

Paired Comparison Analysis Of Financial Performance Of Certain Private Sector Banks In India For The FY 2018-19

D. Sandhya¹· Chaithra N²

¹Department of Management, East West College of Management, Bangalore, Karnataka, India

²Department of Management, East West College of Management, Bangalore, Karnataka, India

Abstract

Currently India's Private sector banks are competing intensely with the other scheduled banks. Their business practices and technology adaptation has changed the way banking sector functions in India. Among the 22 banks there are very few banks that are contributing to more than 90% for the development of banking sector. Among them are HDFC Bank, ICICI Bank, and Federal Bank, Axis Bank and Yes Bank to name a few. This study is an effort to understand the financial performances of these banks and rank them according to their performances. The study considers five financial performance ratios namely "Net Profit Margin Ratio", "Operating Profit Margin", "Return on Asset", "Return on Equity", "Net Interest margin" and "Cost to income ratio" for the FY2018-19. The researcher is using the paired comparison method for analyzing the relative performance of the above mentioned banks. The required data on the performance ratios are collected from RBI website, Moneycontrol.com and the financial statements of the respective bank from their websites. Using the paired comparison method, where the banks are relatively compared with each other, we can say that HDFC bank is best performing; following to it is Federal bank, Axis Bank, Yes bank and ICICI bank in the descending order of the ranks. The same kind of study can be done comparing different to her Private and PSBs (PSBs) with the two foreign banks and do the categories of banks. The study may also extend to comparison of performances of previous financial years also.

Keywords- Private sector banks; profitability ratios; Performance analysis.

1. INTRODUCTION

In today's business scenario, banking is one of the fastest growing sectors all over the world. Without efficient banking facility, development of any economy is questionable. Like any other country, even in India banking is the most essential aspect for its development. Indian Financial System has a very great contribution to the Indian economy. RBI being a regulatory body monitors the fiscal system in India. After independence RBI has taken several initiatives to increase the Financial Inclusion in India. After introduction of New Economic Policy in 1991, there was a revolutionary change seen in banking industry. RBI gave permission for many Private sector and Foreign banks to open up in India.

Banks operating in India as on 2019

Table 1: ("Reserve Bank of India - Bank links," n.d.)

Bank Groups	Number of Banks
Private Sector Banks	22
PSBs	20
Local Area Banks	3
Small Finance Banks	10
Payment Banks	7
Financial Institutions in India	4
Regional and Rural Banks	45
Foreign Banks	44

Introduction of new Private sector banks and to an extent, introduction of foreign banks has changed the functioning of Banks totally. The private sector banks are having a critical role in improving the Indian economy. They are in a competition with the PSBs and old generation Private sector banks in demanding them also to adopt the advance technological setup within them. Private Banks are contributing with high degree of professional approach in functioning, creating positive competition, boosting foreign investment, supporting to access foreign capital markets, bringing in Innovation for enhanced performance. Private Banks have introduced various new and advanced technologies in the banking services. Therefore, private sector banks lead the other banks in various new fields like induction of computerized operations, plastic card business, ATM and CDM services, online banking etc.

Nowadays, investors and other stake holders are very keen on the bank performance and there is an extensive scope of indicators in the financial reports to evaluate financial performance. Hence this study focuses to analyze the financial performances of few selected Private sector Banks in India by using paired comparison analysis as a tool.

2. Review of Literature

- (Dhanabhakym&Karthick,2016): The paper aims to ‘compare and evaluate the performances of selected Public and Private sector banks in India’. The main aim is to analyse the ‘profitability and liquidity position’ of PSB and Private sector banks. The study was purely based on secondary data. The period of the study was for 10 years (2005-2015). 5 banks of each type are considered for the study. The researcher uses the Ratio Analysis tool namely ‘Profitability ratio, Liquidity ratio and investor’s valuation ratio’ to measure the performances, also uses descriptive statistical tools like mean, Standard Deviation and CV. The findings of the study indicate that the Indian Private sector banks better than PSBs in their performance. There searcher includes that the banks should satisfy their customers by creating friendly customer environment.
- (Singh, 2016): The study was conducted to ‘evaluate the financial performance of Private sector banks using CAMEL model’. There searcher chose the top banks for analysis. The study was for 5 years (2010-15). The secondary sources were used to collect the data. Banks were ranked in ascending order based on the parameters of individual bank by calculating mean and also composite Ranking of banks was done to analyse the data. The study reveals that HDFC Bank is excellent in performance and is ranked 1st among other banks. The researcher concluded that Indus land and Axis bank performance on CAMEL component was also good.
- (Karne, n.d.)(2017): The researcher aims to ‘analyse the financial performance of selected Private sector Banks in India using Profitability Ratios’. The private sector banks considered for the study was Axis bank, ICICI bank, Kotak Mahindra Bank, Karur Vysya Bank, Yes Bank and the period of the study was for 5 years (2012-2016). The data was collected by secondary sources. The researcher concludes that the private sector banks are seen to be moderately superior.
- (Pinto & Al-shawesh, n.d.) (2018): The research was conducted to ‘analyse the performance of Private sector banks’. The study is done to compare the ICICI bank performance with other

banks in the private sector. The other banks considered for the study was Axis, HDFC and Kotak Mahindra. The period of the study was 5 Years (2012-13 to 2016-17). The data was collected through secondary sources. The various ratios considered for the study was 'Net Profit Margin', 'Interest spread', 'return of net worth', 'Total assets turnover ratio', 'Credit deposit ratio', 'return on assets', 'Liquid assets to demand deposit' and 'cash deposit ratio'. The statistical tools used for the study was mean, Variance and ANOVA. The findings of the study revealed that ICICI bank has achieved a better position with positive differences in comparison with select Private sector Banks in India.

- (Koley, 2019): The research was to 'analyse the performance and financial position of public and private sector banks'. The study was comparative on SBI and HDFC bank. The main purpose of the study was to analyse the performance and to examine whether there exist any significant differences in their performances. The data was collected through secondary sources. The period of the study is 5 years (2014-2018). To assess the financial strength CAMEL model was used and also descriptive analysis tools like mean, T test was also used to analyze the data. The parameters considered for the study was 'Asset quality', 'Capital adequacy', 'Management efficiency', 'earnings ability' and 'liquidity'. It was found that HDFC bank has higher results for all ratios. It was inferred that HDFC bank was in a higher position than SBI bank in terms of liquidity.

Research gap: From the above reviews, attempts are made by researchers to analyze and evaluate the financial performance of few top Private sector banks and also comparing it with PSBs by using various evaluation tools like 'ratio analysis', 'CAMEL model and descriptive analytical tools. But there is no work done on analysis of performance using Paired comparison method by considering different banks in India. Hence the present study tries to analyze the performance of selected private sector banks by considering 5 key performance ratios as parameters using paired comparison method of analysis for the financial year 2018- 19.

3. Company Profile

The following are the Private Sector Banks considered for the study for the FY 2018-19.

("Top 10 Private Banks in India 2020 by RBI," n.d.)

Name of the bank	Head Quarters	Established year	No of branches as on 2019	No of employees as on 2019	No of ATM's as on 2019
ICICI	Mumbai	1994	4882	84992	15101
HDFC	Mumbai	1994	4014	104154	12160
Federal	Kochi	1931	1251	12295	1516
Axis	Mumbai	1993	4094	61940	11800+
Yes	Mumbai	2004	1122	18238	1220

Source: Banks websites

4. Objectives of the Study

- To study the financial performances of private sector banks chosen.
- To identify the banks based on their financial performances.
- To provide an insight to the investors, customers and other interested stake holders for any business decisions in the banks considered for the study.

5. Scope of the Study

- This paper covers only five Private Sector banks in India namely ICICI Bank, HDFC Bank, Federal Bank, Axis Bank and Yes Bank.
- The study considers 5 performance ratios namely, “Net Profit Margin Ratio”, “Operating Profit Margin”, “Return on Asset”, “Return on Equity”, “Net Interest Margin” and “Cost to Income Ratio”. The study considers the performances of the banks for the FY 2018-19
- The study uses Paired Comparison method for analyzing and evaluating the performances of the banks

6. Research Methodology

The effort is to analyze the financial performance of the private sector banks considered for the study for the FY 2018-19 and rank them based on their performances.

Research Design:

The research is descriptive and analytical which is based on secondary data.

Samples: The study includes 5 Private sector banks in India for the year FY 2018-19 namely HDFC Bank, ICICI Bank, Federal Bank, Axis Bank and Yes Bank.

Data Collection:

Secondary sources are used to collect the required data for the study. To mention a few sources, RBI, Moneycontrol.com and websites of various private sector banks considered for the study.

Tool used for analysis is Paired Comparison Analysis:

Paired Comparison Method is a simple and economical HR tool used for evaluating the performance of an employee, team or an Organization in comparison with others. It outlines the values and compares them to each other. It helps to work out the position of one person or organization relative to one another. In this study we have the banks for comparison relative to one another. It's sometimes hard to identify the best performer when the values are different and varied. When all the banks are compared with each other it is easy to identify the position of one bank against the other banks. This helps to identify the critical issues to solve. It also makes easy to set priorities of issues to resolve. The tool is mostly useful when the data available does not help in arriving at a right decision. It is also useful to compare similar, particular data, for example, if the relative importance of competencies and ability to perform need to be checked in seams in the process of Recruitment. In this study this tool is used for assessing the relative position of different banks. It's especially helpful where preferences are vague, where the banks are to an extent different in some aspects, where evaluation becomes subjective, or where there is tough competition among themselves. This is an efficient tool that helps comparison of one bank against all others, and helps to show the differences in factors chosen in the study.

The following steps are followed to use this tool for comparing the performances of the banks.

- A Paired comparison work sheet is drawn along with the score sheet for every ratio against which the banks are being compared.
- A list of all of the banks that needs to be compared is made and every bank has been assigned a letter.

Bank	Alphabet
------	----------

'ICICI Bank'	I
'HDFC Bank'	H
'Federal Bank'	F
'Axis Bank'	A
'Yes Bank'	Y

- Banks are marked as both the row and column headings on the worksheet. This is to compare banks with one-another easily. On the table, where the cells are comparing a bank with itself are blocked out. The cells on the table where duplicating a comparison happens, even those cells are also blocked out. This ensures that comparisons are made only once. The total number of comparisons can be calculated by using the formula

Total Number of Comparisons/appraisals= $n(n-1)/2$.

Here n= total number of banks considered for comparison.

In this paper, there are 5 banks that are considered. The performance of each bank is considered against the other 4 banks forever criteria/Ratio. Hencen = 5and the total number of comparisons would be $5(5-1)/2=$ 10comparisons.

- In each of the blank cells, the banks are compared against row and column. Decision is taken on which of the two banks is with a higher/major importance and the letter allocated of the performing bank is written in the cell.
- The difference in performance between the banks is recorded, running from zero (no difference to same importance) to two (major difference)

IMPORTANCE	RATI NG
Minor Difference	0
Medium Difference	1
Major Difference	2

- Finally, the results are consolidated by adding up the values for each of the banks. The total score of each bank is converted into percentage. In few places the scores are manually adjusted to round it off to bring it to100%.
- After to telling the overall scores of various criteria considered, banks are ranked according the final scores. Rank1 is obtained by the bank which gets the highest score and the last rank is obtained by the bank with the least score.

A. Limitations of the study

- The study is limited to only Private sector banks in India.
- The study considers only five Private sector banks in India
- The study analyses the performance of the select banks only for the FY2018-19
- The study uses 5 performance ratios to analyze the bank's performance.
- The study uses paired comparison method to analyze the financial performance of the banks.

7. Analysis and Interpretation

Key Performance Ratios for the year 2019-20 that are considered for the study is based on which the analysis of the performances of the banks are observed are:

- “Net Profit Margin Ratio”(NPM):**
It is the percentage of net profit to the revenue earned during a particular period. NPM Ratio also specifies the proportion of sales revenue which translates into net profit. Greater the value of NPM value better the bank generates the revenue and convert it into profits. Hence greater the NPM better is the bank performance.
- “Operating Profit MarginRatio”(OPM):**
It is the ratio of operating profit (PBIT to the revenue earned during a period in percentage. Normally, a higher operating profit margin is needed as it reflects greater potential to generate profits and reasonable if any increase in competition or costs experienced.
- “Returnon Assets Ratio”(ROA):**
It is an indicator of how profitable a company is in comparison to its total assets. ROA gives an idea on efficiency of a company's management in using its assets to generate earnings. Higher the ROA more is the asset efficiency. Hence higher the ROA better is the performance of the bank.
- “Returnon Equity Ratio”(ROE):**
It is a very important profit ability ratio that issued to measure the company's income that is returned as shareholders' equity. It measures the profitability of a company with regard to shareholders' equity. The higher the ROE, the more efficient and organization is at generating income and growth from its equity. Hence higher the value of ROE better is the performance of the bank.
- “Net Interest Margin Ratio” (NIM):**
NIM ratio measures the profit a company because of the investing deeds to its total investing assets measured in percentage. This ratio analyzes the investment decisions and track the profitability of lending operations of a company. This way companies can adjust their lending system to maximize profitability. NIM is an indicator of a bank's profitability and growth. It reveals banks' earning in interest on its loans Vs payment of interest on deposits. Hence higher the value of NIM better is the performance of the bank.
- “Cost to Income Ratio” (COI):**
This shows the relation between income and cost. This ratio helps in analyzing banking stocks. It gives clarity of how efficiently is the bank performing. Cost Income ratio is inversely proportional to bank profitability. The lower a bank's COI, the more efficiently a bank is operating, the outcome of which is the increased profitability. On the other hand, if cost raises, profitability decreases.

Banks and value of Ratios considered for the study

Bank/ Ratios	NPM (%)	OPM (%)	ROA (%)	ROE (%)	NIM	CTI
'ICICI Bank'	5.3	-17.58	0.34	3.19	2.8	48.98
'HDFC Bank'	21.29	3.48	1.69	14.12	3.87	38.41
'Federal Bank'	10.89	-0.93	0.78	9.37	2.62	33.54
'Axis Bank'	8.5	-15.37	0.58	7.01	2.71	44.28

'Yes Bank'	5.8	-9.68	0.45	6.39	2.57	37.05
------------	-----	-------	------	------	------	-------

Source: Moneycontrol.com

Table No 1: Performance indicator Ratings and Values of Net Profit Margin Ratio

IMPORTANCE	RATING	VALUES
Minor Difference	0	5.3 to 10.60
Medium Difference	1	10.61 - 15.91
Major Difference	2	15.92 - 21.29

Analysis: Table helps us understand that Net Profit Margin Ratio of various banks selected for the study ranges from 5.3% to 21.29%. These values are divided into 3 scales with a rating of 0, 1 and 2. Rating of 0 is given to the banks with a minor or no difference consisting arrange of values from 5.3 to 10.60, rating of 1 is assigned to banks with medium difference with arrange of values between 10.61 to 15.91 and rating of 2 is given with a major difference with a range of values between 15.92 to 21.29 percent.

Table No 2: Paired Comparison analysis and score of Banks on Net Profit Margin

Banks	I	H	F	A	Y
I		B-2	C-1	D-0	E-0
H			B-2	B-2	B-2
F				C-1	C-1
A					D-1
Y					

Banks	Score	Percentage
I	0	0
H	8	66.67
F	3	25
A	1	8.33
Y	0	0

Interpretation:

The score sheet explains that Bank A with a score of 0 and a percentage of 0%, Bank B with a score of 8 and a percentage of 66.67%, Bank C with a Score of 3 and a percentage of 25% and Bank D is with a score of 1 and percentage of 8.33% and Bank E is with a score and percentage of 0.

Table No 3: Performance indicator Ratings and Values of Operating Profit Margin Ratio

IMPORTANCE	RATING	VALUES
Minor Difference	0	- 17.58 to - 10.46
Medium Difference	1	-10.45 to - 3.34
Major Difference	2	-3.33 To 3.48

Analysis:

From the above table it can be understood that Operating Profit Margin Ratio of various banks selected for the study ranges from -17.58% to +3.48%. These values are divided into 3 scales with a rating of 0, 1 and 2. Rating of 0 is given to the banks with a minor or no difference consisting a range of values from -17.58 to -10.46%, rating of 1 is given to banks with medium

difference with arrange of values between -10.45to-3.34% and rating of 2 is given with a major difference with arrange of values between-3.33to +3.48%.

Table No 4: Paired Comparison analysis and Score Sheet of Banks on Operating Profit Margin of banks

Banks	H	F	A	Y
I	B - 2	C - 1	D - 0	E - 1
H		B - 2	B - 2	B - 2
F			C - 2	C - 2
A				E - 1
Y				

Banks	Total	Percentage
I	0	0
H	8	53.33
F	5	33.33
A	0	0
Y	2	13.33

Interpretation:

The score sheet explains that Bank A with ascore of 0 and a percentage of 0%, Bank B with ascore of 6 and a percentage of 40%, Bank C with a Score of 5 and a percentage of 33.33% and Bank D is with a score of 2 and percentage of 13.33% and Bank E is with a score of 2 and a percentage of 13.34% (rounded off to make it hundred%).

Table No 5: Performance indicator Ratings and Values of Return on Asset Ratio

IMPORTANCE	RATING	VALUES
Minor Difference	0	0.34 to0.79
Medium Difference	1	0.80 to 1.25
Major Difference	2	1.26 to 1.69

Analysis:

From the above table it can be understood that Return on Asset Ratio of various banks selected for the study ranges from 0.34 to1.69%. These values are divided into 3 scales with a rating of 0,1and 2, Rating of 0 is given to the banks with a minor or no difference consisting a range of values from 0.34 to 0.79%, rating of 1 is given to banks with medium difference with a range of values between 0.80 to 1.25%and rating of 2 is given with a major difference with a range of values between 1.26 to1.69%.

Table No 6: Paired Comparison analysis and score sheet of banks on Return on Asset

Bank	Total	Percentage
I	0	0
H	8	100
F	0	0
A	0	0
Y	0	0

Banks	I	H	F	A	Y
I		B-2	C-0	D-0	E-0
H			B-2	B-2	B-2
F				C-0	C-0
A					D-0
Y					

Interpretation: The score sheet explains that Bank A with a score of 0 and a percentage of 0%, Bank B with a score of 8 and a percentage of 100%, Bank C, Bank D and Bank E with a Score of 0 and a percentage of 0%

Table No 7: Performance indicator Ratings and Values of Return on Equity

IMPORTANC E	RATI NG	VALUES
Minor Difference	0	3.19 to 6.83
Medium Difference	1	6.84 to 10.48
Major Difference	2	10.49 to 14.12

Analysis: From the above table it can be understood that Return on Equity Ratio of various banks selected for the study ranges from 3.19 to 14.12 %. These values are divided into 3 scales with a rating of 0, 1 and 2, Rating of 0 is given to the banks with a minor or no difference consisting a range of values from 3.19to 6.83%, rating of 1 is given to banks with medium difference with a range of values between 6.84 to 10.48%and rating of 2 is given with a major difference with a range of values between 10.49 to14.12%.

Table No 8: Paired Comparison analysis and score sheet of banks on Return on Equity

Banks	I	H	F	A	Y
I		B-2	C-1	D-1	E-0
H			B-2	B-2	B-2
F				C-1	C-1
A					D-1
Y					

Bank s	Tota l	Percentag e
I	0	0
H	8	61.53
F	3	23.07
A	2	15.40
Y	0	0

Interpretation: The score sheet explains that Bank A with a score of 0 and a percentage of 0%, Bank B with a score of 8 and a percentage of 61.53%, Bank C with a Score of 3 and a percentage of 23.07% and Bank D is with a score of 2 and percentage of 15.40% and Bank E is with a score of 0 and a percentage of 0%

Table No 9: Performance indicator Ratings and Values of Net Interest Margin

IMPORTANC E	RATI NG	VALUES
Minor Difference	0	2.57 to 3
Medium Difference	1	3.01 to 3.44
Major Difference	2	3.45 to 3.87

Analysis: Table explains that Net interest Margin Ratio of various banks selected for the study ranges from 2,57 to 3.87 These values are divided into 3 scales with a rating of 0, 1 and 2, Rating of 0 is given to the banks with a minor or no difference consisting a range of values from 2,57 to 3,44, rating of 1 is given to banks with medium difference with a range of values between 3.01 to 3.44 and rating of 2 is given with a major difference with a range of values between 3.45to3.87.

Table No 10: Paired Comparison analysis and score sheet of banks on Net Interest Margin ratio

Banks	I	H	F	A	Y
I		B-2	A-0	A-0	A-0
H			B-2	B-2	B-2
F				D-0	C-0
A					D-0
Y					

Banks	Total	Percentage
I	0	0
H	8	100
F	0	0
A	0	0
Y	0	0

Interpretation:

The score sheet explains that Bank A with a score of 0 and a percentage of 0%, Bank B with a score of 8 and a percentage of 100%, Bank C, Bank D and Bank E with a Score of 0 and a percentage of 0%

Table No 11: Performance indicator Ratings and Values of Cost to Income Ratio

IMPORTANCE	RATI NG	VALUES
Minor Difference	0	48.98 to 43.83
Medium Difference	1	43.83 to 38.69
Major Difference	2	38.68 to 33.54

Analysis: Table explains that Cost to Income Ratio of various banks selected for the study ranges from 33.54% to 48.98%. These values are divided into 3 scales with a rating of 0,1and 2. As the values of CIM are inversely proportional to the performance, Rating of 0 is given to the banks with a major difference consisting a range of values from 48.98 to 43.83%, rating of 1 is given to banks with medium difference with a range of values between 43.83 to 38.69%and rating of 2 is given with a minor or no difference with a range of values between 38.68

to33.54%.

Table No 12: Paired Comparison analysis and score sheet of banks on Cost to Income ratio

Banks	I	H	F	A	Y
I		B-2	C-2	D-0	E-2
H			C-2	B-2	E-0
F				C-2	C-2
A					E-2
Y					

Banks	Total	Percentage
I	0	0
H	4	25
F	8	50
A	0	0
Y	4	25

Interpretation: The score sheet explains that Bank A with a score of 0 and a percentage of 0 % ,Bank B with a score of 8 and a percentage of 61.53%, Bank C with a Score of 3 and a percentage of 23.07% and Bank D is with a score of 2 and percentage of 15.40% and Bank E is with a score of 0 and a percentage of 0%

Table no 13: Consolidated table of Scores of various Performance ratios of Private sector banks

Bank/ Ratio wise Ranks	NPM (%)	OPM (%)	ROA (%)	ROE (%)	NI M	CT I	Tot al Sco re	Fi na l R an k
‘ICICI Bank’	0	0	0	0	0	0	0	5
‘HDFC Bank’	8	8	8	8	8	4	44	1
‘Federal Bank’	3	5	0	3	0	8	19	2
‘Axis Bank’	1	0	0	2	0	0	3	4
‘Yes Bank’	0	2	0	0	0	4	6	3

The above table explains the overall scores of each bank considered for the study using the paired comparison Analysis tool for comparing the performances of banks.

- The Net Profit Ratio is used to measure the bank’s ability to generate revenue into profits. HDFC bank scores are high with 8 points having NPR of 21.29% followed by Federal bank (3 points) with 10.89%, Axis Bank (1 point) with 8.5%, Yes bank and ICICI bank scores doesn’t make much difference with 5.8% and 5.3% respectively. Hence Yes Bank and ICICI bank must concentrate on Net profit to increase their performances.
- Operating Profit margin reflects the percentage of profit a bank produces from its operations. HDFC bank scores are high with 8 points with a positive percentage of 3.48 followed by federal bank with-0.93%, Yes Bank (-9.68), Axis Bank (-15.37) and ICICI bank (-17.58) where it doesn’t make much differences when compared among themselves.
- The Return on Assets ratio is used to measure the profitability of the banks. HDFC banks with a

high point of 8 having 1.69% of ROA ,followed by federal Bank (0.78) , Axis bank (7.01) Yes Bank (0.45) and ICICI bank (0.34) doesn't make much differences in their performances based on Return on Assets.

- Return on Equity measures the efficiency of the banks management in generating income from equity financing. HDFC banks scores high with 8 points having 14.12% of ROE followed by Federal Bank (9.37%), Axis bank (7.01%), and Yes Bank (6.39%) with a least difference and ICICI bank (3.19) must concentrate on ROE to enhance the Performance when compared to other banks.
- Net Interest Margin ratio measures the amount of money that bank earns through interest on loans compared to amount of interest it pays on deposits it is understood from the table that again H DFC bank is earning more money having a score of 8 points and NIM of 3.87 and other banks compared doesn't make much differences in NIM. Therefore, the banks are advised to concentrate on NIM to increase their performances.
- Cost to income Ratio measures the relation between the income and the cost involved in acquiring that income. It has an inverse relationship on performance. From the table it is understood that federal banks scores are high with 8 point s having least CIR (33.54) ,followed by Yes bank (37.05), HDFC bank (38.41%), Axis Bank (44.28) and ICICI bank (45.98). therefore, when comparing Axis Bank and ICICI bank must take care on CIR to increase their performances.

According to the scores obtained by the various banks considered for the study, when ranks are assigned.

Rank	Bank
1 st Rank	HDFC Bank
2 nd Rank	Federal Bank
3 rd Rank	Yes Bank
4 th Rank	Axis Bank
5 th Rank	ICICI Bank

These ranks are given to the banks after analyzing their performances using Paired Comparison Analysis. According to this method ,the banks are compared in pairs and performance Is compared between a pair of banks. It is mutually exhaustive in nature and hence we get to understand the performance of each bank more detailed under each criteria / performance ratio considered for the study. It is observed that HDFC bank is performing better when compared to other banks considered for the study. And ICICI bank with a least performance having a 5th rank when compared to other banks in the study. When we look at the total score Yes bank, Axis Bank and ICICI banks does not make major differences on their Performances.

8. CONCLUSION

When observed bank wise, HDFC Bank has all ratio indices better than the other banks compared in the study. Hence it stands first in the list. Federal bank is showing a good performance next to HDFC bank according to the ratio of NPM, OPM, ROE and CTI. It needs to improve itself in ROA and NIM. Hence it has taken fourth place in the study. Yes Bank indicates a good performance in OPM and CTI but needs improvement in performance in NPM, ROA, ROE and ROM in comparison to other banks in study except OPM. Still it occupies third place among the banks considered for the study. Axis Bank is showing a positive indication in NPM, OPM and ROE. The bank needs to improvise its ROA, NIM and CTI when compared to other banks. Hence it takes the fourth place among the banks considered for the study. ICICI bank is low in all ratios considered in the study when compared to the other banks of the study. Hence it stands at the last in the list.

To conclude it is very obvious that contribution of private sector banks is very beneficial to Indian economy and most of the credit goes to the exemplary performance shown by HDFC Bank, ICICI Bank, Federal Bank, Axis bank and other private sector banks. It is for sure that with this kind of enhanced performance and growth of the private sector banks, India is able to

and can compete with the world to prove that it is capable of becoming the third biggest economy by 2025.

REFERENCES

- [1] <http://blog.stockedge.com/what-is-cost-to-income-ratio/>
- [2] <https://www.sptulsian.com/f/p/how-to-calculate-cost-to-income-ratio-of-a-bank>
- [3] Dhanabhakya, M., & Karthick, C. (2016). Impact Factor: 5.2 IJAR, 2(8), 85–90.
- [4] Karne, S. (n.d.). Financial Performance of Banking Sector: an Analysis With Respect to Profitability Ratios of Selected Private Banks of India - Ignited Minds Journals.
- [5] Koley, J. (2019). Analysis of financial position and performance of public and private sector banks in India: A comparative study on SBI and HDFC bank. *A Multidisciplinary Online Journal of Netaji Subhas Open University*, 2(1), 1–14.
- [6] Paired Comparison Analysis - Decision-Making Skills From MindTools.com. (n.d.). Retrieved April 6, 2020, from https://www.mindtools.com/pages/article/newTED_02.htm
- [7] Pinto, O. R., & Al-shawesh, M. H. A. (n.d.). Financial Performance of Private Sector Banks With Reference to ICICI Bank And Selected Private Banks. Dr. Oshma Rosette Pinto & Mr. Mohammed Hussein Ali Al-Shawesh Dept. of Commerce St Philomena's College Mysore, (April 2018), 1–21.
- [8] Reserve Bank of India - Banklinks. (n.d.).
- [9] Singh, B. (2016). An Analysis of Indian Private Sector. *International Journal of Marketing & Financial Management*, 4(7), 36–52.
- [10] Top 10 Private Banks in India 2020 by RBI. (n.d.). Retrieved April 6, 2020, from <https://www.mymoneymantra.com/blog/top-10-private-banks-in-india-2019/>