio in Selected Public Sector Bank in India

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## ABSTRACT

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Commercial banks are critical to the growth of industry and trade. The current study examines the managerial effectiveness of a number of Indian public sector banks. For the period of April 1, 2017 to March 31, 2021, the study looked at a sample of the top three public sector banks. The analysis is based on secondary data obtained and retrieved from the selected banks' financial statements. Various management efficiency ratios and statistical methods such as geometric mean standard deviation and ANOVA were used to analyse the acquired data.

**Keywords:** Public Sector Banks, Management Efficiency Ratio

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## Introduction

Efficiency ratios assess a company's ability to generate revenue from its assets and liabilities. Because a highly efficient corporation has lowered its net asset investment, it requires less capital and debt to stay in business. Efficiency ratios relate an aggregated set of assets to sales or the cost of products sold in the case of assets. The major efficiency ratio in the case of liabilities compares payables to total purchases from suppliers. These ratios are frequently compared to the outcomes of other companies in the same industry to assess success. The following efficiency ratios are considered to be efficient.

Efficiency ratios are used to assess a company's management. When an asset-related ratio is high,

it means that the management team is efficient in employing the fewest assets possible in proportion to sales. A low liability-related ratio, on the other hand, indicates management effectiveness because payables are stretched.

Efficiency ratios can have a detrimental impact on a company's bottom line. A low rate of liability turnover, for example, could be linked to deliberate payment delays beyond terms, resulting in a company's suppliers refusing to extend more credit. Furthermore, the goal to achieve a high asset ratio may lead management to reduce critical fixed asset investments or to stock produced items in such little quantities that delivery to customers are delayed. As a result, paying too much attention to efficiency ratios may not be in a company's best interests in the long run.

## Literature Review

Muhittin oral and Reha Yolalan (1990) This type of strategy, they said, is not only complimentary to standard financial measures, but also a beneficial bank management tool for reallocating resources between branches to achieve higher efficiencies. It was also shown that the most lucrative bank branches were also the most efficient, implying that there is a link between service efficiency and profitability.

R.K Uppal (2009) Discovered in his review that there is a significant difference in the amount of time clients must spend to complete a transaction between the three banks. When it comes to saving time, e-banks are more efficient. This is a crucial aspect of attracting new clients to e-banks.

Dr.Viakas Choudhary and Suman Tandon (2010)In their research, they discovered that the CAGR of many parameters varies from bank to bank. If there is an occurrence of aggregate advances; add up to stores and aggregate resources, State Bank of Indore has showed the most extreme CAGR. Punjab and Sink Bank have shown the least amount of growth in terms of shops and advances, whereas State Bank of India has shown the least amount of growth in terms of stores. Despite Dena Bank, Punjab, and Sind Bank showing negative trends in their ratios, United Bank of India had the highest CAGR of profit for value and profit for resources. In the case of State Bank of Hyderabad, the decline in NPAs ratio was the greatest, while in the case of Dena Bank, it was the smallest.

K.N.V Prasad G. Ravinder, Dr. D. Maheshwara Reddy (2011) in their reviews titled " A Camel Model analysis of public and private sector banks in India " they discovered that Karur Vysya Bank

was at the top of the list, followed by Andhra Bank, Bank of Baroda, and the Reserve Bank of India. It was also discovered that the Reserve Bank of India was at the bottom of the list. India's largest public sector banks gained from the 36th rank.

Saiful Islam and Md.Borak Ali (2011) Customer loyalty and the bank's reputation both lead to increasing loyalty, according to their reviews. As a result of the conclusions of the review, a new way for planning to retain banking benefits in developing nations such as Bangladesh will be available. It will also point investors in the direction of how well they can serve current and prospective clients. In reality, the evaluation lays forth a framework for bankers to follow in order to give excellent service.

## Objective

A study on management efficiency selected top three public sector in India

## Hypothesis of the Study

- $H_0$ - There is no significant difference in management efficiency ratio in selected public sector in India.
- $H_1$  - There is significant difference in difference in management efficiency ratio in selected public sector in India.

## Research Methodology

In this study, only secondary data is used. The information was gathered from the annual reports of the selected public sector banks, as well as from several financial management journals, websites, and books. The research was conducted over a five-year period, from 2017 to 2021. The study uses secondary data, percentages, averages, and standard deviations, as well as the ANOVA test.

## Data Analysis

### Interest Income / Total Funds Ratio (in percentage)

Table: -1					
	SBI	PNB	BOB	AVG.	SD
2017	6.98	6.85	6.18	6.67	0.43
2018	7.22	6.49	6.17	6.63	0.54
2019	6.85	6.69	6.63	6.72	0.11
2020	6.79	6.74	7.84	7.12	0.62
2021	6.28	7.77	6.09	6.71	0.92
AVG.	6.82	6.91	6.58		
SD	0.35	0.50	0.73		

ONE WAY ANOVA INTEREST INCOME / TOTAL FUNDS					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.286	2	.143	.473	.634
Within Groups	3.634	12	.303		
Total	3.921	14			

## Inference

Table-1 shows that interest income to total fund ratio it indicates how much interest is earned with respect to total deposits. It is found that total average of SBI is 6.82% it is highest comparatively PNB and BOB. It is also found that SBI has highest interest income to total funds ratio in the year 2018

i.e. 7.22% it is more than that total average. In Punjab national bank the total average ratio is 6.91%. Where in the year 2021 PNB has highest interest income to total fund ratio i.e. 7.77% it is more than the total average ratio. Where in case of bank of Baroda the total average ratio is 6.58% it is low compare to SBI and PNB. The high interest income to total funds ratio is good for bank.

### Non-Interest Income / Total Funds Ratio (in percentage)

Table :-2					
Year	SBI	PNB	BOB	AVG.	SD
2017	1.41	1.3	0.99	1.23	0.22
2018	1.46	1.2	0.94	1.20	0.26
2019	1.04	0.96	0.84	0.95	0.10
2020	1.19	1.16	1.06	1.14	0.07
2021	1.03	1.23	1.07	1.11	0.11
AVG.	1.23	1.17	0.98		
SD	0.20	0.13	0.09		

ONE WAY ANOVA NON INTEREST INCOME / TOTAL FUNDS					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.166	2	.083	3.774	.054
Within Groups	.264	12	.022		
<b>Total</b>	<b>.431</b>	<b>14</b>			

## Inference

The above table shows that noninterest income to total funds ratio of selected banks. It is found that SBI have highest ratio among PNB and BOB. In state bank of India the highest noninterest income to total fund ratio found in the year 2017 i.e. 1.41%

it is more than the total average. In case of PNB the highest ratio found in the year 2017 i.e. 1.3% it is more than the total average of bank. Where in the case of BOB the highest ratio found in the year 2021 i.e. 1.07% it is also more than the total average of bank.

Operating Expense / Total Funds Ratio (in Percentage)

Table: 3					
Year	SBI	PNB	BOB	AVG.	SD
2017	1.79	3.11	2.53	2.48	0.66
2018	1.86	5.79	3.41	3.69	1.98
2019	1.88	5.13	3.09	3.37	1.64
2020	3.04	3.18	3.91	3.38	0.47
2021	2.92	3.74	2.97	3.21	0.46
<b>AVG.</b>	<b>2.30</b>	<b>4.19</b>	<b>3.18</b>		
<b>SD</b>	<b>0.62</b>	<b>1.21</b>	<b>0.51</b>		

## Inference

The above table indicate operating expenses to total funds ratio of selected banks. During the study PNB have highest operating expenses to total funds ratio that is 4.19% whereas the SBI have lowest ratio is 2.30%. It means that SBI have good control over operating ratio because of lower the ratio better it is for the banks as it indicates better efficiency.

**Net Profit / Total Funds Ratio(in percentage)**

<b>Table:-4</b>					
<b>Year</b>	<b>SBI</b>	<b>PNB</b>	<b>BOB</b>	<b>AVG.</b>	<b>SD</b>
2017	0.38	-1.63	-1.04	-0.76	1.03
2018	-0.21	-5.7	-2.44	-2.78	2.76
2019	0.02	-5	-1.65	-2.21	2.56
2020	-0.76	-1.71	-2.16	-1.54	0.71
2021	-0.56	-1.68	-1.23	-1.16	0.56
<b>AVG.</b>	<b>-0.23</b>	<b>-3.14</b>	<b>-1.70</b>		
<b>SD</b>	<b>0.45</b>	<b>2.03</b>	<b>0.60</b>		

<b>One way ANOVA Net Profit / Total Funds</b>					
	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	21.288	2	10.644	6.826	.010
Within Groups	18.713	12	1.559		
Total	40.001	14			

## Inference

The above table shows net profit to total fund ratio of selected banks from 2017 to 2021. It is found that all the banks have negative ratio during the study period. Among the selected banks PNB have a highest negative value i.e. -3.14%. It is shows that PNB have poor performance during the study period.

**Total Income / Capital Employed Ratio (in percentage)**

<b>Table:-5</b>					
<b>Year</b>	<b>SBI</b>	<b>PNB</b>	<b>BOB</b>	<b>AVG.</b>	<b>SD</b>
2017	8.39	8.14	7.17	<b>7.90</b>	<b>0.64</b>
2018	8.69	7.69	7.11	<b>7.83</b>	<b>0.80</b>
2019	7.89	7.65	7.47	<b>7.67</b>	<b>0.21</b>
2020	7.98	7.9	8.9	<b>8.26</b>	<b>0.56</b>
2021	7.32	9	7.16	<b>7.83</b>	<b>1.02</b>
<b>AVG.</b>	<b>8.05</b>	<b>8.08</b>	<b>7.56</b>		
<b>SD</b>	<b>0.52</b>	<b>0.55</b>	<b>0.76</b>		

ONE WAY ANOVA TOTAL INCOME / CAPITAL EMPLOYED(%)					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.845	2	.422	1.095	.366
Within Groups	4.626	12	.386		
Total	5.471	14			

## Inference

The above table indicate that total income to capital employed ratio of selected banks from 2017 to 2021. It is found that SBI have highest ratio in the year 2018 i.e. 8.69% it is more than the total average of bank. Where in PNB the highest ratio found in the year 2021 i.e.9% and lowest ratio found in the year 2019 i.e. 7.65%. While in bank of Baroda the highest ratio found in the year 2020 i.e. 8.9%.

## Conclusion

One way Anova performed for the above mentioned management efficiency ratio. The results Anova show that interest income to total fund ratio and total income to capital employed ratio are insignificant because the p value is more than a significant level. In the case of noninterest income to total funds ratio, operating expenses to total funds ratio and net profit to total fund ratio, the p value are significant because the p value is less than 0.05. So it is recommended that selected banks try to improve management efficiencies to increase the productivity and better performance of the bank.

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