Analysis of Financial Performance of Selected Public and Private Sector Banks

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Abstract

The commercial banks have played a vital role in depicting the financial system of any country. The health of any country can be defined by the condition of the financial system which is going to be reformed. Reforms have been done from time to time on the ground of several committees introduced in the banking sector such as the first Narasimham Committee (1991), Verma Committee (1996), Khan Committee (1997), second Narasimham Committee (1998). The growth and efficiency of the country can be determined through the financial performance of the banks. The main task of this paper was to do a comparative analysis of the financial performance of selected public sector and private sector banks. Besides this, the study tried to acknowledge the financial stability, liquidity, profitability, and other financial aspects of the banks. For the study purpose, three public sector banks (State Bank of India, Bank of Baroda, and Punjab National Bank) and three private sector banks (HDFC Bank, ICICI Bank, and Axis Bank) were chosen as they have the largest financial base. The overall study is based on the secondary data collected from the annual reports, newspapers, magazines, and online sources for the period of 5 years from 2015-2019. It was found from a comparative analysis that the public sector banks have made a significant progress, but they still do not meet the performance benchmark set by the private sector banks. Private sector banks (2.02300%) were found to be more successful in controlling the non-performing assets (NPA) in comparison to the public sector banks (5.12133%).

Keywords : Commercial banks, social base, financial performance, profitability, liquidity

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Indian banks play a vital role in the growth of an economy and development of our country. A bank is a financial institution which does not only accept deposits and pays interest, but it also helps the country in developing by providing loans to the needy and formation of capital in the economy. The banking sector of our country is considered to be the lifeline of the modern economy. The banking sector fulfils the financial requirements of households, trade, industries, and different businesses.

In India, banks have played an important role in the socioeconomic development of the nation after independence. India has developed very fast with the help of our banking sector. From the establishment of the first bank of India, Bank of Hindustan (1770) to the establishment of Reserve Bank of India (1935), there have been vast changes in the functions of banks. Reserve Bank of India (RBI) was chosen as the Central bank of India in 1935. The main function performed by RBI was to issue and supply the Indian rupee. After independence, RBI

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issued many measures for the improvement of the economic growth of the country.

In this study, State Bank of India, Bank of Baroda, Punjab National Bank, Industrial Credit and Investment Corporation of India (ICICI Bank), Axis Bank, and The Housing Development Finance Corporation Bank (HDFC Bank) have been selected to ascertain the financial position and liquidity of the banks. In case of public sector banks, the government has major holdings of at least 51% shares. In early times, public sector banks made significant progress, but still, private sector banks have better performance than the public sector banks. After independence, the banking sector of India took two major actions — in 1949, the Banking Regulations Act was set up, which provided very extreme powers to the RBI, and the second, the RBI got nationalized.

Nowadays, we have seen that commercial banks are facing lots of challenges like high rate of non-performing assets (NPA), competition in the banking sector, government policies, creditworthiness, weakening asset qualities, etc. These are collectively creating a negative and drastic impact on our economy. Here, the subject matter of the study is to do a comparative analysis of selected public and private sector banks in India.

Review of Literature

Literature review is a significant part of a research study and was conducted to search the recent studies done in the given field. Some of these literatures are depicted here :

Koley (2019) attempted to examine the financial performance and efficiency of the selected banks. The analysis studied the performance of banks for the period belonging to 2013–14 to 2017–18 with the help of CAMEL model and statistical tool : *t* - test. The empirical study observed that the capital adequacy ratio (CAR) of SBI and HDFC was much better than the base ; debt-equity ratio of SBI was higher as compared to that of HDFC Bank. The attempt involved 16 ratios out of which 14 ratios were withstanding with HDFC. HDFC stood with victory against SBI.

Balaji and Kumar (2016) conducted an analysis and comparison of overall financial position of selected banks. The study involved a time-period of five months, *t*-test, mean, and graphs. The conclusion out of the analytical study was that there was an increment in profitability of both sectors, but the growth rate was higher for private sector as compared to the public sector. Public sector banks were lagging behind and faced varied challenges. The contribution in social aspects stood commendable with regard to public sector banks.

Chadha (2017) conducted a study with a perspective to assess the impact of SBI, BOB, and PNB Bank over HDFC Bank and ICICI Bank considering the time period from 2014 – 15 to 2016 – 17. The study followed a qualitative approach and diverse ratios. The results revealed that profitability of majority of the banks showed good earning over return on assets, equity paid up to net worth, return on investment, and deposits.

Goel and Rekhi (2013) attempted to measure the relative performance of the Indian banking sector. The emphasis involved a time-period of 2009 – 2012 by following diverse ratios and coefficient correlations matrix. The extract drawn out of the study is that PNB marked high return on assets (ROA) as compared to others. Net interest margin of PNB, BOB, ICICI, SBI were comparatively less than that of HDFC Bank and Axis Bank. Capital deposit ratio (CDR) of Axis Bank and HDFC Bank was high and had greater sign for profit increment. Capital deposit ratio of BOB, PNB, ICICI Bank was lesser. SBI and AXIS Bank had remarkable capital deposit ratio.

Gajera's (2016) study indicated towards financial performance, parameters of better or poor performance, and factors responsible for respective presentation of banks. The emphasis covered a 12 years time from 2001 – 02 to 2012 – 13. The methods adopted for analysis are varied ratios and varied research designs namely descriptive, analytical, and exploratory. The analysis made for financial performance of banks at three diverse levels such as inter-bank comparison within sector, comparison between sectors, and varied banks.

Chandan Babu and Rajini (n.d.) threw light on identification and analysis of factors influencing the customer's adoption of technology. Researchers adopted the questionnaire form of compilation of data as well as verbal information. The study demanded various suggestions like all banks should provide ATM facilities. There should be suitable recruitment of more officers in public sector banks and the overburdened and understaffed branches should be made systematically sufficient.

The main perspective behind the study conducted by Chaudhari and Sharma (2011) was to measure the impact of public and private sector banks. Statistical tools were used as a tool for projection of trend. The results revealed that an efficient management information system should be developed, and bank staffs should be trained properly, and prevention of advances turning into non-performing assets (NPAs) should be focused upon. Public sector banks should improvise functioning to compete with private sector banks.

Ali and Bisht (2018) measured the satisfaction levels of customers of public and private sector banks. Data compilation were done on the basis of primary information obtained from 200 banking customers. There was no specific variance in satisfaction of customers from rural and urban areas. Behaviour of public sector banks was not found to be upto the mark as compared to private banks. Dilemmas were identified in the form of infrastructure, tangibility, and ATMs related to public sector banks. The study recommended that the employees of public sector banks should be provided better training.

Need of the Study

There is stiff competition in the present dynamic economic environment and every firm must be ready to change itself in the changing environment. Merger and acquisition is one tool in the hand of banks to restructure themselves. Merger of banks in India is not new. Imperial Bank of India was formed in 1921 by the merger of three presidency banks which is now known as State Bank of India. Nowadays, mergers play a significant role in the Indian banking sector and the structure of banking scenario is going to change rapidly. It makes the banks financially more strong in different ways like, upgrading the technology, avail the banking products conveniently, increase in market share, increase in profit, etc. Therefore, an attempt is made in the present study to analyze the performance of banks after merger.

Objectives of the Study

(1) The foremost objective of the study is to analyze and compare the financial performance of SBI, BOB, PNB, HDFC Bank, Axis Bank, and ICICI Bank with a specific time period of past 5 financial years ranging from 2014 – 15 to 2018 – 19.

(2) To ascertain the liquidity of the banks and analyze whether they are capable of meeting the short term loans effectively or not.

(3) To analyze whether the public sector banks are performing well or private sector banks are more effective (Banerjee, 2018).

Hypotheses

- **H_0 :** There is no significant difference between the financial performance of public and private sector banks.
- **H_1 :** There is a significant difference between the financial performance of public and private sector banks.

Research Methodology

(i) Scope and Type of the Study : The scope of the study is limited in nature. The study is confined to the Indian banking sector. Yet, the study covers selected banks only. The study is based on a comparative analysis which comes under the purview of descriptive and analytical (Nagaraju, 2014).

(ii) Population : The total population of the study includes public and private sector banks in India.

(iii) Period of the Study : The study covers a period of 5 years ranging from 2014 – 15 to 2018 – 19.

(iv) Type of Data : The study is based on secondary data.

(v) Sources of Data Collection : The information were collected from published data of selected banks, RBI annual bulletin, annual reports, Money Control, bank websites, Business Today, journals, research papers, text books, etc.

(vi) Sampling Frame, Sampling Unit, and Sampling Technique : The study comprises of data taken from six banks from the banking sector in India. The sample includes three public sector banks and three private sector banks. These banks were selected on the basis of market capitalization. These banks are :

Public Sector Banks	Private Sector Banks
State Bank of India	Housing Development Finance Corporation (HDFC Bank)
Bank of Baroda	Industrial Credit and Investment Corporation of India (ICICI Bank)
Punjab National Bank	Axis Bank

For the purpose of the study, judgement technique is employed.

(vii) Analysis Design : Different financial and statistical tools are used to analyze the data. CAMEL model is used to know the capacity of a firm (Varghese, 2016). CAMEL stands for capital adequacy, asset quality, management quality, earnings efficiency, and liquidity (Sahota & Dhiman, 2017). Nowadays, it is used to evaluate the performance of banks.

Analysis and Results

Table 1 shows the financial position of selected private sector banks ranging from the period of 2015 – 2019. The table depicts that the capital adequacy ratio of all selected banks is good and banks were able to meet with the future unabsorbed liability. HDFC Bank showed the lowest NPA (0.245%) in the year of 2014 –15 ; whereas, ICICI Bank was on the top with the highest NPA (5.43%) in the year 2016 – 17. Profit per employee (PPE) of HDFC Bank was the highest (₹ 21.49 lakhs) out of the selected banks in the year of 2018–19 and Axis Bank got the lowest position in earning profit per employee (₹ 0.46 lakhs).

Highest business per employee (BPE) represents the efficiency of banks ; here, HDFC Bank showed greater efficiency in all selected private banks with a BPE figure of ₹ 1,776.99 lakhs. Return on assets (ROA) of HDFC Bank (2%) was the highest in the year of 2014–15 ; whereas, Axis Bank showed the lowest return on assets (0.003%) in the year of 2017–18. HDFC Bank exhibited a good relationship between current assets and current liabilities by showing current ratio as 2.09 times in the year of 2015–16; whereas, ICICI Bank was not in a good position as it showed the highest blocking of assets (5.162 times) in the year of 2017–18.

Table 2 indicates the financial performance of selected public sector banks (SBI, BOB, and PNB) from the

Table 1. Year Wise Financial Data of Private Sector Banks

Bank	Year	CAR (%)	NPA/NA (%)	PPE (₹ in Lakh)	BPE (₹ in Lakh)	ROA (%)	CR (in Times)
HDFC	2014–15	17	0.245	13.39	1070.03	2	1.710
ICICI		17	1.610	16.84	1129.38	1.72	2.121
AXIS		15	0.468	17.42	1429.13	1.59	3.054
HDFC	2015–16	16	0.284	14.04	1154.72	1.92	2.09
ICICI		17	2.97	13.47	1186.96	1.34	3.381
AXIS		15	0.74	16.40	1389.73	1.56	4.048
HDFC	2016–17	15	0.332	17.25	1420.94	1.88	1.61
ICICI		17	5.43	11.83	1151.93	1.26	4.036
AXIS		15	2.31	6.49	1390.83	0.61	3.64
HDFC	2017–18	15	0.395	19.81	1639.72	1.93	3.49
ICICI		18	5.43	8.19	1297.53	0.77	5.162
AXIS		17	3.77	0.46	1498.42	0.03	3.575
HDFC	2018–19	17	0.392	21.49	1776.99	1.90	2.36
ICICI		17	2.31	0	0	0.34	4.283
AXIS		16	3.70	7.55	1684.32	0.58	3.84

period of 2015–2019 on different parameters. As per RBI norms, the public sector banks need to maintain 12% capital adequacy ratio, and the results show that SBI and BOB were able to maintain the adequate ratio, while PNB failed to maintain the adequate ratio of CAR. Ratio of NPA to NA of these banks were increasing from first 4 years, but in the last year, the results show that there was a decrease in the NPAs of banks, that is, the figures were : SBI

Table 2. Year Wise Financial Data of Public Sector Banks

Bank	Year	CAR (%)	NPA/NA (%)	PPE (₹ in Lakh)	BPE (₹ in Lakh)	ROA (%)	CR (in Times)
SBI	2014–15	12	2.12	6.144	17613.54	0.63	1.36
BOB		13	1.88	6.88	2117.59	0.43	7.24
PNB		13	4.04	4.48	1291.42	0.50	3.95
SBI	2015–16	13	3.81	4.78	19032.54	0.42	1.40
BOB		13	4.96	-10.37	1841.19	-0.80	6.79
PNB		11	8.55	-5.61	1363.50	-0.59	5.65
SBI	2016–17	13	3.71	5.00	21058.9	0.38	1.64
BOB		13	4.71	2.63	1878.9	0.19	7.90
PNB		12	7.79	1.79	1408.56	0.18	6.73
SBI	2017–18	13	5.73	-2.47	20706.8	-0.18	1.48
BOB		12	5.49	-4.42	1852.26	-0.33	5.45
PNB		9	11.22	-16.39	1436.58	-1.6	5.78
SBI	2018–19	13	3.01	0	0	0.02	1.71
BOB		13	3.33	0.77	1986.41	0.05	5.09
PNB		10	6.47	-14.08	1610.65	-1.28	7.31

(3.01%), BOB (3.33%), and PNB (6.47%). There were fluctuations in the earning of profit per employee of the selected public sector banks. BOB showed highest PPE (₹ 6.68 lakhs) in the year of 2014–15, while PNB indicated highest negative earnings of PPE (₹ –14.08 lakhs). PNB showed a continuous increase in business per employee from ₹ 1,291.42 lakhs in 2015 to ₹ 1,610.65 lakhs in 2019 ; whereas, SBI showed highest PPE (₹ 21,058.9 lakhs) in the year of 2016–17. Return on assets revealed the capacity of assets to earn income for the banks. SBI showed maximum return on assets (0.63%) in all selected public sector banks in the year 2014–15, and then it started to decline till 2017–18, while PNB showed worst condition in the earning of return on assets (–1.28) in the year of 2018–19. There is no more versatility in maintaining the current ratio of SBI as it maintained equal to ideal ratio of current ratio, while the table shows that BOB blocked a big amount in the form of current assets.

Table 3 and Figure 1 depict the average results of selected private sector banks from the period of 2015 – 2019 on different financial basis. CAR of all these three banks are approximately equal to the grand average. HDFC Bank is found to be financially sound as it showed lowest average NPA (0.329%) in comparison to the other two banks. Average profit per employee of HDFC Bank (₹ 17.19 lakhs) was more than the grand average PPE (₹ 12.30 lakhs), while the two other banks had lower PPE than the grand average of PPE. ICICI Bank did not show good business per employee (₹ 953.16 lakhs) as compared to the grand average (₹ 1,281.37 lakhs). Return on assets of Axis Bank (0.874%) was lower than that of HDFC Bank and ICICI Bank. Average current ratio of all these three private sector banks is more than the ideal ratio (2 : 1).

Table 4 and Figure 2 describe the average results of selected public sector banks on the basis of different key variables ranging from 2015 – 2019. SBI and BOB had satisfactory capital adequacy ratio (12.80%) ; whereas,

Table 3. Average of Key Variables Per Bank Per Period (2015–19) for Private Sector Banks

S. No.	Banks	Avg. CAR (%)	Avg. NPA/NA (%)	Avg. PPE (in lakh)	Avg. (in Lakh)	BPE Avg. ROA (%)	Avg. CR (in times)
1.	HDFC	16	0.329	17.19	1412.48	1.926	2.25
2.	ICICI	17.2	3.55	10.06	953.16	1.086	3.79
3.	AXIS	15.6	2.19	9.66	1478.48	0.874	3.63
	Grand Average	16.27	2.023	12.30	1281.37	1.295	3.22

Figure 1. Private Sector Banks : Average Results of Different Financial Parameters (2015 – 19)

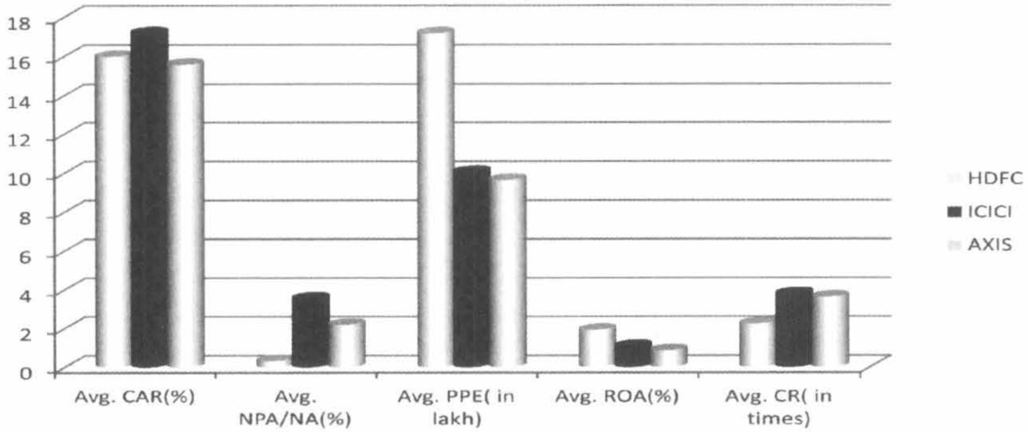
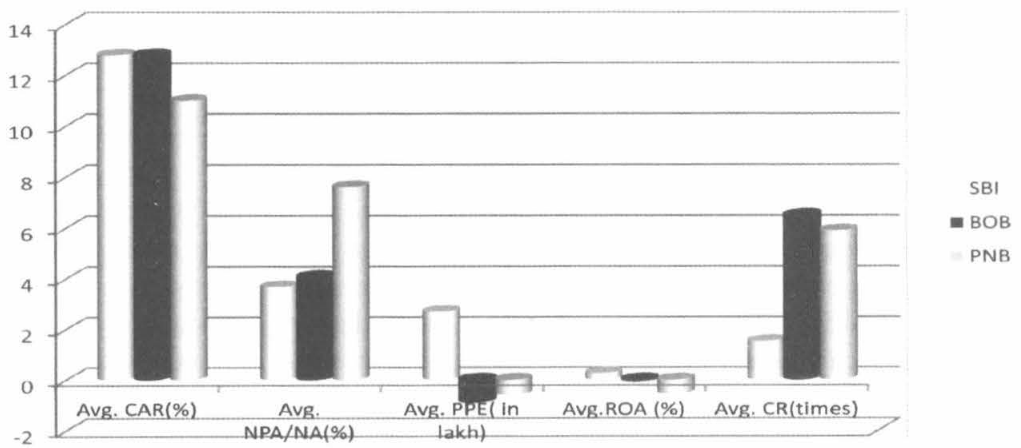


Table 4. Average of Key Variables Per Bank Per Period (2015–19) for Public Sector Banks

S. No.	Banks	Avg. CAR (%)	Avg. NPA/NA (%)	Avg. PPE (in Lakh)	Avg. BPE (in Lakh)	Avg. ROA (%)	Avg. CR (in times)
1.	SBI	12.80	3.676	2.690	15682.35	0.254	1.518
2.	BOB	12.80	4.074	–0.902	1935.27	–0.084	6.494
3.	PNB	11	7.614	–0.596	1422.14	–0.558	5.884
	Grand Average	12.2	5.121	0.397	6346.58	–0.129	4.632

Figure 2. Public Sector Banks : Average Results of Different Financial Parameters (2015 – 19)



PNB maintained only 11% of CAR. PNB showed highest percentage (7.614%) of NPAs as compared to SBI (3.676%) and BOB (4.074%). Only SBI showed positive result in average profit per employee (₹ 2.690 lakhs), while the other two showed negative results. Average BPE of SBI (₹ 15,682.35 lakhs) was higher than that of BOB (₹ 1,935.27 lakhs) and PNB (₹ 1,422.14 lakhs) and only SBI showed more average BPE than the grand average. BOB and PNB exhibited negative performance in earning ROA, while SBI showed 0.254% of average return on assets. It can be inferred from the results that only SBI had a satisfactory current ratio, while the other two banks had higher current ratio than required.

Discussion

(1) Capital Adequacy Ratio (CAR) : Capital adequacy ratio is a measure of a bank's capital and it shows the ability of a bank in managing the need of additional capital, if conditions arise. As per Table 5, the mean value of private sector banks is more than that of the public sector banks in case of capital adequacy ratio. Hence, the private sector banks are more secure from the future point of view as compared to the public sector banks as these are providing more protection to depositors and promote the stability and efficiency of the banks. In Table 6, equal variances not assumed are to be used for comparing public and private sector banks because the significance value (p - value : 0.001) for F-test is less than 0.5 $(0.001 < 0.558)$. Using the bottom row, $t = 5.289$ and significance value for t-test is 0.007. At the 95% confidence level, it can be concluded that there is a significant difference in public and private sector banks $(.007 < 0.05)$.

Table 5. Group Statistics

	Type of Bank	*N*	Mean	Std. Deviation	Std. Error Mean
CAR	Private	3	16.2667	.83266	.480740
	Public	3	12.2000	1.03923	.600000
NPA to NA	Private	3	2.0230	1.61698	.933564
	Public	3	5.1213	2.16786	1.251618
BPE	Private	3	1281.3733	286.15030	165.20895
	Public	3	6346.5866	8089.07802	4670.23137
PPE	Private	3	12.30333	4.236701	2.446060
	Public	3	.39733	1.991394	1.149732
ROA	Private	3	1.29533	.556364	.321217
	Public	3	–.12933	.407894	.235498
CR	Private	3	3.22333	.846714	.488854
	Public	3	4.63200	2.713996	1.566926

(2) Net Non-Performing Assets to Net Advances (NNPA to NA) : This ratio shows the quality of banks' assets. It expresses the relationship between the uncovered loans or bad loans to net advances of the banks. A greater value of the ratio shows the inefficiency of the banks to recover their advances. So, it is better for the banks to maintain a lower rate of this ratio. From Table 5, it is observed that mean value of public sector banks (5.12133) is more than two times that of private sector banks (2.02300). Public sector banks are not in a good condition to recover their bad loans. It can be inferred from Table 6 that the significance (p - value) for the f - test (0.457) is less than 0.5 (0.457< 0.5) ; so, the variances are not assumed to be equal, and the bottom row for t - test result will be used. Here, the p - value for this t - test is .124, which is more than 0.05 (.124 > 0.05). Therefore, the null hypothesis is accepted for the conclusion. At the 95% confidence level, it can be calculated that there is no significant difference in public and private sector banks (3.699 > 0.05).

(3) Business Per Employee (BPE) : The employees' contribution in banks can be measured by business per employee for the 5 year time period (2015–19) as portrayed in Table 5. In case of HDFC Bank, business per employee increased continuously from ₹ 1,070.03 lakhs to ₹ 1,776.99 lakhs. In public sector banks, PNB showed positive increment in BPE from 2015 – 2019 of ₹ 1,291.42 lakhs to ₹ 1,610.65 lakhs. The public sector banks showed higher BPE as compared to private sector banks. As per Table 6, significant p - value for f-test is .018, which is less than 0.05 ; so, it can be concluded that there is difference in the BPE of public and private sector banks. In case of equal variances not assumed, value for t - test is –1.084 and significance value is .391, which is more than 0.05, which supports the result that BPE of both the sector banks are not the same.

(4) Profit Per Employee (PPE) : The efficiency of employees can be studied with the help of profit per employee. It can be calculated by dividing the profit by number of employees. In the given sample, profit per employee of HDFC Bank increased from ₹ 13.99 lakhs in 2015 to ₹ 21.49 lakhs in 2019 in case of private sector banks, while in the case of public sector banks, PNB showed very bad condition, and the value of PPE was increasing in a negative way. In all, from Table 5, it can be concluded that employees' contribution in financial position of public sector banks (₹ .397 lakhs) was very low in comparison to private sector banks (₹ 12.30 lakhs). It is observed from Table 6 that significant p -value for f - test is .131, which is greater than .05. The equal variance assumed is .012, which is less than 0.05. Hence, the null hypothesis is rejected.

Table 6. Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	*T*	*df*	Sig.(2-tailed)	Mean Diff.
CAR	Equal Variances Assumed	.408	.558	5.289	4	.006	4.066667
	Equal Variances Not Assumed			5.289	3.818	.007	4.066667
NPA to NA	Equal Variances Assumed	.676	.457	-1.984	4	.118	3.098333
	Equal Variances Not Assumed			-1.984	3.699	.124	3.098333
BPE	Equal Variances Assumed	14.741	.018	-1.084	4	.339	5065.2133
	Equal Variances Not Assumed			-1.084	2.005	.391	5065.2133
PPE	Equal Variances Assumed	3.601	.131	4.405	4	.012	11.90600
	Equal Variances Not Assumed			4.405	2.843	.024	11.90600
ROA	Equal Variances Assumed	.616	-476	3.577	4	.023	1.42466
	Equal Variances Not Assumed			3.577	3.688	.027	1.42466
CR	Equal Variances Assumed	6.194	.068	-.858	4	.439	-1.40866
	Equal Variances Not Assumed			-.858	2.386	.468	-1.40866

(5) Return on Assets : It explains the efficiency of banks in earning profit by utilizing the available resources. Return on assets is the ratio of annual net profit to the total assets of the banks during a financial year. In the given sample, by surpassing the time, the ROA of both the banks (public sector banks and private sector banks) showed decreasing returns from 2015 – 2019. None of the banks showed positive returns. In the year of 2014 –15, ROA of SBI, BOB, and PNB were 0.63%, 0.47%, and 0.50%, respectively, while in the year of 2018–19, ROA of the same banks were 0.02%, 0.05%, and –1.28% respectively. From Table 5, the comparative study of public and private sector banks in consideration with ROA showed that private sector banks' average ROA was 1.295%, and the public sector banks' average ROA was – 0.129. The Table 6 shows that the significant p - value is .476, which is greater than 0.05. The equal variance assumed is 0.023, which is less than 0.05. Hence, the null hypothesis is rejected.

(6) Current Ratio (CR) : Current ratio is a highly useful ratio in calculating the liquidity position of the banks. It is useful for internal as well as external parties of the banks. It is very important for the banks to maintain a balanced situation as per the requirement because a high level of current ratio will show extra cost on the bank, while on the other hand, lower level of current ratio will indicate risk of bankruptcy. The ideal current ratio is 2 : 1. Table 5 shows that the HDFC Bank, out of the private sector banks, was able to maintain the balanced situation of current ratio ; whereas, in case of public sector banks, SBI maintained the equilibrium level of current ratio. In all, BOB is the worst in maintaining the current ratio situation. The comparison of public and private sector banks related to the current ratio suggests that the private sector banks (3.2233) are better than the public sector banks (4.6320)

(Table 5). As per the independent sample test, it is perceived from Table 6 that the significant p - value for the f - test is 0.68, which is greater than 0.05. The equal variance assumed is .439, which is greater than 0.05 ; so, the null hypothesis is accepted that there is no difference in the current ratio of public and private sector banks.

Findings

From the analysis of the financial position of public and private sector banks, the following results are obtained :

↳ The capital adequacy ratio for both types of banks – public (except PNB) and private sector banks was more than the specified norms of RBI, that is, 12%. Therefore, it presents a good financial condition of the Indian banking sector. From the depositor point of view, private sector banks are found to be more secure than the public sector banks.

↳ The NPA of public sector banks was more than that of the private sector banks. From the last few years, public sector banks are trying to control the increase in the non-performing assets. The implementation of Insolvency and Bankruptcy Code, 2016 and Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 were one of the main causes of reduction in NPAs of public sector banks during the last few years.

↳ Profit per employee of private sector banks was quite high in comparison to that of the public sector banks. Even the results show negative profit returns per employee in case of public sector banks (BOB and PNB). HDFC Bank showed higher profit (Average PPE of ₹ 17.19 lakhs) per employee. There was a significant difference between profit per employee of public and private sector banks as their profit showed a big difference.

↳ Business per employee of public sector banks was higher than that of private sector banks because public sector banks provided a good working environment to their employees. Hence, the public sector banks have good opportunities to enhance their efficiency and productivity in business operations.

↳ Private sector banks had good return on assets as compared to the public sector banks. Advanced technology, better management, competitive marketing strategies, etc. may be the reasons of earning high revenue on assets by private sector banks.

↳ There was no significant difference in the current ratio of public and private sector banks. The results show that both the banks maintained adequate level of liquidity position. They were able to meet the needs of day to day customer demand, and also, they were able to meet the sudden demand of high cash by depositors.

↳ The results depict that private sector banks played a better role — better than the public sector banks in the current scenario (Jain, Metri, & Rao, 2019).

Research Implications

Efforts have been taken in the present study for making valuable contribution to the present literature regarding financial health of the banks. The study aimed to explore and compare the profitability position of public and private sector banks in India. The study would be beneficial for the researchers and academicians for further research, helpful for the government in framing the policy, and provides a base for the banks to take decisions regarding profitability, solvency, liquidity, earning per share, and granting loans to the needy.

Limitations of the Study

- The study is primarily based on secondary data.
- The study ignores changes in the price level due to change in time.
- The study is confined to the selected banks only.
- The study covers a limited time period.
- The results of the study may be affected by the limitations of the tools used for the study like, *t*-test, mean, and ratio analysis.

Scope for Further Research

Basically, the research is done to give an answer of unanswered questions, and also, it has a number of questions with it. Hence, there is a question of further research on a number of issues where we faced problems during the course of research. Thus, it would be significant to consider the following suggestions for further research :

- Since, the research was confined and limited to the selected banks only, therefore, it provides little ideas about the financial conditions of the banks in India. It would be good for further research to include other banks also.
- The present study is based on secondary data only. For further research, primary data may also be utilized to give a clearer picture of the banks.
- There are many other variables which influence the financial position of the banks, such as, return on funds, cost of funds, return on advances, etc. These variables may be covered for future research as well.

Authors' Contribution

Piyush Gupta and Krishna Kumar Jaiswal conceived and designed the analysis. Collection of the data for the study was done by Krishna Kumar Jaiswal, while the analysis and interpretation work was done by Piyush Gupta. The paper was written by Piyush Gupta and was critically revised by Krishna Kumar Jaiswal. Both the authors read and finally approved the paper.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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Appendix

List of Abbreviations :

- HDFC Bank - Housing Development Finance Corporation
- ICICI Bank - Industrial Credit and Investment Corporation of India
- SBI - State Bank of India
- BOB - Bank of Baroda
- PNB - Punjab National Bank
- CAR - Capital Adequacy Ratio
- NPA - Non-Performing Assets
- NA - Net Advances
- PPE - Profit per Employee
- BPE - Business per Employee
- ROE - Return on Assets
- CR - Current Rate

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