

# A Comparative Analysis of Selected Public and Private Sector Banks in India

**Dr. Hemalatha S**

## **Abstract**

Indian Banking Sector plays a significant role when it come to the investment decision of the investors. Hence to understand the performance of banking sector a comparative analysis was conducted between the public and private sector banks of India. The study was conducted on 12 public and 12 private sector banks. The study was completely based on secondary data obtained from RBI official website. To analyse the financial performance of the banks five parameter were considered i.e., Net Interest Margin, Return on Asset Return on Equity, Return on Investment and NPA were considered. Mean and Anova Single Factor was used to justify the hypothesis statement. Through the analysis it was found that there is no significant difference between public and private sector banks when we consider Net Interest Margin , Return on Asset and Return on Equity but when compared to Return on Asset and Non- Performing Assets public sector banks were vital.

**Keywords:** NPA, LPG.

## **Introduction:**

Banking sector plays a vital role in the economic growth of country. Banks are a financial institutions which accepts deposits and extend loans and provides financial service to the public. After Liberalization, Privatization and Globalization (LPG) in the year 1991, both public and private sector banks play a vital role in the in the Indian financial system. As dated on 1 August 2025, there are basically 12 public sector banks and 24 private sector banks in India. And both sector banks have shown a consistent improvement over the year. Indian banking sector provides diverse opportunities for both public and private sector bank investors.

## **Objectives:**

- To evaluate the financial performance of selected 12 public and private sector banks.
- To compare the financial soundness of both public and private sector bank.

## **Hypothesis:**

- H01: There is no significant difference in the mean Net Interest Margin between Indian Public Sector Bank and Private Sector Bank.
- H02: There is no significant difference in the mean Return on Asset Between Public Sector Bank and Private Sector Bank.
- H03: There is no significant difference in the mean Return on Equity between Indian Public Sector Bank and Private Sector Bank.

- H04: There is no significant difference in the mean Return on Investment between Indian Public Sector Bank and Private Sector Bank.
- H05: There is no significant difference in the mean Non- Performing Assets between Indian Public Sector Bank and Private Sector Bank.

## Research Methodology:

### Data Collection:

The study was completely based on secondary data. It is been collected for RBI Website.

### Tools of Analysis:

Mean and Anova – Single Factor test is used to evaluate and compare the financial performance of selected Public and Private Sector Banks of India. A sample of 12 Public Sector Bank and 12 Private Sector Banks has been chosen for the study.

**Study Period:** The study period covered is 5 years i.e., from 2025 to 2021.

## Literature Review:

1. Dr P Piakatheeswari (2023): The main objective of the paper was to analyze the financial performance of both public and private sector banks and the study period was restricted to 5 year from 2014-15 to 2018-19. The study findings was there is no significant difference between the net profit of public sector banks and private sector banks.
2. Sanjeeta Parab (2024): The objective of the study was to analyze the financial performance of both public and private sector banks. Randomly 12 banks were chosen for the analysis and the study period was restricted to 2014- 2023. The finding of the study was that the private sector banks performance was better compared to public sector banks.

## Data Analysis:

**Table 1: Ratio of Net Interest Income to Total Assets - Net Interest Margin Ratio**

Public Sector Bank	2025	2024	2023	2022	2021	Mean
BANK OF BARODA	2.71	2.94	3.02	2.68	2.49	2.77
BANK OF INDIA	2.50	2.67	2.62	1.93	2.06	2.35
BANK OF MAHARASHTRA	3.45	3.42	3.11	2.83	2.68	3.10
CANARA BANK	2.34	2.58	2.44	2.22	2.19	2.35
CENTRAL BANK OF INDIA	3.00	3.02	2.95	2.51	2.27	2.75
INDIAN BANK	3.02	3.10	2.93	2.58	2.63	2.85
INDIAN OVERSEAS BANK	2.92	2.95	2.69	2.20	2.21	2.59
PUNJAB AND SIND BANK	2.45	2.00	2.31	2.29	2.14	2.24
PUNJAB NATIONAL BANK	2.53	2.65	2.48	2.23	2.43	2.47
STATE BANK OF INDIA	2.60	2.73	2.76	2.54	2.61	2.65
UCO BANK	2.81	2.59	2.58	2.48	2.24	2.54
UNION BANK OF INDIA	2.57	2.74	2.65	2.46	2.36	2.56
<b>Total</b>	<b>32.89</b>	<b>33.39</b>	<b>32.55</b>	<b>28.94</b>	<b>28.31</b>	<b>31.22</b>
Private Sector Bank	2025	2024	2023	2022	2021	Mean

AXIS BANK LIMITED	3.52	3.57	3.45	3.06	3.08	3.34
BANDHAN BANK LIMITED	6.22	6.18	6.28	6.86	7.32	6.57
CITY UNION BANK LIMITED	3.12	3.09	3.38	3.34	3.55	3.29
CSB BANK LIMITED	3.52	4.53	4.89	4.74	4.46	4.43
DCB BANK LIMITED	3.01	3.34	3.53	3.22	3.29	3.28
DHANLAXMI BANK LIMITED	2.85	2.95	3.29	2.69	2.60	2.88
FEDERAL BANK LTD	2.88	2.92	3.01	2.82	2.90	2.90
HDFC BANK LTD.	3.26	3.57	3.83	3.77	3.96	3.68
ICICI BANK LIMITED	4.07	4.30	4.15	3.59	3.35	3.89
IDBI BANK LIMITED	3.77	4.09	3.62	3.06	2.85	3.48
IDFC FIRST BANK LIMITED	6.03	6.14	5.88	5.49	4.73	5.65
INDUSIND BANK LTD	3.56	4.24	4.09	3.92	4.04	3.97
<b>Total</b>	<b>45.82</b>	<b>48.91</b>	<b>49.38</b>	<b>46.58</b>	<b>46.12</b>	<b>47.36</b>

Source: RBI website

**Table 1** Represents the Net Interest Rate ratio of both public and private sector banks from 2021 to 2025. From the above table it is observed that the total mean value of public sector bank was 28.31 in the year 2021 and it drastically increased to 2.89 in the year 2025, whereas the total mean value of private sector bank was 46.12 in the year 2021 and it increased to 45.82 in the year 2025. Both public and private sector banks have showed improvement whereas private sector banks mean value is quite higher compared to public sector banks.

**Table 2: Return on Assets ratio**

Public Sector Banks	2025	2024	2023	2022	2021	Mean
BANK OF BARODA	1.16	1.17	1.03	0.6	0.07	0.806
BANK OF INDIA	0.90	0.70	0.49	0.43	0.28	0.56
BANK OF MAHARASHTRA	1.75	1.50	1.1	0.55	0.3	1.04
CANARA BANK	1.09	1.01	0.81	0.48	0.23	0.724
CENTRAL BANK OF INDIA	0.86	0.63	0.44	0.3	-0.26	0.394
INDIAN BANK	1.32	1.07	0.77	0.63	0.5	0.858
INDIAN OVERSEAS BANK	0.92	0.81	0.76	0.59	0.31	0.678
PUNJAB AND SIND BANK	0.67	0.41	0.98	0.85	-2.55	0.072
PUNJAB NATIONAL BANK	0.97	0.54	0.18	0.26	0.15	0.42
STATE BANK OF INDIA	1.10	1.04	0.96	0.67	0.48	0.85
UCO BANK	0.76	0.56	0.62	0.33	0.06	0.466
UNION BANK OF INDIA	1.26	1.03	0.69	0.47	0.27	0.744
<b>Total</b>	<b>12.76</b>	<b>10.47</b>	<b>8.83</b>	<b>6.16</b>	<b>-0.16</b>	<b>7.612</b>
Private Sector Banks	2025	2024	2023	2022	2021	Mean
AXIS BANK LIMITED	1.74	1.83	0.8	1.21	0.7	1.256
BANDHAN BANK LIMITED	1.50	1.39	1.5	0.1	2.13	1.324
CITY UNION BANK LIMITED	1.55	1.52	1.46	1.35	1.15	1.406
CSB BANK LIMITED	1.49	1.79	2.06	1.9	0.99	1.646

DCB BANK LIMITED	0.89	0.93	0.97	0.7	0.87	0.872
DHANLAXMI BANK LIMITED	0.41	0.38	0.34	0.27	0.29	0.338
FEDERAL BANK LTD	1.23	1.32	1.28	0.94	0.85	1.124
HDFC BANK LTD.	1.91	1.98	2.07	2.03	1.97	1.992
ICICI BANK LIMITED	2.41	2.37	2.16	1.84	1.42	2.04
IDBI BANK LIMITED	1.98	1.65	1.2	0.84	0.46	1.226
IDFC FIRST BANK LIMITED	0.47	1.10	1.13	0.08	0.28	0.612
INDUSIND BANK LTD	0.50	1.92	1.8	1.28	0.9	1.28
<b>Total</b>	<b>16.08</b>	<b>18.18</b>	<b>16.77</b>	<b>12.54</b>	<b>12.01</b>	<b>15.116</b>

Source: RBI Website

Table 2 represents the Return on Assets ratio value of public and private sector banks from 2021 to 2025. From the above table it is observed that the total mean value of public sector bank was -.016% in the year 2021 and it drastically increased from loss to profit that is 12.76% in the year 2025. Whereas private sector banks total mean value was 12.01% in the year 2021 it later on increased to 16.08% in the year 2025. Thought the mean value it is observed that the private sector banks performance is better compared to public sector banks but public sector bank has shown consistent improvement over the years.

**Table 3: Return on Equity ratio**

<b>Public Sector Banks</b>	<b>2025</b>	<b>2024</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>Mean</b>
BANK OF BARODA	15.72	16.91	15.33	8.93	1.11	11.60
BANK OF INDIA	12.50	9.88	7.05	6.75	4.83	8.20
BANK OF MAHARASHTRA	22.92	22.98	17.64	8.85	4.81	15.44
CANARA BANK	18.22	18.13	15.18	9.09	4.62	13.05
CENTRAL BANK OF INDIA	11.03	8.32	5.59	4.24	-4.12	5.01
INDIAN BANK	17.10	15.16	11.52	9.61	8.21	12.32
INDIAN OVERSEAS BANK	11.03	9.98	8.70	8.56	5.02	8.66
PUNJAB AND SIND BANK	7.03	3.89	9.02	9.29	-39.16	-1.99
PUNJAB NATIONAL BANK	14.22	7.99	2.57	3.71	2.29	6.16
STATE BANK OF INDIA	17.33	17.33	16.53	11.86	8.40	14.29
UCO BANK	8.38	6.23	7.55	4.26	0.85	5.45
UNION BANK OF INDIA	17.14	15.57	11.33	7.75	4.68	11.29
<b>Total</b>	<b>172.62</b>	<b>152.38</b>	<b>128.00</b>	<b>92.90</b>	<b>1.56</b>	<b>109.49</b>
<b>Private Sector Banks</b>	<b>2025</b>	<b>2024</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>Mean</b>
AXIS BANK LIMITED	15.95	17.98	7.96	12.02	7.06	12.19
BANDHAN BANK LIMITED	11.96	10.84	11.88	0.72	13.53	9.79
CITY UNION BANK LIMITED	12.58	12.81	13.35	12.23	10.65	12.32
CSB BANK LIMITED	14.31	16.18	18.70	18.98	10.55	15.74
DCB BANK LIMITED	11.44	11.12	10.81	7.36	9.35	10.02
DHANLAXMI BANK LIMITED	5.50	5.81	5.30	4.07	4.40	5.02
FEDERAL BANK LTD	12.96	14.71	14.94	10.82	10.38	12.76
HDFC BANK LTD.	14.30	16.88	16.96	16.66	16.61	16.28

ICICI BANK LIMITED	17.81	18.62	17.18	14.68	12.27	16.11
IDBI BANK LIMITED	13.65	11.84	8.38	6.22	3.84	8.78
IDFC FIRST BANK LIMITED	4.34	10.22	10.43	0.75	2.73	5.69
INDUSIND BANK LTD	4.15	15.24	14.44	10.13	7.33	10.26
<b>Total</b>	<b>138.93</b>	<b>162.25</b>	<b>150.34</b>	<b>114.64</b>	<b>108.69</b>	<b>134.97</b>

Source: RBI Website

Table 3 represents Return on Equity ratio of both public sector bank and private sector bank from 2021 to 2025. From the above table it is observed that the total mean value of public sector bank was 1.56% in the year 2021 and it drastically improved to 2025 in the year 172.62% in the year 2025. Whereas the total mean value of private sector bank was 108.69 in the year 2021 and it increased to 138.93 in the year 2025. Though the mean value of private sector bank is more when compared to public sector bank, private sector banks have shown a consistent improvement over the years.

**Table 4: Return on Investment ratio**

<b>Public Sector Banks</b>	<b>2025</b>	<b>2024</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>Mean</b>
BANK OF BARODA	6.87	6.79	6.53	6.11	6.37	6.54
BANK OF INDIA	7.08	6.55	6.31	6.15	6.68	6.55
BANK OF MAHARASHTRA	7.13	6.51	6.21	6.41	6.60	6.57
CANARA BANK	6.67	6.70	6.50	6.24	6.59	6.54
CENTRAL BANK OF INDIA	7.07	6.78	6.28	6.40	6.88	6.68
INDIAN BANK	7.00	6.73	6.46	6.25	6.60	6.61
INDIAN OVERSEAS BANK	6.68	6.14	6.08	5.86	6.53	6.26
PUNJAB AND SIND BANK	6.68	5.62	5.42	5.64	6.62	6.00
PUNJAB NATIONAL BANK	6.69	6.77	6.55	6.14	6.44	6.52
STATE BANK OF INDIA	6.84	6.70	6.29	5.99	6.65	6.50
UCO BANK	6.78	6.51	10.77	6.32	6.56	7.39
UNION BANK OF INDIA	6.70	6.64	6.21	5.87	6.73	6.43
<b>Total</b>	<b>82.20</b>	<b>78.44</b>	<b>79.60</b>	<b>73.37</b>	<b>79.26</b>	<b>78.57</b>
<b>Private Sector Banks</b>	<b>2025</b>	<b>2024</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>Mean</b>
AXIS BANK LIMITED	6.30	6.45	6.44	5.83	6.56	6.32
BANDHAN BANK LIMITED	6.23	6.53	6.14	5.45	5.80	6.03
CITY UNION BANK LIMITED	6.51	6.39	6.29	5.82	6.28	6.26
CSB BANK LIMITED	6.57	6.33	6.29	5.80	8.00	6.60
DCB BANK LIMITED	7.21	7.29	6.54	6.76	7.22	7.01
DHANLAXMI BANK LIMITED	5.73	5.63	5.93	5.79	5.94	5.80
FEDERAL BANK LTD	7.15	6.72	6.34	6.12	6.43	6.55
HDFC BANK LTD.	6.93	7.28	6.44	5.79	5.56	6.40
ICICI BANK LIMITED	6.82	6.95	6.21	5.55	6.23	6.35
IDBI BANK LIMITED	7.10	7.21	6.51	5.64	6.35	6.56
IDFC FIRST BANK LIMITED	6.84	6.06	6.03	5.71	6.69	6.27
INDUSIND BANK LTD	6.93	6.54	6.09	5.76	5.93	6.25
<b>Total</b>	<b>80.32</b>	<b>79.39</b>	<b>75.26</b>	<b>70.04</b>	<b>76.99</b>	<b>76.40</b>

Source : RBI Website

Table 4 represents the Return on Investment ratio of both public sector bank and private sector banks from the year 2021 to 2025. From the above table it is observed that the mean total value of public sector bank was 79.26% in the year 2021 and has increased to 82.20% in the year 2025. Both the banks doesn't show much difference when it comes to return on investment.

**Table 5: Ratio of NPA to Net Advances**

<b>Public Sector Banks</b>	<b>2025</b>	<b>2024</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>Mean</b>
BANK OF BARODA	0.58	0.68	0.89	1.72	3.09	1.39
BANK OF INDIA	0.82	1.22	1.66	2.34	3.35	1.88
BANK OF MAHARASHTRA	0.18	0.20	0.25	0.97	2.48	0.82
CANARA BANK	0.70	1.27	1.73	2.65	3.82	2.03
CENTRAL BANK OF INDIA	0.55	1.23	1.77	3.97	5.77	2.66
INDIAN BANK	0.19	0.43	0.90	2.27	3.37	1.43
INDIAN OVERSEAS BANK	0.37	0.57	1.83	2.65	3.58	1.80
PUNJAB AND SIND BANK	0.96	1.63	1.84	2.74	4.04	2.24
PUNJAB NATIONAL BANK	0.40	0.73	2.72	4.80	5.73	2.88
STATE BANK OF INDIA	0.47	0.57	0.67	1.02	1.50	0.85
UCO BANK	0.49	0.89	1.29	2.70	3.94	1.86
UNION BANK OF INDIA	0.63	1.03	1.70	3.68	4.62	2.33
<b>Total</b>	<b>6.34</b>	<b>10.45</b>	<b>17.25</b>	<b>31.51</b>	<b>45.29</b>	<b>22.17</b>
<b>Private Sector Banks</b>	<b>2025</b>	<b>2024</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>Mean</b>
AXIS BANK LIMITED	0.35	0.34	0.41	0.67	1.06	0.57
BANDHAN BANK LIMITED	1.28	1.11	1.17	1.66	3.51	1.75
CITY UNION BANK LIMITED	1.25	1.97	2.36	2.95	2.97	2.30
CSB BANK LIMITED	0.52	0.51	0.35	0.68	1.17	0.65
DCB BANK LIMITED	1.12	1.11	1.04	1.97	2.31	1.51
DHANLAXMI BANK LIMITED	0.99	1.25	1.16	2.85	4.76	2.20
FEDERAL BANK LTD	0.44	0.60	0.69	0.96	1.19	0.78
HDFC BANK LTD.	0.43	0.33	0.27	0.32	0.40	0.35
ICICI BANK LIMITED	0.42	0.45	0.51	0.81	1.24	0.69
IDBI BANK LIMITED	0.15	0.34	0.92	1.36	1.97	0.95
IDFC FIRST BANK LIMITED	0.53	0.60	0.86	1.53	1.86	1.08
INDUSIND BANK LTD	0.95	0.57	0.59	0.64	0.69	0.69
<b>Total</b>	<b>8.43</b>	<b>9.18</b>	<b>10.33</b>	<b>16.4</b>	<b>23.13</b>	<b>13.49</b>

Source: RBI Website

Table 5 represents the ratio of NPA to Net Advances of both public sector bank and private sector bank. From the above table it is observed that the total NPA of public sector bank was 45.29% in the year 2021 and it has been reduced to 6.34% in the year 2025 which shows improved efficiency and financial positions of the banks. Whereas private sector banks total NPA was 23.13% in the year 2021 it has been reduced to 8.43% which means a good sign on business. When we compare both public and private sector banks public sector banks have shown a better performance.

**Result**

**Table 6: Ratio of Net Interest Income to Total Assets - Net Interest Margin**

Anova: Single Factor						
<b>SUMMARY</b>						
<b>Groups</b>	<b>Count</b>	<b>Sum</b>	<b>Average</b>	<b>Variance</b>		
Public Sector Bank	12.00	24.20	2.02	0.03		
Private Sector Bank	12.00	22.54	1.88	0.03		
<b>ANOVA</b>						
<b>Source of Variation</b>	<b>SS</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>P-value</b>	<b>F crit</b>
Between Groups	0.12	1.00	0.12	4.04	0.06	4.30
Within Groups	0.63	22.00	0.03			
Total	0.75	23.00				

Since F Value is lesser than the F critical Value we accept the null hypothesis. There is no significant difference in the mean Net Interest Margin between Indian Public Sector Bank and Private Sector Bank.

**Table 7: Return on Assets**

Anova: Single Factor

**SUMMARY**

<b>Groups</b>	<b>Count</b>	<b>Sum</b>	<b>Average</b>	<b>Variance</b>
Public Sector Bank	12.00	4.49	0.37	0.04
Private Sector Bank	12.00	3.62	0.30	0.06

**ANOVA**

<b>Source of Variation</b>	<b>SS</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>P-value</b>	<b>F crit</b>
Between Groups	0.03	1.00	0.03	0.61	0.44	4.30
Within Groups	1.13	22.00	0.05			
Total	1.16	23.00				

Since F value is lesser than F Critical Value we accept the null hypothesis. There is no significant difference in the mean Return on Asset Between Public Sector Bank and Private Sector Bank.

**Table 8: Return on Equity**

Anova: Single Factor

**SUMMARY**

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Public Sector Bank	12.00	66.39	5.53	16.58
Private Sector Bank	12.00	54.07	4.51	18.71

**ANOVA**

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	6.33	1.00	6.33	0.36	0.56	4.30
Within Groups	388.20	22.00	17.65			
Total	394.53	23.00				

Since F value is lesser than F critical value accept null hypothesis. There is no significant difference in the mean Return on Equity between Indian Public Sector Bank and Private Sector Bank.

**Table 9: Return on Investment**

Anova: Single Factor

**SUMMARY**

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Public Sector Banks	12.00	62.16	5.18	0.12
Private Sector Banks	12.00	58.67	4.89	0.03

**ANOVA**

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.51	1.00	0.51	6.67	0.02	4.30
Within Groups	1.67	22.00	0.08			
Total	2.18	23.00				

Since F value is Greater than F critical value, reject null hypothesis and accept alternative hypothesis. There is a significant difference between the Return on Investment from Public Sector Bank and Private Sector Bank.

**Table 10: Ratio of NPA to Net Advances**

Anova: Single Factor

**SUMMARY**

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Public Sector Banks	12.00	22.17	1.85	0.42
Private Sector Banks	12.00	13.49	1.12	0.43

## ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	3.13	1.00	3.13	7.38	0.01	4.30
Within Groups	9.35	22.00	0.42			
Total	12.48	23.00				

Since F Value is greater than F critical value, reject null hypothesis and accept alternative hypothesis. There is a significant difference between the Ratio of NPA to Net Advances of Public Sector Banks and Private Sector Banks.

**CONCLUSION:**

The study analyzes the financial performance of both public and private sector banks. As per the findings of the study, private sector banks have a better performance based on Return on Investment and Ratio of NPA to Net Advances. Whereas there is no significant difference between Public Sector Banks and Private Sector Banks when it comes to Net Interest Margin, Return on Asset and Return on Equity.

It's a good opportunity for investors to diversify their portfolio to private sector banks. As their performance is comparatively high when compared with public sector banks.

**REFERENCE:**

1. Dr. P. Pirakatheeswari (2023), "FINANCIAL PERFORMANCE OF SELECTED PUBLIC AND PRIVATE SECTOR BANKS IN INDIA" Vol. XXI, No.21, January – June: 2023, 87
2. Sanjeeta Parab (2024) "Evaluating key financials of public versus private sector banks in India: An investment perspective" Banks and Bank Systems, Volume 19, Issue 4, 2024
3. Dr. Nithyakalyani C (2026) "Financial Innovation and Financial Performance of Selected Private Sector Banks in India: An Empirical Analysis" Volume 7, Issue 2 E-ISSN: 3048-7641