# A Comparative Study of the Performance of Selected Public and Private Sector Banks in India

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Abstract - Banks form a fundamental component of the financial system and also active players in financial markets. An efficient banking system capable of mobilizing the savings and channeling them to productive purposes are essential for the development of any economy. In present dynamic and competitive financial environment, it is necessary to find out strength and weaknesses of banks, to face challenges effectively Research in financial area becomes helpful for bank to take better decision.

The objective of the study is to analyze and compare the overall financial performance of selected public and private sector banks in India. The study is based on secondary data that has been collected from annual reports of the banks, Reserve Bank of India website. Financial performance of banks has been judged on the basis of seven selected financial ratios i.e. Capital Adequacy ratio, Return on Equity, NPA to Net advance ratio, Total Expenditure to Total Income ratio, Total Advance to Total Deposits ratio, Net Interest Margin, Return on Average Assets. Top ten public and private sector banks have been selected for the study.

Data have been collected for four years i.e.F.Y. 2015-16,2016-17, 2017-18, 2018-19. Average offour years have been calculated for each ratio of public and private sector banks. Further, comparison of financial performance of public and private sector bank has been made on the basis of average ratios. T-Test have been used for hypotheses testing. Financial ratios i.e. Capital Adequacy ratio, Return on Equity, NPA to Net advance ratio, Total Expenditure to Total Income ratio, Total Advance to Total Deposits ratio, Net Interest Margin, Return on Average Assets of private sector banks are showing better results as compared to public sector banks. Analysis and interpretation of data has proven that financial performance of private sector banks is better than public sector banks. Public sector banks need to improve in areas of Capital Adequacy ratio, Return on Equity, NPA to Net advance ratio, Return on Average Assets for better financial performance in future.

Keywords - financial performance, financial ratios, private sector banks, public sector banks

## INTRODUCTION

The major landmark in the development of the Indian banking system was the nationalization of banks, after which profit earning was not considered as the main objective. The focus shifted to social banking and the main concentration was on public sector that too with highly regulated environment. However, liberalization, privatization and globalization, commercial banks started facing a lot of challenges in the form of competition and regulations, due to which increased efficiency to meet the new challenges came to the forefront of sound and stable banking system. In the light of the various changes taking place in the Indian banking system, it is important to keep an eye on the performance of the banking system. It is also essential to know whether the efficiency and performance of the Indian banking sector are in accordance with the regulatory Performance of the commercial banks is an important indicator of the state and growth of the banking system, which can be measured in terms of profitability, efficiency, solvency and credibility of banks.

Public sector banks are the banks in which the government has a major holding. Private sector banks are those banks in which the equity is held by private shareholders i.e there is no government holding. Public sector banks dominated the Indian banking industry in the initial stages. The banking sector is the principal constituent of the financial system, which is directly linked to the country's economy; each complements the other for growth, strength and status. A strong banking system is the foundation for sustainable economic growth. Every

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bank has to face the challenges of changing technology, changing customers expectation and rules of corporate governance. Banks need to improve their financial performance to sustain in this competitive environment. Research in banking and finance plays important role to determine strength and weaknesses of banks, to sustain in financial environment. Banks are played significant role in the development of economic condition of the country. It generally performs various financial related roles. But the prime one is encourage saving habits of the people by deposited their surplus money into bank and it also provide good return in the form of interest to their customers. Banks generally uses their deposits into different investment and gets good return on their investment. The second prime role is it also rendering facility to their customer to withdrawn their money when they required. Besides, these roles banks also provide numerous facilities to their customers for their growth and development. In present research, efforts have been made to compare the financial performance of public and private sector banks, so that weak areas of financial performance can be pointed out and efforts can be made to improve these weak areas in near future. Researcher has been trying to find out financial performance of public and private sector banks with the help of seven ratios i.e. Capital Adequacy ratio, Return on Equity, NPA to Net advance ratio, Total Expenditure to Total Income ratio, Total Advance to Total Deposits ratio, Net Interest Margin, Return on Average Assets ratios. So that efficiency in financial performance can be compared among public and private sector banks. These results will be helpful to expand dimension of knowledge and understanding in banking and financial sector.

## **REVIEW OF LITERATURE**

Dangwal and Kapoor (2010) evaluated the financial performance of nationalized banks in India and assessed the growth index value of various parameters through overall profitability indices. The data for 19 nationalized banks, for the post-reform period from 2002-03 to 2006-07, was used to calculate the index of spread ratios, burden ratios, and profitability ratios. They found that whilefour banks had excellent performance, five achieved good performance, four attained fair performance, and six had poor performance.

**Shobana (2010)** studied the operational efficiency of public sector banks in India using a non-parametric model, which measures the efficiency as a ratio of output index to an index of input used. The findings reveal that out of 27 public sector banks in India, only nine banks had achievedhigh level of efficiency in their operations, with Oriental Bank of Commerce at the top.

**Prasad et al. (2011)** measured the performance of banking sector using CAMEL Model for the period 2006-2010. They used the parameters like capital adequacy, asset quality, management efficiency, earning quality and liquidity. According to the study,

Karur Vysya Bank ranked top, followed by Andhra Bank and Bank of Baroda.

**D. K. Malhotra, (2011)** analyzed the performance of commercial banks in india during the pereiod 2005 to 2009. This period covers the pre-credit crisis and the crisis time period. Specifically, the paper examines the behaviour of profitability, efficiency, soundness of the banking system, and industry concentration for public and private sector Indian commercial banks.

Singh and Tandon (2012) compared the performance of SBI and ICICI using 11 parameters such as credit-deposit ratio, net profit margin, net worth ratio, etc. for the period 2007-08 to 2011-12. They found that SBI is performing well and is financially sounder than ICICI Bank, but in the context of deposits and expenditure, ICICI Bank has better managing efficiency than SBI.

**Chandani and Mehta (2013)** analyzed the performance of Axis Bank. They compared the CAMEL score of the bank for the period 2006-07 to 2011-12 and found that the CAMEL score of the bank was not very different from the period when the bank was headed by a man.

Goel and Rekhi (2013) measured the relative performance of public and private sector banks by using different proxy indicators for measuring the productivity of banking sector. Segmentation of banking sector was done on bank assets size. The public sector banks are not as profitable as others.

It means that efficiency and profitability are interrelated. The key to increase performance depends upon ROA, ROE and NIM.

Sharma and Hemalatha (2014) evaluated and compared the financial performance of State Bank of India and ICICI Bank by comparing various ratios like return on equity, cash deposit ratio and credit-deposit ratio for the period 2008-09 to 2013-14. The results depicted that ICICI performed better than SBI as it was able to generate more loans from its deposits to the customers.

Anand. K(2015) describe Banks form a fundamental component of the financial system and are also active players in financial markets. An efficient banking system capable of mobilizing the savings and channelizing them to productive purposes are essential for the development of any economy. Besides providing financial resources for the growth, banks can also influence the direction in which these resources are to be utilized. Post liberalization era has spread new colors of growth and development in India.

Vidisha Shah (2015) discussed about the comparative analysis on performance of new private sector banks and the public sector banks of India during the period 2011-2015 on many key

parameters such as the P/E Ratio, Dividend Payout ratio, Return on equity ratio, Capital adequacy ratio, Credit deposit atio. The above period is chosen since it is very important to know how different banks performed during the recession and nflation duration. We have done a field study taking ICICI bank as private sector bank and SBIBank as public sector bank to better understand the above argument.

Balaji and Kumar (2016) examined and compared the overall financial performance of selected public and private sector banks in India during the period 2011-12 to 2015-16 with help of mean and T-Test. They concluded that public sector banks must redefine their strategies by considering their strengths, weakness and operating market.

Majumder and Rahman (2016) measured the financial performance of the fifteen selected banks in Bangladesh and identified the significant difference in their performances for the period 2009-2013. They recommended that the lower ranking banks should take necessary steps to improve their weaknesses.

**Taqi and Mustafa (2018)** analyzed the growth and performance of Punjab National Bank and HDFC bank for the period 2006-07 to 2015-16. They made quantitative analysis and found that PNB is more financially sound that HDFC but in context of deposits and expenditure HDFC has better managing efficiency.

## **OBJECTIVES**

The present study is done in the light of the following objectives

- To know the financial performance of public and private sector banks with the help of financial ratios.
- To compare financial performance of public and private sector banks using financial ratios.

## **HYPOTHESES**

Following are the null hypotheses for the study:

- a) There is no significant difference between Capital Adequacy ratio of public and private sector banks.
- **b**) There is no significant difference between Return on Equity of public and private sector banks.
- c) There is no significant difference between NPA to Net advance ratio of public and privatesector banks.
- **d)** There is no significant difference between Total Expenditure to Total Income ratio of

public and private sector banks.

 There is no significant difference between Total Advance to Total Deposits ratio of publicand private sector banks.

## **RESEARCH METHODOLOGY**

Research methodology is the direction to achieve the research objectives. In present study, the top ten private and public sector banks in India are selected. Following are the names of the banks:

**Table 1: Name of the Sample Banks** 

	Sample Banks							
	Public Sector Banks	Private Sector Banks						
1	State Bank of India	Axis Bank						
2	Bank of Baroda	HDFC Bank						
3	Punjab National Bank	Kotak Mahindra Bank						
4	Canara Bank	ICICI Bank						
5	Bank of India	Yes Bank						
6	Union Bank of India	IndusInd Bank						
7	Central Bank of India	Bandhan Bank						
8	IDBI Bank	Federal Bank						
9	Syndicate Bank	DCB Bank						
10	Indian Banks	RBL Bank						

Data has been collected for four years i.e.F.Y. 2015-16,2016-17, 2017-18, 2018-19. The financial performance of public and private sector banks has been analyzed by calculating various financial ratios. These financial ratios are indicators of public and private banks financial performance.

Following financial ratios are calculated for analyzing financial performance of banks.

- Capital Adequacy ratio
- Return on Equity
- NPA to Net advance ratio
- Total Expenditure to Total Income ratio

- Total Advance to Total Deposits ratio
- Net Interest Margin
- Return on Average Assets

Present study is based on Secondary method of data collection. Quantitative data were collected from the Annual reports of banks. Other relevant information was collected from various journals, thesis, books, publications and website.

## DATA ANALYSIS AND INTERPRETATION

Data has been collected for four financial year i.e. F.Y. 2015-16,2016-17, 2017-18, 2018-19 and average of every ratio is calculated as follows:

Table 2: Public Sector Banks – Average of Ratios of F.Y. 2015-16 to F.Y. 2018-19 (%)

AVG. of Ratios F.Y. 2016 to F.Y. 2019 (%)	SBI	вов	PNB	Canara	BOI	Union Bank	Central Bank	IDBI	Syndi cate Bank	Indi an Bank	Avg
CAR	12.89	12.87	10.47	12.27	12.82	11.41	10.00	11.09	12.42	13.1	11.94
ROE	2.92	-4.98	-16.18	-5.47	-22.38	-8.59	-20.54	-23.48	-15.08	6.43	-10.73
NPA to Net advance ratio	4.07	4.65	8.56	6.40	6.97	6.77	9.10	11.70	5.53	4.04	6.78
Total Exp toTotal income ratio	98.00	103.0 6	110.9	81.88	110.67	104.08	104.89	128.7 2	107.2 4	78.1 2	102.76
Total Advance to Total Deposit ratio	77.00	69.06	69.33	70.22	67.22	74.07	72.16	71.54	77.42	75.6 3	72.36
Net Interest Margin	2.59	2.325.3 5	2.329.39	2.372.37	2.220.20	1.19.99	2.25. <b>5</b> 58	.716.76	2.28.888	227700	2.2333
Return on Average Assets	0.18	-0.22	-0.82	-0.25	-0.73	-0.30	-1.15	-2.40	-0.59	0.42	-0.59

Source: Annual Reports of Banks

Table 3: Private Sector Banks – Average of Ratios of F.Y. 2015-16 to F.Y. 2018-19 (%)

PRIVATE SECTOR BANK											
AVG. of Ratios F.Y. 2016 to F.Y. 2019 (%)	AXIS	HDFC	Kotak Mahindra	ICICI	YES Bank	Indusin Bank	dBandhai Bank	n Federa Bank	IDCB	RBL	Avg.
CAR	15.66	15.52	17.19	17.33	17.10	15.00	29.00	13.79	15.29	13.86	16.97
ROE	8.33	15.94	10.86	7.85	16.40	15.44	22.79	8.54	10.95	11.52	12.86
NPA to Net advance ratio		0.35	1.05	4.03	0.90	0.62	0.40	1.52	0.73	0.68	1.23
Total Exp to Total income ratio	92.44	82.11	85.39	89.58	86.65	85.32	77.14	92.03	90.67	89.60	87.09
Total Advance to Total Deposit ratio	92.95	85.85	87.80	94.80	96.95	93.91	107.35	78.06	84.04	89.26	91.10
Net Interest Margin	3.61	4.28	4.40	3.35	3.38	3.90	6.87	3.20	3.99	3.58	4.05
Return on Average Assets	0.76	1.90	1.58	1.03	1.40	1.77	3.66	0.76	1.00	1.14	1.50

Source: Annual Reports of Banks

Table 4: Average ratios and T-values of Public sector and Private sector bank.

Financial Ratios	Public Sector Banks (Average %)	Private Sector Banks (Average %)	T- Values	
Capital Adequacy ratio	11.94	16.97	5.63	
Return on Equity	-10.73	12.86	2.46	
NPA TO Net Advance Ratio	6.78	1.23	2.27	
Total Expenditure to Total Incomeratio	102.76	87.09	0.0079	
Total Advance to Total Deposit ratio	72.36	91.10	1.83	
Net Interest Margin	2.33	4.05	0.00053	
Return on Average Assets	-0.59	1.50	2.37	

# Capital Adequacy ratio (CAR)

Capital Adequacy ratio measures the ability of a bank to meet its obligation by comparing its capital to assets. It includes tier 1 and tier 2 capital divided by risk weighted assets. Bank with highcapital adequacy ratio is considered safer and vice versa. Table no. 2, 3 and 4 shows that CAR ratio of private sector bank is higher than public sector bank i.e. 16.97 and 11.94 respectively. It indicates private sector banks are having more ability to meet its obligation.

For Hypothesis testing T-test has been used. Critical table value at 5% level of significance at 9 degree of freedom is 2.262. Table No. 4 shows that calculated T-value of CAR ratio 5.63 is greater than the critical table value i.e. 2.262. Hence researcher rejects null hypothesis. It indicates, there is significant difference between capital adequacy ratio of public and private sector banks.

#### Return on Equity (ROE)

Profitability of the bank is measured by calculating Return on Equity. It is calculated by dividingnet profit after tax by total shareholder's equity or net worth. This is used to ascertain the earning power of shareholder's As per Table no. 2, 3 and 4, Average return of equity of public sector banks of last four years (2015-16 to 2018-19) is negative i.e. -10.73. Private Sector banks have higher average return on equity i.e. 12.86.It shows that earning power of shareholders fund is higher in private sector banks as compared to public sector banks T-Value 2.46 is greater than table value i.e. 2.262. Hence researcher rejects null hypothesis. It indicates, there is

significant difference between return on equity of public and private sector banks.

#### NPA to Net advance ratio

It is the ratio of net NPA to advances. It indicates overall quality of bank's loan book. Lower ratio is preferable. Table no. 2,3 and 4 shows that NPA to advance ratio of public sector bank is much higher than private sector bank i.e. 6.78 and 1.23 respectively. Public sector banks are suffering a large amount of non-performing assets. It has affected their financial performance T-Value 2.27 is greater than table value i.e. 2.262. Hence researcher rejects null hypothesis. It indicates, there is significant difference between NPA to Net advance ratio of public and private sector banks.

### **Total Expenditure to Total Income ratio**

This ratio indicates degree of total expenditure over its total income. Lower the ratio, higher will be the profitability of banks and vice versa. Table no. 2,3 and 4 shows that Total Expenditure to Total Income ratioof public sector bank is higher than private sector bank i.e.102.76 and 87.09 respectively. Most of the public sector banks total expenditure is more than their total income. It has created financial crises for public banks, though private sector banks performance is not so good.

T-Value 0.0079 is less than table value i.e. 2.262. Hence researcher fails to rejects null hypothesis. It indicates, there is no significant difference between Total Expenditure to Total Income ratio of public and private sector banks.

## **Total Advance to Total Deposits ratio**

This ratio indicates efficiency of management in utilising total deposits for granting advances for maximum returns. Higher ratio indicates higher management efficiency and vice versa. Table no. 2,3 and 4 shows that private sector banks are having higher Total Advance to Total Deposit ratio i.e. 91.10 as compared to public sector i.e. 72.36. It indicated private sector banks are using their deposits for granting maximum advances for better profitability. It has indicated improvement in managerial efficiency of private sector banks and its success in converting its deposits into high earning advances, though the difference is not so major. Public Sector banks are trying to improvetheir financial condition.

T-Value 1.83 is less than table value i.e. 2.262. Hence researcher fails to rejects null hypothesis. It indicates, there is no significant difference between Total Advance to Total Deposit ratio of public and private sector banks.

### **Net Interest Margin**

It is the net interest income as a percentage of total assets. Higher ratio indicates efficient earningquality as

against total assets. Table no. 2,3 and 4 shows that private sector banks are having higher Net Interest Margin i.e. 4.05 as compared to public sector i.e. 2.33. Private sector banks are having higher efficiency in earning quality as against total assets, but the difference in average of Net Interest Margin of last four year is not so high between public and private sector bank.

T-Value 0.0079 is less than table value i.e. 2.262. Hence researcher fails to reject null hypothesis. It indicates, there is no significant difference between Net interest margin of public and private sector banks.

#### **Return on Average Assets**

This ratio measures profitability of bank in terms of assets employed in the bank. This ratio is calculated by dividing net profit after tax by total assets. The higher the ratio, better is profit earning capacity of bank. As per Table No. 2,3, and 4, public sector banks return on average assets is 1.50. Private sector banks are having higher Return on average assets as compared to Public sector banks. It shows private sector banks are able to use their assets efficiently.

T-Value 2.37 is greater than table value i.e. 2.262. Hence researcher rejects null hypotheses. It indicates, there is significant difference between Return on Average Assets of public and privatesector banks.

In short, Capital adequacy ratio, Return on equity, NPA to Net advance and Return on average assets ratio of private sector banks are better than public sector banks and it shows major difference in above four ratios of public and private sector banks. Total expenditure to total income, Total advances to total deposits and Net interest margin ratio of private sector bank is higher than public sector bank, but difference is not major.

#### CONCLUSION

From above analysis, researcher has concluded that financial performance of private sector banksis better than public sector banks in terms of selected financial ratios. All financial ratios of private sector banks are showing better results as compared to public sector banks. Public sector banks need to improve in areas of Capital adequacy ratio, Return on equity, NPA to Net advance and Return on average assets ratio for better financial performance in future.

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