Comparison of Selected Public Sector Banks in Different Aspects by using CAGR Method

Shipra Gupta, Rupa Khanna

Abstract: Banking sector has a vital role in Indian economy and a great change came in it after nationalization. Nationwide, there are a number of branches of banks and financial institutions have opened. Presently banking sector is facing a high level competition. Banks or financial Institutions which have maximum profit are showing maximum growth rate. By optimization of the resources of banks, cost becomes minimum and profit becomes maximum. This manuscript is an effort to make a comparative study between SBI, PNB and OBC for total income, expenses, net profit, share capital, operating expenses, share holder funds, total reserves, earning per share, total liabilities, total assets and total investments from 2014-19. Year over Year (YOY) and Compound annual growth rate (CAGR) analytical methods are used. The main parameter of this study belongs to P&L and Balance-Sheet statement of the selected banks. This research paper will be very fruitful for banks, research scholars, investors (public), and society to understand about the above given parameters.

Key Words: Earning per share (EPS), Shareholders funds, Total Operating expenses, Net profit. CAGR, YOY

I. INTRODUCTION

After banking nationalization, the banking system has considerably developed with a large network of branches and financial instruments. Banking sector is one of the fastest growing sectors in India. In earlier age banking was limited by two tasks as deposits and lending. Today's banking sectors are becoming more complex. Now banking has lead to various types of products and services like: retail banking, Investment banking, Capital banking, marketing collection, money marketing etc. Now banks have a large number of customers, transactions, accounts by the latest technologies and strategies. Now banks have two objectives maximize the profit and growth (wealth) along with the customers' satisfaction. Banking Sector growth is important for the economic development and prosperity of the country. Banking Sector works as the backbone of the economy, it controls demand and supply of money too. It works as the promoter of economic growth and development of finance. Banks accepts the money in the form of deposits, from those customers who have excess money and want to invest. This fund is provided in the form to industrialist and individuals. Now a day's banks are not only involved in intermediary services, but also earned profit to give money to industries at higher interest. It also provides the services of exchanging the money across different countries and again earned profit.

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This manuscript helps to the customers of banks understand about the bank's services and many more technical aspects. In this paper an effort has been made to assess the banking performance by ratio analysis for the measurement of profitability, evaluation of operational efficiency, liquidity, overall financial strength, and fiscal position in the economy. To know about the better performance and growth of selected public sector banks ratio analysis is used. Performance of Indian banking sectors is not an easy task. There are so many factors, which are in a need of taking under consideration. The percentage change method and compound annual growth rate are used to analyze the performance of selected banks.

Objectives of the Study

There are two objectives of this study.

1) To review different percentage growth changes of different components for different banks.
2) To compare among public sector banks (SBI, PNB and OBC).

II. REVIEW OF LITERATURE

The current situation of clients is requesting for e-commerce in Malaysian keeping money division. This paper is based on customer's inclination for electronic managing an account and its components. After the investigation of this paper afew components likesmooth accessibility of Web, clients mindfulness with respect to e-banking, alter in worthiness in clients behavior are profoundly influencing the utilization of e-banking in Malaysia clients [2,9]. Over the periods 2007 to 2011, in Gulf Cooperative Council (GCC) nations, the cost, income and benefit proficiency levels of 74 banks (47 ordinary and 27 Islamic banks) are studied by utilizing Data Envelopment analysis (DEA) strategy, it was found that the higher income effectiveness as it were influences a better benefit proficiency levels in Islamic banks [4]. This strategy is additionally utilizing the US banking industry by the Stochastic Frontier Approach (SFA), to assess the generation structure of combined and non-merged banks. This ponder is done for Malaysian banks in which Constrained banks are considered. The primary, specialized, locative and taken a toll wasteful aspects of Middle Eastern banks are found around 13%, 21% and 30%. The scattering of effectiveness is vital over the consider period since the coefficient of variety ranges from 18% to 39%, depending upon the measures of proficiency inspected additionally to watch the efficiency measured by the Malmquist and Luenberger files which is progressed by around 2.44% and 1.79% separately, but interests this advancement is completely clarified by the positive variety in specialized advance whereas the specializ ed proficiency component enlisted a negative variety [5, 8]. Over a period of 1993-99, in a board of Greek banks, a distributive free approach is utilized to explore taken toll productivity. Bank characteristics such as bank estimate, sort of possession and chance behavior plays a major part in clarifying contrasts in measured wasteful aspects. Scale economies are inspected and the discoveries demonstrate the Greek managing an account industry encounters [1]. A bank is institutions which receives savings in the form of deposits from customers and provide it in the form of loan to needed financial institutions [10]. Usman and Khan define the performance of conventional and Islamic banks [11]. Many researchers have measured the overall financial performance of selected main private sector banks in India by the application of CAMEL Model [12]. Aspal and Dhawan analyzed the execution of banks in India, Save Bank of India has endorsed two supervisory models (Capital Adequacy, Asset Management, Earnings, Liquidity Ratio, Frameworks and Controls) and CACS (Capital Adequacy, Asset Quality, Compliance, Frameworks and Controls) [13]. Performance of the managing account portions beneath CAMELS demonstrate, incorporates examination and appraisal of the five crucial measurements of keeping money operations. In this way the CAMELs how incorporates set of execution measures that give a comprehensive see of the banks [14]. Camel show incorporates five critical parameters that are Capital ampleness, Resource quality, Administration productivity, Profit quality and Liquidity. Agreeing to Mohiuddin, think about is carried out to survey the budgetary execution of the two major banks NCB and PCB working in Bangladesh [15]. Earnings per share is an important factor which investigations the affect of monetary use on a firm [16]. An adequate level of capital adequacy shows that the bank has sufficient amount of capital for the expansion. For the other side if it has enough net worth, it shows that it is capable for absorb any financial crisis without any bankruptcy. This ratio covers the bank solvency for timely payment and other risks as operational risk, market risk and credit risk [17]. Profitability of commercial banks is measured by Return on Equities (ROE) and Net Interest Margin ratio (NIM)[18]. How leverage ratios can be beneficial in different public sector banks and how these can be compared [3]. In the current scenario customers satisfaction with service quality is a big task in everywhere. In Tirupati region customers satisfaction in terms of service quality are measured in different public and private sector banks [7].

III. 3. RESEARCH METHODOLOGY

This research paper is based on descriptive type or secondary data based. These are collected from different banks reports, different financial statements and by different websites etc. Percentage Increase or decrease calculated by year over year (YOY) and compound annual growth rate (CAGR) method in different aspects. These are Percentage change in net profit, total operating expenses, shareholders funds and Earning per Share are calculated.

IV. DATA ANALYSIS AND INTERPRETATION

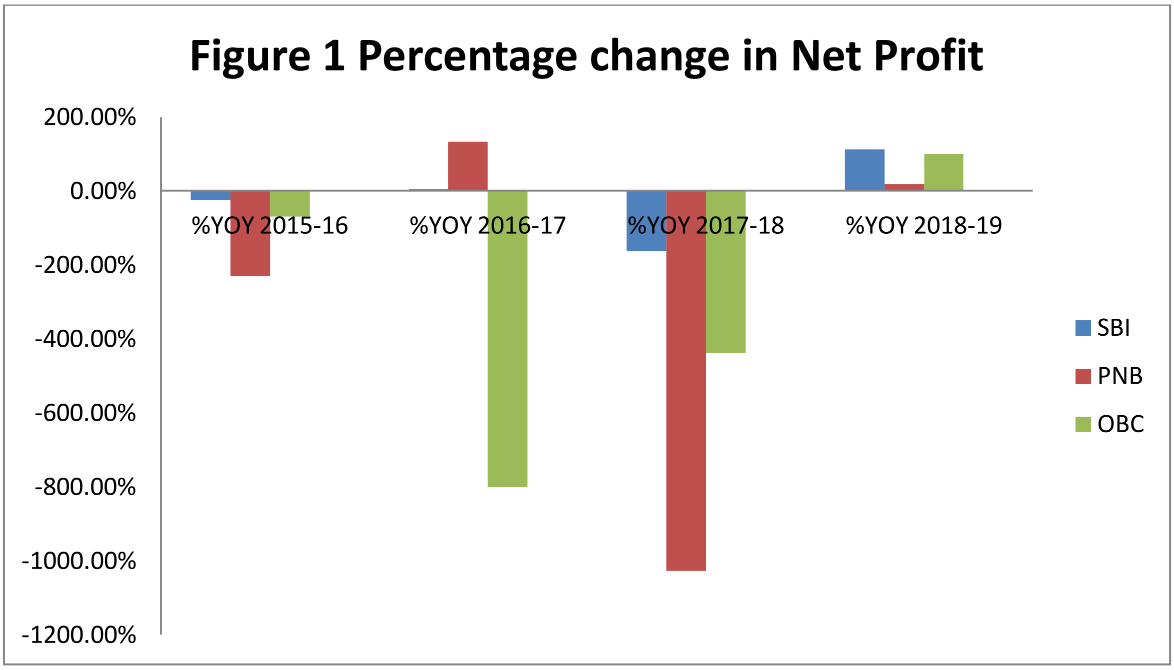
1) Net Profit

Table 1 Net Profit of different three banks from 2014-2015 to 2018-2019

Bank name	March , 2015	%YOY 2015-2016	March,2016	%YOY 2016-2017	March,2017	%YOY 2017-2018	March,2018	%YOY 2018-2019	March,2019
SBI	13101.57	(24.05)%	9950.65	5.36%	10484.10	(162.45)%	(6547.45)	113.17 %	862.23
PNB	3,061.58	(229.82) %	(3,974.40)	133.33%	1,324.80	(1027.15) %	(12,282.82)	18.79%	(9975.49)
OBC	497.08	(68.60)%	156.08	(800.97) %	(1,094.07)	(436.69)%	(5,871.74)	100.94 %	54.99

*() Stands for negative terms

**Sources of data: https:/www.sbi.com,https:/www.pnb.com,https:/www.obc.com.



Reference number [6, 17, 18]

Interpretation

By observing the above percentage change in net profit of SBI, it is decreased by 24.05% from compared to 2014-2015 and 2015-2016.Next year increased by 5.36% compared from 2015-2016 to 2016-2017. Again it has decreased by 162.45% compared from 2016-2017 and 2017-2018. But in next year it has a tremendous change in this percentage, it is increased by 113.17% compared from 2017-2018 to 2018-2019. So finally the nature of this percentage change is about to fluctuating.

In PNB, this percentage change is decreased by 229.82% from compared to 2014-2015 and 2015-2016. It has increased by 133.33% in next year compared from 2015-2016 to 2016-2017. Again it has decreased by 1027.15% compared from 2016-2017 and 2017-2018, but in next year it has increased by 18.79 %. So finally the nature of this percentage change is about to fluctuating.

In OBC, this percentage change is decreased by 68.60% from compared to 2014-2015 and 2015-2016. It has again decreased by 800.97% in next year compared from 2015-2016 to 2016-2017. Again decreased by 436.69 % compared from 2016-2017 and 2017-2018, but in next year it has a tremendous increased. After increased it would be 54.99%. So finally the nature of this percentage change is about to decreasing.

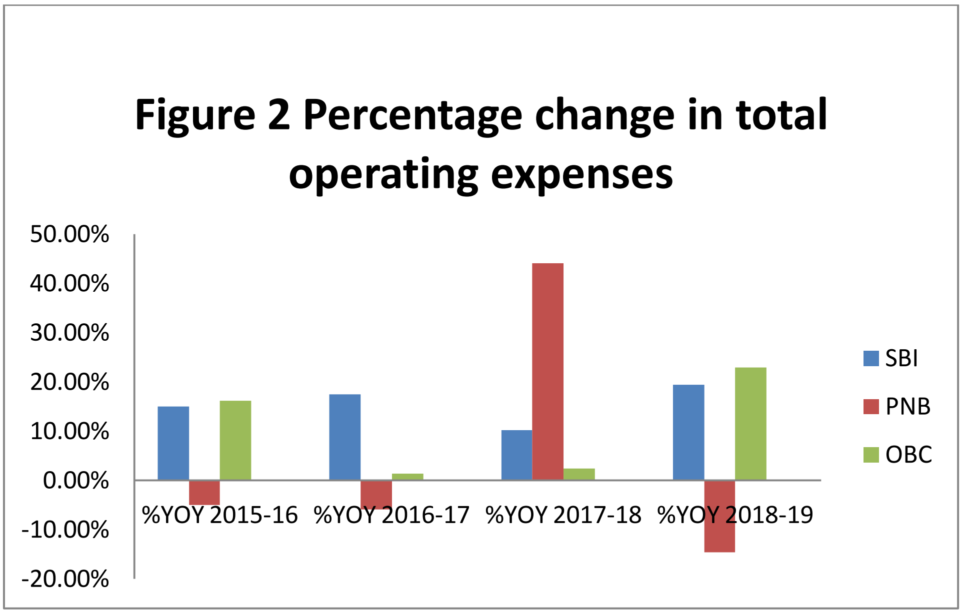
2) Total operating expenses

Table 2 Total Operating expenses of different three banks from 2014-2015 to 2018-2019

Bank name	March, 2015	%YOY 2015-2016	March, 2016	%YOY 2016-2017	March, 2017	%YOY 2017-2018	March, 2018	%YOY 2018-2019	March, 2019
SBI	73,224.23	**14.99%**	74,307.19	**17.47%**	87,289.89	**10.16%**	96,154.37	**19.39%**	114,800.30
PNB	10,491.55	**(4.95)%**	9,972.45	**(5.95)%**	9,379.38	**44.03%**	13,509.07	**(14.59)%**	11,538.47
OBC	2978.53	**16.12**	3458.79	**1.33%**	3504.88	**2.43%**	3589.95	**22.94%**	4413.43

*() Stands for negative terms

**Sources of data: https:/www.sbi.com,https:/www.pnb.com,https:/www.obc.com.



Reference number [6, 17, 18]

Interpretation

In SBI, by observing the above percentage change in total operating expenses, it is increased by 14.99 % from compared to 2014-2015 and 2015-2016. In next year it is increased by 17.47% compared from 2015-2016 to 2016-2017. In next year again increased by 10.16% compared from 2016-2017 and 2017-2018 but by analyzing overall this year percentage rate of ratio is decreased by others. In last year again it has increased. After increased it has become 19.39% compared from 2017-2018 and 2018-2019. So finally the nature of this percentage change is about to continuous increase.

In PNB, this percentage change is decreased by 4.95 % from compared to 2014-2015 and 2015-2016. It has again decreased by 5.95 % in next year compared from 2015-2016 to 2016-2017. It is increased by 44.03% compared from 2016-2017 and 2017-2018, in next year it has again decreased by 14.59% compared from 2017-2018 and 2018-2019. So finally the nature of this percentage change is about to decreasing.

In OBC, this percentage change is increased by 16.12% from compared to 2014-2015 and 2015-2016. It has increased by 1.33% in next year compared from 2015-2016 to 2016-2017 but by analyzing overall this year percentage rate of ratio is decreasing to others. Again it increased by 2.43% compared from 2016-2017 and 2017-2018. Again in last year it has increased by 22.94% compared from 2017-2018 and 2018-2019. So finally the nature of this percentage change is about to continuous increase.

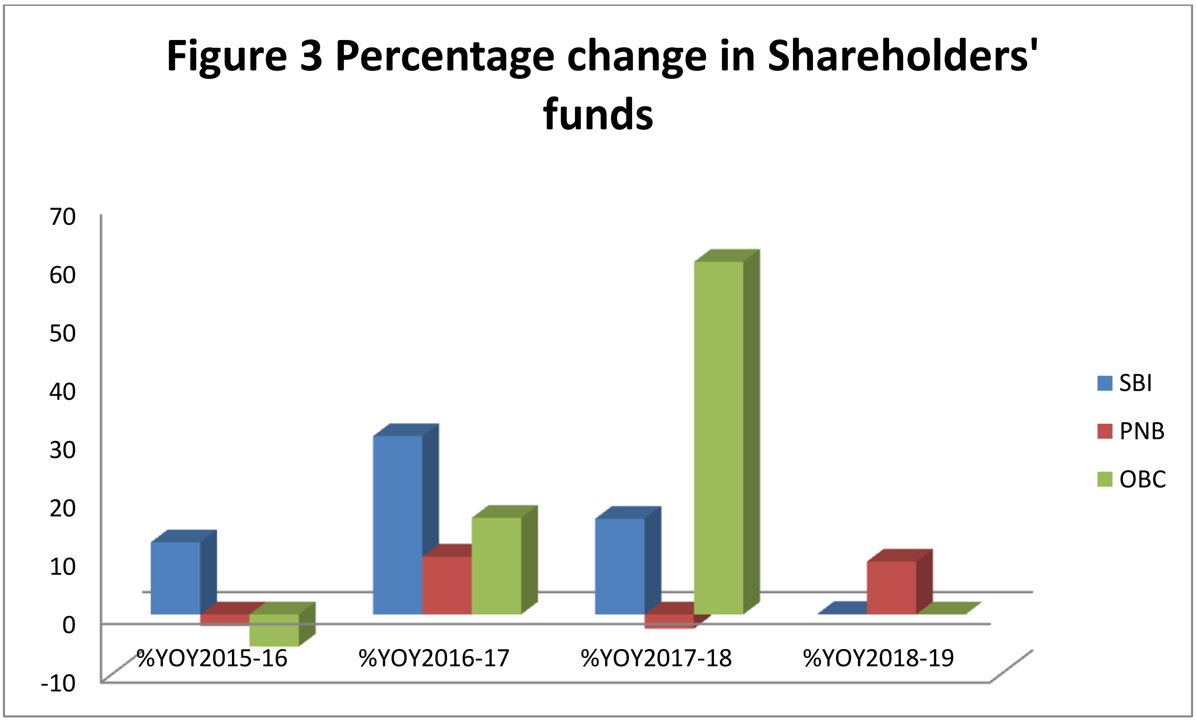
3) Shareholder's funds

Table 3 Shareholder's funds of different three banks from 2014-2015 to 2018-2019

Bank name	March, 2015	%YOY 2015-2016	March, 2016	%YOY 2016-2017	March, 2017	%YOY 2017-2018	March, 2018	%YOY 2018-2019	March, 2019
SBI	128438.23	**12.33%**	144274.44	**30.51%**	188286.06	**16.38%**	219128.56	**0.08%**	220913.82
PNB	39079.52	**(1.97)%**	38310.14	**9.89%**	42097.46	**(2.43)%**	41074.31	**9.04%**	44787.13
OBC	14941.14	**(5.49)%**	14121.36	**16.53%**	11786.76	**60.36%**	18901.24	**0%**	18901.24

*() Stands for negative terms

**Sources of data: https:/www.sbi.com,https:/www.pnb.com,https:/www.obc.com.



Reference number [6, 17, 18]

Interpretation

In SBI, by observing the above percentage change in Shareholder's funds, it is increased by 12.33 % from compared to 2014-2015 and 2015-2016. In next year it is increased by 30.51% compared from 2015-2016 to 2016-2017. In next year again increased by 16.38% compared from 2016-2017 and 2017-2018 but analyzing by overall this year percentage rate of ratio is decreased by others. In last year again it has increased. After increased it has become 0.08% compared from 2017-2018 and 2018-2019, but analyzing by overall this year percentage rate of ratio is decreased by others. So finally the nature of this percentage change is about to increase.

In PNB, this percentage change is decreased by 1.97 % from compared to 2014-2015 and 2015-2016. It has increased by 9.89 % in next year compared from 2015-2016 to 2016-2017. It is decreased by 2.43% compared from 2016-2017 and 2017-2018, in next year it has again increased by 9.04% compared from 2017-2018 and 2018-2019. So finally the nature of this percentage change is about to fluctuate.

In OBC, this percentage change is decreased by 5.49% from compared to 2014-2015 and 2015-2016. It has increased by 16.53% in next year compared from 2015-2016 to 2016-2017. Again it increased by 60.36% compared from 2016-2017 and 2017-2018. Again in last year it has decreased by 0% compared from 2017-2018 and 2018-2019. So finally the nature of this percentage change is about to increase.

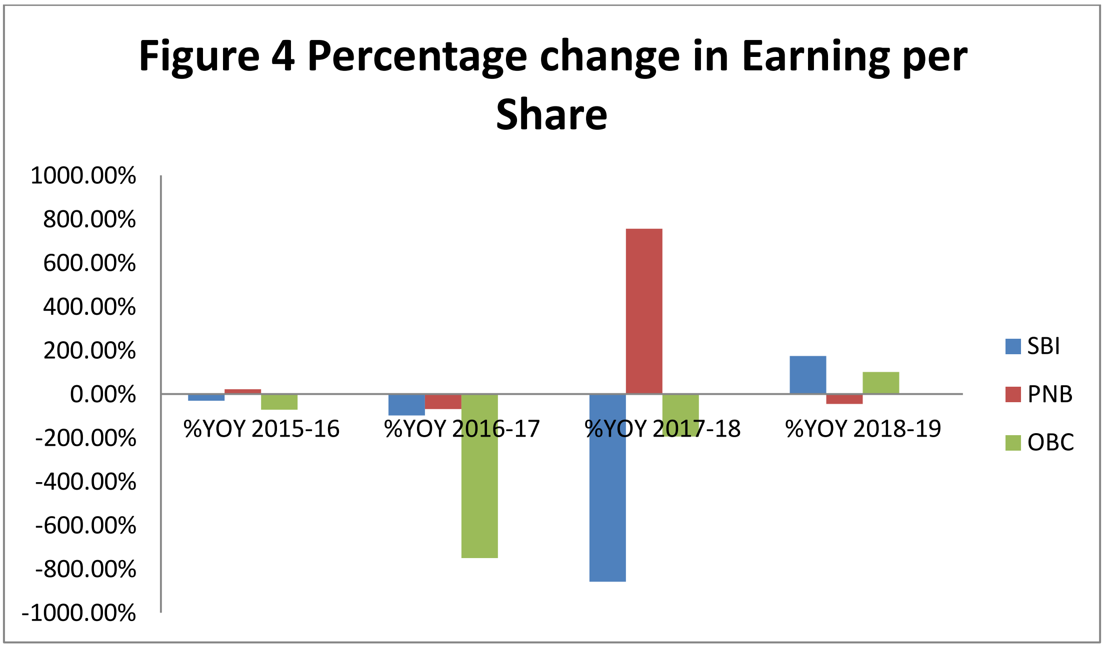
4) Earnings per share

Table 4 Earnings per Share (EPS) of different three banks from 2014-2015 to 2018-2019

Bank name	March, 2015	%YOY 2015-2016	March, 2016	%YOY 2016-2017	March, 2017	%YOY 2017-2018	March, 2018	%YOY 2018-2019	March, 2019
SBI	23.46	**(30.01)%**	16.42	**(97.02)%**	(0.49)	**(857.14)%**	(4.69)	**173.35%**	3.44
PNB	16.91	**23.12%**	20.82	**(69.02)%**	6.45	**757.36%**	55.39	**(44.14)%**	30.94
OBC	16.58	**(70.69)%**	4.86	**(750.21)%**	(31.60)	**(193.64)%**	(92.79)	**100.43%**	0.40

*() Stands for negative terms

**Sources of data: https:/www.sbi.com,https:/www.pnb.com,https:/www.obc.com.



Reference number [6, 17, 18]

Interpretation

In SBI, by observing the above percentage change in Earning per Share, it is decreased by 30.01% from compared to 2014-2015 and 2015-2016. In next year it is again decreased by 97.02% compared from 2015-2016 to 2016-2017. In next year again decreased by 857.14% compared from 2016-2017 and 2017-2018. In last year it has increased. After increased it has become 173.35% compared from 2017-2018 and 2018-2019. So finally the nature of this percentage change is about to continuous decrease.

In PNB, this percentage change is increased by 23.12% from compared to 2014-2015 and 2015-2016. It has decreased by 69.02% in next year compared from 2015-2016 to 2016-2017. It is increased by 757.36% compared from 2016-2017 and 2017-2018, in next year it has again decreased by 44.14% compared from 2017-2018 and 2018-2019. So finally the nature of this percentage change is about to continuous fluctuate.

In OBC, this percentage change is decreased by 70.69% from compared to 2014-2015 and 2015-2016. It has again decreased by 750.21% in next year compared from 2015-2016 to 2016-2017. Again it decreased by 193.64% compared from 2016-2017 and 2017-2018. In last year it has increased by 100.43% compared from 2017-2018 and 2018-2019. So finally the nature of this percentage change is about to continuous decrease.

V. RESULTS AND DISCUSSION:

The study has been done for EPS, Shareholders' funds, total operating expenses, and net profit of different selected banks. To know about the better performance, CAGR of each bank is calculated.

By analyzing table and figure 1, I have concluded that these percentage changes in net profits are about to fluctuating in SBI and PNB and decreasing in OBC. So, the net profit position of SBI and PNB are not sure it may be fluctuating and in OBC it is mostly decreasing. It is not purely clear that which bank performance is better regarding Net Profit. So, to know about this we are calculated (CAGR) Compound annual growth rate of net profit in SBI is -41.97% whereas PNB -226.65% and OBC -35.62%. According to this percentage growth rate in net profit indicates that all of the banks growth percentage are in negative terms but the highest one is in OBC other than PNB and SBI.

Table & figure 2 shows that percentage changes in total operating expenses are slightly increasing in SBI & OBC while in PNB it is decreasing. The above results do not show the proper performance of the banks and again Compound annual growth rate of total operating expenses in SBI is 9.41% whereas PNB 1.92% and OBC 8.19%. According to this percentage growth rate, it indicates that this percentage is the highest in SBI, following is OBC and the last one is PNB.

As per table and figure 3, the percentage changes in Shareholder's funds are slightly increased in SBI & OBC, while fluctuate in PNB. Thus, we can say that the percentage change in Shareholder's funds positions of SBI and OBC are good. Compound annual growth rate of shareholder's funds in SBI is 11.46% whereas PNB 2.76% and OBC 4.81%. The percentage is highest in SBI, following is OBC and the last one is PNB.

As per data analysis of table 4, the percentage changes in EPS are about to continuous decrease in SBI and OBC, but fluctuate in PNB. So, the percentage change in EPS positions of PNB is moderate to others. CAGR represents that the compound annual growth rate of EPS in SBI is (31.89) % whereas in PNB 12.84% and in OBC (52.52) %. The percentage growth is the highest only in PNB and in OBC & SBI are in negative form.

CAGR = (End value/starting value) $^{1/n}$

Where n = number of years.

Table: 12 Compound Annual Growth Rate (in% CAGR) from table1- table4

Bank Name	Table1	Table2	Table3	Table4
SBI	(41.97)	9.41	11.46	(31.89)
PNB	(226.65)	1.92	2.76	12.84
OBC	(35.62)	8.19	4.81	(52.52)

***() sign stands for negative term**

VI. CONCLUSION

After conclusion of above table 12, it has been concluded that as per compound annual growth rate of net profit, highest rate is the best for the banks but as per this component all the banks are in loss condition, but OBC is in the least loss condition. So, OBC has the least and best option for net profit. As per CAGR of total operating expenses, least is better for the banks. Therefore PNB has the least and best option for operating expenses. According to the CAGR of shareholder's funds, maximum rate is the best for all banks. As per above table SBI will be the best and highest option for shareholder's funds. CAGR of table 4 Earnings per Share, highest is the best option for all the banks. But as per above table Only PNB Will be the best and highest option.

LIMITATIONS

The study has the following limitations:

i. In India, many public sectors, private sectors and foreign banks are available but we can't select all the banks for study. In this manuscript, some public sector banks are selected for this study.
ii. The period of this study is limited. It has five years from 2014-15 to 2018-19.
iii. The collection of data from the selected banks is very difficult and challenging

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