

# A Study on Financial Performance of Selected Public Sectors Commercial Banks in India

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## 1. INTRODUCTION

Banks play an active role in the economic development of a country. The banks mostly deal with money collected in the form of deposits along with their own funds in the form of share capital and resources constituting around 5% of total resource of the of the banks. Therefore the banks have the obligation of meeting the demand of the customers promptly, paying interest for the amount and meeting the expenses to carry out its activities. This necessitates the banks to maintain adequate liquidity and earn required profit from its activities.

Therefore the banks have to perform the difficult task of maintaining equilibrium between liquidity and profitability. The maintenance of liquidity is necessary to prove the fact that the bank is able to meet its commitment without fail and is paying the day-to-day expenses. Thus, liquidity refers to the ability concern to fulfill its obligations promptly whereas profitability is primarily the measure of the overall success of business and so. It is the ability to earn profit. Profitability is the most powerful motivational factor in any business. More the profit, more efficient the business is demand. It is the engine that drives a business concern. It also enables a concern to discharge its obligation to have segments of the society.

### STATEMENT OF THE PROBLEM:

Profitability remains a worthwhile yardstick to measure the company's prospects. A bank generates profit by differentiating between the level of interest it pays for deposits and other sources of funds, and the level of interest it charges in its lending activities. This difference is referred to as the spread between the cost of funds and the loan interest rate. Historically, profitability from lending activities has been cyclical and dependent on the needs and strengths of loan customers. Though a number of studies on profitability of banks in India have been carried out the researcher wants to fill the gap between the past study and present study. So the broad objectives of the study are:

1. To analyze the profitability of public sector banks in India
2. To examine the determinants of profitability for public sector banks in India.

### OBJECTIVES:

The main objective of the study is to compare the profitability of Public Sector Banks in India.

1. To analyze the performance and components of selected commercial banks
2. To ascertain factors influencing the profitability of selected commercial banks
3. To find out the growth of profit by using trend analysis for selected commercial banks
4. To give appropriate suggestions and recommendations for the profitability of the banking sector.

### HYPOTHESIS:

Based on the above objectives, the researcher had framed the following hypothesis.

1. There exists association between Operating Profit, Interest Spread Interest Earned, Interest Paid and Net Profit.

## 2. METHODOLOGY

### PERIOD OF THE STUDY:

The study covers a period of ten years from **2004-2005** to **2013-2014**.

### SOURCES OF DATA:

The study is based on secondary data. Secondary data have been collected from the bases of where data required for the study have been mined out.

Database maintained by Center for monitoring Indian Economy (CMIE)

### SAMPLE:

In this study, the researcher has selected 5 Public Sector Banks in India for analyzing the profitability and dividend. The following criteria are used by the researcher for selecting the sample banks for analysis.

- Only those banks, which have gone for raising equity capital to the maximum, have been included in the sample.

**Table 1 List of Selected Banks**

S.No	Public Sector Banks
1	State Bank Of India
2	Bank of India
3	Bank of Baroda
4	Canara Bank
5	Indian Overseas Banks

### Mean:

All values do not carry equal importance hence, values have different weight age and mean is calculated on the basis of their relative importance.

$$\text{Mean (X)} = \frac{\sum X}{N}$$

### Standard Deviation:

Standard deviation is the square root of the quotient obtained by dividing the sum of the squares of deviations of items from the arithmetic mean by the number of observations. Standard deviation is simply an average of deviation.

$$\text{S.D. } (\sigma) = \frac{\sum X^2}{N}$$

### Co-efficient of Variation:

$$\text{C.V.} = \left(\frac{\sigma}{X}\right) \times 100$$

### Correlation:

Correlation analysis deals with association of two or more variables. The correlation is one of the most common and most useful statistics. A correlation is a single number that describes the degree of relationship between two variables.

### T-test:

An independent sample t-test compares the means of two independent groups. To compare the statistical significance of a possible difference between the means of two groups on some dependent variable and the two groups are independent of one another.

## 3. LIMITATION OF THE STUDY

- Analysis made on the financial statements data, which may not be 100 percent accurate.
- The period of the study is limited to ten years only.

#### 4. BANK PROFILE

**State Bank of India:**

SBI is the oldest bank of India and also India’s largest commercial bank. This government owned bank was established in the year 1806. It is also the second largest bank in the globe. The bank provides a wide array of banking products through their effective network not only on India but also overseas. The bank has about 16,000 branches and is also accountable for one-fifth of the loans of India. It has about 8500 ATMs across nation.

**Bank of India:**

BOI is a state-owned commercial bank with headquarters in Mumbai. Government-owned since nationalization in 1969, It is India’s 4<sup>th</sup> largest bank, after State Bank of India, Punjab National bank and Bank of Baroda. It has 3415 branches, including 29 branches outside india. BOI founder member of SWIFT which facilitates provision of cost effective financial processing and communication services. The bank completed its first one hundred years of operations on 7 September 2006. The banks provides many services like Mobile Banking & payments, online tax payments ,pay bills online trading in shares. Internet Banking, Book ticket and many more.

**Bank of Baroda:**

BOB is the third largest bank in India, after the state bank of India and the Punjab National Bank and ahead of ICICI Bank. BOB is ranked 763 in Forbes Global 2000 list. BOB has total assets in excess of Rs.3.58 lakh crores, or Rs.3, 583 billion, a net work of over 3,409 branches and offices, and about 1,657 ATMs. It plans to open 400 new branches in the coming year. It offers a wide range of banking products and financial services to corporate and retail customers through a variety of delivery channels through its subsidiaries and affiliates in the areas of investment banking, credit cards and asset management. Its total business was 5,452 billion as of June 30.

**Canara Bank:**

Canara Bank is a State-owned financial services company in India. It was established in 1906, making it one of the oldest banks in the country. As on 2009 November, the bank had a net work of 3057 branches, 4000 ATMs spread across India. The bank also has offices abroad in London, Hong Kong, Moscow, Shanghai, Doha, and Dubai. Widely known for customer centricity. Growth of Canara Bank was especially after nationalization in the year 1969, attaining the status of a national level player in terms of geographical reach and clientele segments. Eighties was characterized by business diversification for the bank. In June 2006, the bank completed a century of operation in the Indian Banking Industry. Today, Canara Bank occupies a premier position in the comity of Indian banks. With an unbroken record of profits since its inception.

**Indian Overseas Bank:**

IOB is a one of the major bank based in Chennai, with over 1,400 domestic and 6 branches abroad. Indian Overseas Bank was established in 1937 to encourage overseas banking and foreign exchange operations.

From the beginning Indian Overseas Bank several Chettinad, Ceylon(Sri Lanka), Burma (Myanmar),Malaya, Singapore, Java, Sumatra and Saigon. In 1960 Indian Overseas Bank absorbed five weaker private sector banks including Kulitali Bank. In the year 2000 Indian Overseas Bank India engaged in IPO, which brought the government’s share in the bank’s equity down 75%.

S.No	Bank Name	No. Of Branches	No. Of Employees	Total Income ₹ Million	Net Profit ₹ million
1	State Bank of India	15564	228296	1356919	310817
2	Bank of India	4373	42348	356749	74585
3	Bank of Baroda	4377	43108	388273	89992
4	Canara Bank	3837	42693	372309	58900
5	Indian Overseas Bank	3042	28280	226496	38170

## 5. ANAYLIS

### INTEREST SPREAD:

Interest Spread is the difference between Interest Earned and Interest Expended. Higher the Interest Spread, The bank gives a good track record of business. Interest Spread also increasing in recent years. Interest Spread has assumed greater important those days. Appropriate spread is essential to meet the various costs associated with running of the banks. In order to absorb the high establishment costs, better interest spread becomes inevitable as well as loan likely to result in better spread.

Table 2 Table Showing Interest Spread

Year	State Bank of India	Bank of India	Bank of Baroda	Canara Bank	Indian Overseas Bank
2004-05	6.82	4.57	4.81	5.78	5.03
2005-06	5.71	4.42	4.32	4.71	5.18
2006-07	4.50	4.16	4.87	4.25	5.18
2007-08	4.28	3.47	4.57	3.54	4.53
2008-09	4.31	4.13	3.71	3.47	3.81
2009-10	4.20	4.60	4.31	3.57	4.79
2010-11	4.32	4.80	4.21	3.47	4.26
2011-12	4.34	4.96	4.02	3.47	4.29
2012-13	3.82	4.57	4.15	3.32	4.69
2013-14	4.12	5.06	4.60	3.47	3.89
<b>Mean</b>	<b>4.642</b>	<b>4.474</b>	<b>4.357</b>	<b>3.905</b>	<b>4.565</b>
<b>S.D</b>	<b>0.86</b>	<b>0.44</b>	<b>0.34</b>	<b>0.75</b>	<b>0.43</b>
<b>C.V</b>	<b>18.53</b>	<b>9.83</b>	<b>7.80</b>	<b>19.21</b>	<b>9.42</b>

### INTERPRETATION:

Table 2 shows the average Interest Spread is high in State Bank of India(4.642) followed by Indian Overseas Bank (4.565)the average Interest Spread is low (3.908) in Canara Bank.

### ADJUSTED CASH MARGIN (%):

The Adjusted Cash Margin is a measure of how efficiently a company converts its sales dollars to cash. Since expenses and purchase of assets are paid from cash, this is an extremely useful and important profitability ratio. It is also margin ratio.

ACM = Operating Expenses/Net Sales= \_\_\_\_\_%

Table 3 Table showing adjusted cash margin (%)

Year	State Bank of India	Bank of India	Bank of Baroda	Canara Bank	Indian Overseas Bank
2004-05	8.36	8.59	9.15	10.68	7.39
2005-06	9.88	14.22	11.10	13.78	11.51
2006-07	13.50	16.20	13.08	15.98	12.24
2007-08	14.54	6.55	10.95	14.34	15.17
2008-09	13.06	9.82	15.12	15.31	16.69
2009-10	11.43	11.23	12.03	12.81	17.12
2010-11	12.81	14.47	12.06	10.65	14.79
2011-12	13.04	16.25	14.19	11.80	12.16
2012-13	11.62	9.09	16.54	14.46	7.10
2013-14	9.60	10.83	18.16	16.23	8.22
<b>Mean</b>	<b>11.784</b>	<b>11.725</b>	<b>13.298</b>	<b>13.604</b>	<b>12.299</b>
<b>S.D</b>	<b>1.74</b>	<b>3.20</b>	<b>2.58</b>	<b>1.95</b>	<b>3.48</b>
<b>C.V</b>	<b>14.77</b>	<b>27.29</b>	<b>19.40</b>	<b>14.33</b>	<b>28.29</b>

**INTERPRETATION:**

Table 3 shows the average Adjusted Cash Margin is high in Canara Bank (13.604) followed by Bank of Baroda (13.298) the average Adjusted Cash Margin is low (11.725) in Bank of India.

**NET PROFIT MARGIN:**

The Net Profit Margin Ratio is a profit ratio that is a margin ratio. It can be calculated by using numbers of the company's income statement. Net Profit Margin is the number of dollars of after tax profit a firm generates per dollar of sale.

Net Profit Margin Ratio = Net Income/Net Sales = \_\_\_\_\_%

**Table 4 Table Showing Net Profit Margin**

Year	State Bank of India	Bank of India	Bank of Baroda	Canara Bank	Indian Overseas Bank
2004-05	7.15	7.58	7.85	9.50	6.22
2005-06	8.52	11.27	10.50	12.47	10.52
2006-07	9.76	13.38	12.03	14.73	11.40
2007-08	11.56	5.08	9.77	12.81	14.27
2008-09	11.21	8.63	10.76	13.82	16.44
2009-10	10.12	10.48	10.22	11.60	16.18
2010-11	11.56	13.96	10.38	9.61	13.994
2011-12	12.03	15.89	12.86	10.89	11.87
2012-13	10.54	8.59	15.37	13.77	6.14
2013-14	8.55	10.25	17.18	15.65	8.04
<b>Mean</b>	<b>10.112</b>	<b>10.511</b>	<b>11.702</b>	<b>12.485</b>	<b>11.502</b>
<b>S.D</b>	<b>1.53</b>	<b>3.08</b>	<b>2.89</b>	<b>1.98</b>	<b>3.60</b>
<b>C.V</b>	<b>15.13</b>	<b>29.30</b>	<b>24.70</b>	<b>15.86</b>	<b>31.30</b>

**INTERPRETATION:**

Table 4 shows the average Net Profit Margin is high in Canara Bank (12.485) followed by Bank Baroda of (11.702) the average Net Profit Margin is low (10.112) in State Bank of India.

**INTEREST EXPENDED TO INTEREST EARNED:**

It is calculated by the formula for:

Interest Earned-Interest Expended

**Table 5 Table Showing Interest Expended / Interest Earned**

Year	State bank of India	Bank of India	Bank of Baroda	Canara Bank	Indian Overseas Bank
2004-05	69.54	67.37	68.44	71.43	69.41
2005-06	67.90	65.65	65.50	66.46	64.96
2006-07	63.28	62.02	58.17	61.72	57.40
2007-08	57.00	62.91	53.68	58.39	53.04
2008-09	56.32	62.55	54.58	58.89	53.09
2009-10	59.35	62.52	58.90	64.57	56.09
2010-11	65.23	65.77	66.89	75.09	66.37
2011-12	67.28	66.36	66.05	72.44	70.24
2012-13	66.66	67.80	64.43	69.71	69.08
2013-14	60.04	64.09	59.78	66.08	65.23
<b>Mean</b>	<b>63.26</b>	<b>64.704</b>	<b>61.642</b>	<b>67.369</b>	<b>62.491</b>
<b>S.D</b>	<b>4.53</b>	<b>2.04</b>	<b>5.02</b>	<b>5.50</b>	<b>6.52</b>
<b>C.V</b>	<b>7.16</b>	<b>3.15</b>	<b>8.14</b>	<b>8.16</b>	<b>10.43</b>

**INTERPRETATION:**

Table 5 shows the average Interest Expended to Interest Earned is high in Canara Bank(67.369) followed by Bank of India (64.704)the average Interest Expended to Interest Earned is low (61.642) in Bank of Baroda.

**OPERATING INCOME TO TOTAL FUNDS:**

Formula:

$$\text{Operating Expenses/Total Income*100}$$

**Table 6 Table Showing Operating Expense to Total Income**

Year	State Bank of India	Bank of India	Bank of Baroda	Canara Bank	Indian Overseas Bank
2004-05	19.98	21.79	21.19	19.23	22.71
2005-06	27.58	27.94	26.69	25.89	29.39
2006-07	32.57	28.69	33.75	33.28	33.18
2007-08	27.34	32.64	33.64	32.15	30.83
2008-09	28.37	31.45	34.04	29.20	29.39
2009-10	28.19	28.64	25.68	23.49	24.77
2010-11	24.13	22.72	22.70	21.48	17.81
2011-12	22.91	19.27	20.88	19.93	19.76
2012-13	27.61	26.27	22.53	29.68	28.45
2013-14	31.51	24.66	21.98	20.45	26.28
<b>Mean</b>	<b>27.019</b>	<b>26.407</b>	<b>26.296</b>	<b>24.678</b>	<b>26.257</b>
<b>S.D</b>	<b>3.60</b>	<b>4.07</b>	<b>5.20</b>	<b>4.92</b>	<b>4.71</b>
<b>C.V</b>	<b>13.32</b>	<b>15.41</b>	<b>19.77</b>	<b>19.94</b>	<b>17.94</b>

**INTERPRETATION:**

Table 6 shows the average Operating Expense to Total Income is high in State Bank of India (27.019) followed by Bank of India (26.407)the average Operating Expenses to Total Income is low (24.678) in Canara Bank.

**INTEREST INCOME TO TOTAL FUNDS:**

Formula:

$$\text{Interest Income/Total Funds*100}$$

**Table 7 Table Showing Interest Income to Total Funds**

Year	State Bank of India	Bank of India	Bank of Baroda	Canara Bank	Indian Overseas Bank
2004-05	10.16	10.66	10.13	10.89	11.17
2005-06	9.99	10.01	9.80	10.23	10.23
2006-07	9.44	9.07	9.65	9.70	10.09
2007-08	8.41	7.14	7.47	7.92	9.19
2008-09	7.94	7.49	7.01	7.49	8.54
2009-10	8.27	8.05	7.44	7.81	8.60
2010-11	8.82	8.62	8.14	9.08	9.09
2011-12	8.88	9.15	8.16	9.16	9.85
2012-13	8.52	7.93	7.56	8.69	9.06
2013-14	8.39	7.59	7.50	8.20	8.46
<b>Mean</b>	<b>8.882</b>	<b>8.511</b>	<b>8.286</b>	<b>8.917</b>	<b>9.428</b>
<b>S.D</b>	<b>0.71</b>	<b>0.98</b>	<b>1.69</b>	<b>1.05</b>	<b>0.84</b>
<b>C.V</b>	<b>7.99</b>	<b>11.51</b>	<b>20.40</b>	<b>11.78</b>	<b>8.91</b>

**INTERPRETATION:**

Table 7 shows the average Interest Income to Total funds is high in Indian Overseas Bank (9.428) followed by Canara Bank (8.917)the average Interest Income to Total Funds is low (8.286) in Bank of Baroda.

**NET INTEREST INCOME TO TOTAL FUNDS:**

Formula:

Net Interest Income/Total Funds\*100

**Table 8 Table Showing Net Interest Income to Total Funds**

Year	State Bank of India	Bank of India	Bank of Baroda	Canara Bank	Indian Overseas Bank
2004-05	3.92	4.21	4.06	4.32	4.47
2005-06	4.16	4.68	4.37	4.49	4.32
2006-07	4.53	4.61	5.22	4.93	5.21
2007-08	4.15	2.91	6.63	3.70	4.90
2008-09	3.71	3.24	3.29	3.27	4.28
2009-10	3.85	3.52	3.21	2.86	3.98
2010-11	3.87	3.52	3.24	2.84	3.34
2011-12	3.79	3.74	3.26	2.89	3.74
2012-13	3.82	3.05	3.30	3.24	3.39
2013-14	4.10	3.11	3.39	3.09	3.32
<b>Mean</b>	<b>3.99</b>	<b>3.659</b>	<b>3.997</b>	<b>3.563</b>	<b>4.095</b>
<b>S.D</b>	<b>0.23</b>	<b>0.60</b>	<b>1.08</b>	<b>3.72</b>	<b>0.62</b>
<b>C.V</b>	<b>5.76</b>	<b>16.40</b>	<b>27.02</b>	<b>20.21</b>	<b>15.14</b>

**INTERPRETATION:**

Table 8 shows the average Net Interest Income to Total Funds is high in IOB (4.095) followed Bank of India (3.659) the average Net Interest Income to total funds is low (3.563) in Canara Bank.

**Correlation between Net Profit Margin and Management Efficiency Ratios In State Bank of India**

S.No	Ratios	Correlation Value(r)	Calculated Value(t)	Table Value(t)	Null Hypothesis @5% level of significance
1	Adjusted cash Margin	-0.42	-1.31	2.31	Accepted
2	Net Interest Income/Total Funds	0.35	1.05	2.31	Accepted
3	Interest Expended/Total Funds	0.58	2.48	2.31	<b>Rejected</b>
4	Operating Expenses /Total Income	-0.10	-0.28	2.31	Accepted
5	Interest spread	0.05	0.14	2.31	Accepted
6	Net Profit / Total Funds	0.78	3.56	2.31	<b>Rejected</b>
7	Total Income/Capital Employed(%)	-0.56	-1.90	2.31	Accepted

**INFERENCE:**

Since the Null Hypothesis at 5% level of significance is **rejected** there is correlation between Net Profit Margin and Interest Expended to Total Funds, Net Profit to Total Funds.

**Correlation between Net Profit Margin and Management Efficiency Ratios In Bank of India**

S.No	Ratios	Correlation Value(r)	Calculated Value(t)	Table Value(t)	Null Hypothesis @5% level of significance
1	Adjusted cash Margin	0.42	1.31	2.31	Accepted
2	Net Interest Income/Total Funds	0.66	2.49	2.31	<b>Rejected</b>
3	Interest Expended/Total Funds	0.05	0.14	2.31	Accepted
4	Operating Expenses /Total Income	0.29	0.85	2.31	Accepted
5	Interest spread	-0.25	-0.73	2.31	Accepted
6	Net Profit / Total Funds	0.69	2.71	2.31	<b>Rejected</b>
7	Total Income/Capital Employed(%)	0.97	11.44	2.31	<b>Rejected</b>

**INFERENCE:**

Since the Null Hypothesis at 5% level of significance is rejected. There is no correlation between Net Profit Margin and Net interest Income to Total Funds, Profit Before Provisions to Total Funds, Net Profit to Total Funds.

Correlation between Net Profit Margin and Management Efficiency Ratios In **Bank of Baroda**

S.No	Ratios	Correlation Value(r)	Calculated Value(t)	Table Value(t)	Null Hypothesis @5% level of significance
1	Adjusted cash Margin	0.39	1.20	2.31	Accepted
2	Net Interest Income/Total Funds	0.18	0.52	2.31	Accepted
3	Interest Expended/Total Funds	0.01	0.03	2.31	Accepted
4	Operating Expenses /Total Income	-0.62	-2.22	2.31	Accepted
5	Interest spread	-0.44	-1.38	2.31	Accepted
6	Net Profit / Total Funds	0.37	1.13	2.31	Accepted
7	Total Income/Capital Employed(%)	0.78	3.56	2.31	<b>Rejected</b>

**INFERENCE:**

Since the Null Hypothesis at 5% level of significance is rejected there is correlation between Net Profit Margin and Net profit to Total funds.

Correlation between net Profit Margin and Management Efficiency Ratios In **Canara Bank**

S.No	Ratios	Correlation Value(r)	Calculated Value(t)	Table Value(t)	Null Hypothesis @5% level of significance
1	Adjusted cash Margin	-0.24	0.70	2.31	Accepted
2	Net Interest Income/Total Funds	-0.06	-0.17	2.31	Accepted
3	Interest Expended/Total Funds	0.09	0.26	2.31	Accepted
4	Operating Expenses /Total Income	-0.76	-3.31	2.31	Accepted
5	Interest spread	0.67	2.56	2.31	<b>Rejected</b>
6	Net Profit / Total Funds	0.19	0.55	2.31	Accepted
7	Total Income/Capital Employed(%)	0.61	2.19	2.31	Accepted

**INFERENCE:**

Since the Null Hypothesis at 5% level of significance is **rejected** there is correlation between Net profit Margin and operating Expenses to total funds.

Correlation between Net profit Margin and Management Efficiency Ratios In **Indian Overseas Bank**

S.No	Ratios	Correlation Value(r)	Calculated Value(t)	Table Value(t)	Null Hypothesis @5% level of significance
1	Adjusted cash Margin	-0.48	-1.54	2.31	Accepted
2	Net Interest Income/Total Funds	0.21	0.61	2.31	Accepted
3	Interest Expended/Total Funds	0.40	1.23	2.31	Accepted
4	Operating Expenses /Total Income	-0.68	-2.64	2.31	Accepted
5	Interest spread	-0.19	-0.55	2.31	Accepted
6	Net Profit / Total Funds	0.63	2.32	2.31	<b>Rejected</b>
7	Total Income/Capital Employed(%)	0.97	11.44	2.31	<b>Rejected</b>

**INFERENCE:**

Since the Null Hypothesis at 5% level of significance is **rejected** there is correlation between Net Profit Margin and Profit before Provisions to Total Funds, Net Profit to Total Funds.



## 6. CONCLUSION

The paper concludes that profitability and productivity of all bank groups has been increased. There are so many opportunities are available for the public sector to compete the other bank groups. They should concentrate on better services, capital planning, corporate governance, Accountability, and Information technology etc. The study reveals that Indian banking industry has started to moving towards better tomorrow. Some bank groups are facing some hurdles to compete in the global market due to some internal and external factors. Particularly, public sector banks are facing many severe problems but even then they are preparing themselves to compete in global market. We think their future is also quite bright.

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