

# Analysis of Cash Flows for Public Sector Banks in India

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## ABSTRACT

*Banking system, being the most important fundamental of the overall economic system of any country plays a major role in mobilizing nation's savings and in channelizing them into high investment primacies and better be pronounced as the kingpin of the chariot of fiscal progress. Evaluation of the financial performance of the banking sector is an effective measure and indicator to check the steadfastness of the economic activities of the country. In such a competitive environment, banks and financial institutions are forced to re-examine their performance in this ever-changing economics of the 21st century. With this view, in the present paper, the financial performance of the public sector banks of India has been analyzed. Ratio analysis being a very important part of the strategic planning is used for the analysis. In this paper, to evaluate the financial performance of public sector banks, five key financial ratios have been used. The present study adopts an analytical and descriptive research design.*

**Keywords:** Banking system, Fiscal, Financial Performance, Ratio Analysis, Public Sector Banks

## I INTRODUCTION

It is rightly said that, "Cash-flow is the lifeblood for any company" as it gives insight to company's operating, investing and financial activities.

If one believes in the old adage, "it takes money to make money," then he could understand the essence of cash flow and what it means to a company. The cash flows divulge how a company spends its money (cash outflows) and where the money comes from (cash inflows). A company's profitability is shown by its net income. Thus, it would be right to consider net income as a figure to Judge Company's overall performance. But, accrual accounting talks about matching of company's revenue and expenses, where stand-alone figures of net incomes without the cash flows does not solve the problem. That is the reason why a lot of researchers are carried on cash-flow analysis of companies.

However, in case of the banks, the cash-flow metrics are always overlooked. If we look at the researches conducted on banks, the researchers considers customer-driven deposits under operating cash flow since "the strength of a bank's operations hang on its deposit base and its capacity to attract a growing stream of deposits." However, the researchers confess their report's final calculations cannot be fully correct, partly because they didn't have adequate information to differentiate between brokered and consumer-driven deposits.

The present study would thus, analyse the overall cash flows of the public sector banks of India. The flows of cash and credits from a bank to any sector are an indicator of the growth and importance of that sector. Also, the use of Ratio Analysis technique, which is done by establishing a relationship between two or more variables from

the financial statements would help to find out the unique strengths and weaknesses of the commercial banks which otherwise is difficult to ascertain from the stand-alone figures.

**Here is a brief introduction of the banks which are taken into account for the present study:**

**(a) Punjab National Bank-** PNB being the most important financial pillars of the public sector banks in India is playing a prominent role in the development of our banking industry thus contributing towards the growth of our economy. PNB is measured as a high cap public sector bank. With presence of more than 5,800 branches and kiosks across the country, it is certainly stimulating financial inclusion into the unbanked areas of India.

**(b) Oriental Bank of Commerce-** Oriental Bank of Commerce (OBC) is the nation's leading financial institution and house for everybody's personal financial requirements. It goes to the group of high market capitalization public sector banks and acts as a crucial pillar of the public sector banks in India. One of the vital ability of this bank is to finance MSMEs that eventually adds to the GDP growth of the country. On the other hand, this bank with snowballing presence across the country is also supporting financial inclusion and evolving the banking habits of the customers.

**(c) State Bank of India-** State bank of India is the high market cap public sector bank, which acts as a true indicator and an agent of Reserve Bank of India. Due to its exclusive positioning as the bank 'closest' to Government of India, SBI has unique access to some exceptionally large funding decisions like the recent Employees' Provident Fund Organization's (EPFO) decision. SBI also works for the other banks as the banker's bank. It

provides financial help to other banks, leading to improvement of the banking conditions of the country.

## II LITERATURE REVIEW

Kaur Ravinder, in January 2012 in her paper "Performance Evaluation of Indian Banking System: A Comparative Study of Public Sector and Private Sector Banks", found that the overall performance of Public Sector Banks is better than private Sector Banks from 2009-10 to 2010-11. She also opined that all banks have depicted growth in terms of Credit Deposit Ratio, Net Worth, Deposits, Advances, Total Assets, Total Income and Net Profit except State Bank of India, which has shown a negative growth in Net worth and Net Profits.

Dr. Guruswamy D., in January 2012 in the paper titled "Analysis of Profitability Performance of SBI and its Associates", have used various tools such as mean, S.D, variance, CAGR, and ANOVA to analyze the profitability performance of SBI and Its Associates.

Dr. Dhanabhakya M. and Kavitha M, in January 2012 in their paper "Financial Performance of Selected Public Sector Banks in India", have used ratio analysis and concluded that selected public sector banks have performed well on the sources of growth rate and financial efficiency during the period of study. In addition, she also opined that in comparison to the old public sector banks, the new public sector banks play a vital role in marketing new types of deposits and advances schemes.

Dr. Kavitha N., in April 2012 through her paper "An Assessment – Assets and Liability Management of Scheduled Commercial Banks in India", has suggested that SBI and its associate banks group are better performers as compared to Private Banks group and other nationalized banks group.

Hari V. Shri, Dr. Prasad Staya B.G., Jain Vikas, and Dr. Shrinivas L., in June 2012 in their paper "A Comparative Study of Public Sector Banks V/s. Private Sector Banks", have done a study on the Indian banks considering the banking operations after liberalization and banking reforms, and have also analyzed the impact of competition on the functioning of the banking operations in the country.

Kaur Avneet, in November 2012 through her paper "An Empirical Study on the Performance Evaluation of Public Sector Banks in India" has suggested that prompt measures should be taken by the banks to collect the over dues from the borrowers. This would help them to earn profits in

future. The banks should also take necessary steps to increase the non interest incomes, which currently constitute less than 20 percent of their total income. This could be done by collection of cheques and bills, giving guarantees, locker facilities, acting as an agent, providing merchant banking services and so on.

Dr. Gupta R. and Dr. Sikarwar N. S., in February 2013 in their paper "A comparative Study of Growth Analysis of Punjab National Bank of India and HDFC bank Limited", have used parameters like Net profit growth, Net assets growth, EPS growth and Reserve and Surplus growth and opined that in terms of the parameters defined, HDFC Bank has performed much better than the PNB Bank.

Makkar Anita and Singh Shveta, in May 2013 in the paper titled "Analysis of the Financial Performance of Indian Commercial Banks: A Comparative Study", have revealed that there is no statistically significant difference in the financial performance of the public and private sector banks in India, but still, there is a need for overall development in the public sector banks to make their position sound in the current competitive environment.

Desai Sureshbhai Dhaval, in August 2013 in the paper "Performance Evaluation of Indian Banking Analysis" have applied CAMEL model to examine and compare the performance of five different banks of India i.e. BOI, SBI, HDFC, Bank of Baroda, AXIS bank. On the basis of his study, he also gave ranks to the banks i.e. 1st Rank to State bank Of India, 2nd Rank to HDFC, 3rd Rank to Bank of India, and 4th to Bank of Baroda, 5th rank to Axis Bank.

Dr. Choudhary Vikas and Tandon Suman, in October 2013 through their paper titled "Performance Evaluation of Public Sector Banks in India", using key parameters like Coefficient of Variation of advances, deposits, total assets, return on assets, return on equity and spread ratio, etc. have concluded that the CAGR of various variables have shown variations from bank to bank. Thus, government through RBI should formulate and implement bank specific policies for upliftment of Public Sector Banks.

## III RESEARCH METHODOLOGY

**(a) An outline on the Research Methodology-** In this study, a three step methodology has been adopted. The part A of the research deals with computation of various financial ratios under Cash Flow pillar using the banks' data sets, followed by part B which would deal with the prediction of financial ratios using linear regression through SPSS and finally in the part C, the parameters are

identified which would improve the performance and position of the banks by regulating the ratios thus forecasted.

**(b) Research Objectives-** The basic objectives of the research work are:

- (i) Computation of financial ratios for Cash Flow Ratio pillar for Indian Public Sector Banks.
- (ii) Application of Regression and Anova through SPSS for prediction of inclusive ratios upto 2020.
- (iii) Validation of the predictions obtained in form of ratios.
- (iv) Identification of parameters that can be regulated internally for better performance of the banks.

**(c) Research Techniques-** Exploratory research is used for research in this work. Exploratory research provides insights into and comprehension of an issue or situation.

This approach helps to determine the best research design, data collection method and selection of subjects.

The study relies on secondary research such as reviewing available literature and/or data, or qualitative approaches such as informal discussions with consumers, employees, management or competitors and more formal approaches through in-depth interviews, focus groups, projective methods, case studies or pilot studies.

**(d) Data Collection-** Data in this research has been collected from secondary sources thereby secondary data is used. The vital input components of the research are ratios formulated from details mentioned in published statements like balance sheet, cash flow statements, yearly details of banks, profit and loss statements obtained from CMIE database, Reserve Bank of India and official websites of the banks and financial institutions.

Prior researchers have identified the selected financial ratios for prediction of Cash-Flow position of the companies and the usefulness of these financial ratios for prediction of banks' performance can be known from the literature survey. Consequently this research work uses financial data i.e. published time series data for the last 11 years from 2000 to 2010.

**(e) Sampling-** Using Judgment Sampling methodology samples were drawn from Indian banking public sector. The major players both in the public sector of Indian Banking Industry being State Bank of India (SBI), Punjab National Bank (PNB), Oriental Bank of Commerce (OBC) are

chosen as representatives of the Indian Public Sector Banking.

## IV DATA COLLECTION

Following the research methodology elucidated, the datasets that forms the basis for the empirical part of this study are compiled.

The ratios are formulated from details mentioned in published statements like balance sheet, cash flow statements, yearly details of banks, profit and loss statements obtained from CMIE database, Reserve Bank of India and official websites of the banks and financial institutions and internet.

The official websites of the banks have also been visited for vital information. This research work uses financial data i.e. published time series data for the last 10 years from 2000 to 2010. This research tries to present a holistic view by incorporating various ratios that constitutes to an integral part of Cash Flow Analysis and then relating them to examine the explanatory capabilities of the financial ratios to suggest the financial position of the bank.

**(a) Cash Flow Indicator Ratios-** This section of the research looks at cash flow indicators, which focus on the cash being generated in terms of how much is being generated and the safety net that it provides to the company. These ratios can give users another look at the financial health and performance of a company.

- (i) **Dividend payout ratio Net Profit:** This ratio identifies the percentage of earnings (net income) per common share allocated to paying cash dividends to shareholders. The dividend payout ratio is an indicator of how well earnings support the dividend payment. During a fiscal year quarter, a company's board of directors declares a dividend. This event triggers the posting of a current liability for "dividends payable." At the end of the quarter, net income is credited to a company's retained earnings, and assuming there's sufficient cash on hand and/or from current operating cash flow, the dividend is paid out. This reduces cash, and the dividends payable liability is eliminated. The payment of a cash dividend is recorded in the statement of cash flows under the "financing activities" section. The basic formula is:

$$\text{“Dividend Payout Ratio (\%)} = \frac{\text{Dividends per common share}}{\text{Earnings per share}}\text{”}$$

- (ii) **Dividend payout ratio cash profit:** This is similar to the above mentioned ratio but the cash is the inclusive item in this computation.
- (iii) **Earning Retention Ratio:** The percent of earnings credited to retained earnings. In other words, the proportion of net income that is not paid out as dividends. The basic formula is:

$$\text{“ERR} = (\text{Net Income} - \text{Dividends}) / \text{Net income”}$$

The retention ratio is the opposite of the dividend payout ratio. In fact, it can also be calculated as one minus the dividend payout ratio.

- (iv) **Cash Earning Retention Ratio:** Same as the above mentioned ratio but includes cash earning also.
- (v) **Adjusted Cash Flow times:** Cash flow provided by operating activities adjusted to provide a more recurring, sustainable measure. Adjustments to reported cash provided by operating activities are made

to remove such nonrecurring cash items as: the operating component of discontinued operations, income taxes on items classified as investing or financing activities, income tax benefits from nonqualified employee stock options, the cash effects of purchases and sales of trading securities for non-financial firms, capitalized expenditures, and other nonrecurring cash inflows and outflows.

## V RATIO COMPUTATION & DISPLAY

(a) **Computation of Actual Ratios in tabular format -** All the Cash Flow ratios are evaluated for the sampled public sector banks being Punjab National Bank, Oriental Bank of Commerce & State Bank of India. The published information is utilised to compute the ratios using the formulae mentioned from 2000 to 2010. The ratios from 2000 to 2010 are used for training.

**Table : 1**  
**Computed Ratios under the Cash flow ratio pillar using the formulae**

Computed Dividend Pay-out Ratio Net Profit	Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	PNB	13.9	12.87	11.32	12.43	10.79	14.01	14.98	30.71	23.4	23.86	20.74	18.27	17.75	23.51
	OBC	26.84	36.6	21.02	21.39	15.82	8.65	23.07	16.48	16.38	23.63	23.5	20.19	20.19	20.21
	SBI	14.94	18.07	12.98	16.25	17.74	17.46	19.06	18.98	22.64	22.9	23.36	26.03	20.06	20.12
Computed Dividend Pay-out Ratio Cash Profit	Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	PNB	12.58	11.52	9.83	10.78	9.27	12.4	13.26	27.26	21.61	22.47	19.62	17.27	16.75	22.03
	OBC	23.35	30.44	18.73	19.6	14.74	7.71	20.31	15.16	15.04	21.7	21.84	19.2	18.5	18.46
	SBI	12.68	14.45	11.05	14.02	14.91	14.86	16.35	16.75	20.56	21.13	21.2	23.24	18.47	18.62
Computed Earning Retention Ratio	Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	PNB	86.08	100	88.68	87.56	89.2	85.98	84.99	69.28	76.59	76.12	79.25	81.73	82.25	76.49
	OBC	73.16	63.33	78.98	79.35	84.54	93.34	84	82.6	83.57	76.38	76.49	79.82	79.76	79.79
	SBI	85.06	81.93	86.94	83.75	85.09	83.88	80.93	80.97	77.33	77.11	76.67	73.97	79.94	79.88
Computed Cash Earning Retention Ratio	Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	PNB	87.41	100	90.17	89.21	90.72	87.6	86.72	72.73	78.38	77.51	80.37	82.73	83.25	77.97
	OBC	76.66	69.51	81.27	81.02	85.57	93.91	85.37	84.06	84.92	78.3	78.15	80.98	81.46	81.51
	SBI	87.32	85.55	88.89	85.98	87.14	86.12	83.64	83.21	79.41	78.88	78.82	76.76	81.53	81.38
Computed Adjusted Cash Flow Time	Years	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	PNB	105.41	105.41	99.07	78.1	68.16	64.77	73.73	80.65	75.05	63.95	60.43	66.73	73.33	77.29
	OBC	68.97	101.35	79.21	57.89	47.41	44.26	57.13	74.87	85.24	99.78	98.53	87.18	125.48	121.22
	SBI	81.45	121.04	95.21	82.28	62.75	67.82	74.03	84.87	72.64	75.05	79.54	100.91	82.08	78.9

**(b) Forecasting of Ratios using SPSS-** All the actual ratios calculated for the year 2000 to 2010 from the banks' financial statements are used for forecast the various financial ratios. The

forecasting is done using the 'Forecasting models' based on 'Linear Regression' through SPSS software. The ratios forecasted for the year 2011 to 2020 are tabulated as under:

**Table : 2**  
**Ratio Predictions by Linear Regression through SPSS**

<b>Predicted Dividend Pay-out Ratio Net Profit</b>	<b>Years</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>PNB</b>	19.43	16.91	25.39	21.87	21.34	22.82	24.3	25.78	19.26	18.74
	<b>OBC</b>	21.02	21.02	22.14	23.33	24.09	23.88	21.44	19.07	24.54	21.22
	<b>SBI</b>	24.86	22.74	20.62	18.51	17.39	20.27	24.16	27.04	27.92	30.81
<b>Predicted Dividend Pay-out Ratio Cash Profit</b>	<b>Years</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>PNB</b>	18.4	14.78	23.16	27.53	28.91	20.28	22.66	18.04	14.41	15.79
	<b>OBC</b>	20.97	21.19	22.06	23.77	26.99	18.99	23.45	18.66	10.64	18.35
	<b>SBI</b>	21.86	20.81	19.76	18.71	20.66	24.62	27.57	28.52	29.47	30.43
<b>Predicted Earning Retention Ratio</b>	<b>Years</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>PNB</b>	83.04	81.16	79.28	77.4	81.52	83.64	87.77	89.89	88.01	86.13
	<b>OBC</b>	77.88	79.1	81.45	87.55	97.33	84.76	77.32	75.22	79.84	81.53
	<b>SBI</b>	75.66	77.76	78.85	79.94	77.03	76.13	81.22	84.31	89.41	89.5
<b>Predicted Cash Earning Retention Ratio</b>	<b>Years</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>PNB</b>	82.12	81.42	74.61	79.82	82.02	86.23	84.43	82.64	90.84	89.04
	<b>OBC</b>	78.73	83.07	78.33	81.07	80.51	84.97	88.13	79.11	86.37	84.06
	<b>SBI</b>	78.28	79.31	81.34	84.37	84.4	86.43	87.46	87.49	90.52	91.55
<b>Predicted Adjusted Cash Flow Time Ratio</b>	<b>Years</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
	<b>PNB</b>	65.93	71.43	76.94	82.44	87.94	93.44	98.94	94.45	89.95	85.45
	<b>OBC</b>	88.53	105.15	118.12	132.15	143.04	118.53	98.33	87.12	77.15	78.44
	<b>SBI</b>	91.36	89.22	87.15	84.33	81.52	78.15	79.64	81.07	76.99	74.35

## **VI VALIDATION OF FORECASTED RATIOS**

The ratios forecasted through the SPSS are than validated by comparing the forecasted ratios with the actual field data results from 2011 and 2013. The following table reflects a comparison of the

actual ratios of the banks with the predicted ratios. Then, the absolute error and the standard error is computed from the comparison.

A standard error of  $\pm 10\%$  is taken into consideration as the tolerance limit of the model and the results are validated.

**Table : 3 Data Validation Tables for Cash Flow Ratio Pillar**

<b>Dividend Payout Ratio Net Profit of Public Banks</b>												
<b>Years</b>	<b>PNB</b>				<b>OBC</b>				<b>SBI</b>			
	<b>Actual Value</b>	<b>Predicted values</b>	<b>Absolute Error</b>	<b>Standard Error</b>	<b>Actual Value</b>	<b>Predicted values</b>	<b>Absolute Error</b>	<b>Standard Error</b>	<b>Actual Value</b>	<b>Predicted values</b>	<b>Absolute Error</b>	<b>Standard Error</b>
<b>2011</b>	18.27	19.43	-1.16	-6.35	20.19	21.02	-0.83	-4.11	26.03	24.86	1.17	4.49
<b>2012</b>	17.75	16.91	0.84	4.73	20.19	21.02	-0.83	-4.11	20.06	20.74	-0.68	-3.39
<b>2013</b>	23.51	25.39	-1.88	-8.00	20.21	22.14	-1.93	-9.55	20.12	20.62	-0.50	-2.49

<b>Dividend Payout Ratio Cash Profit of Public Banks</b>												
<b>Years</b>	<b>PNB</b>				<b>OBC</b>				<b>SBI</b>			
	<b>Actual Value</b>	<b>Predicted values</b>	<b>Absolute Error</b>	<b>Standard Error</b>	<b>Actual Value</b>	<b>Predicted values</b>	<b>Absolute Error</b>	<b>Standard Error</b>	<b>Actual Value</b>	<b>Predicted values</b>	<b>Absolute Error</b>	<b>Standard Error</b>
<b>2011</b>	17.27	18.40	-1.13	-6.54	19.20	20.97	-1.77	-9.22	23.24	21.86	1.38	5.94
<b>2012</b>	16.75	14.78	1.97	11.76	18.50	21.19	-2.69	-14.54	18.47	20.81	-2.34	-12.67
<b>2013</b>	22.03	23.16	-1.13	-5.13	18.46	22.06	-3.60	-19.50	18.62	19.76	-1.14	-6.12

**Note:** Standard Error of 10% is taken into consideration in the process of prediction. The ratios that give a standard error beyond 10% are presumed not to be predicted accurately by SPSS and thus, would be eliminated.

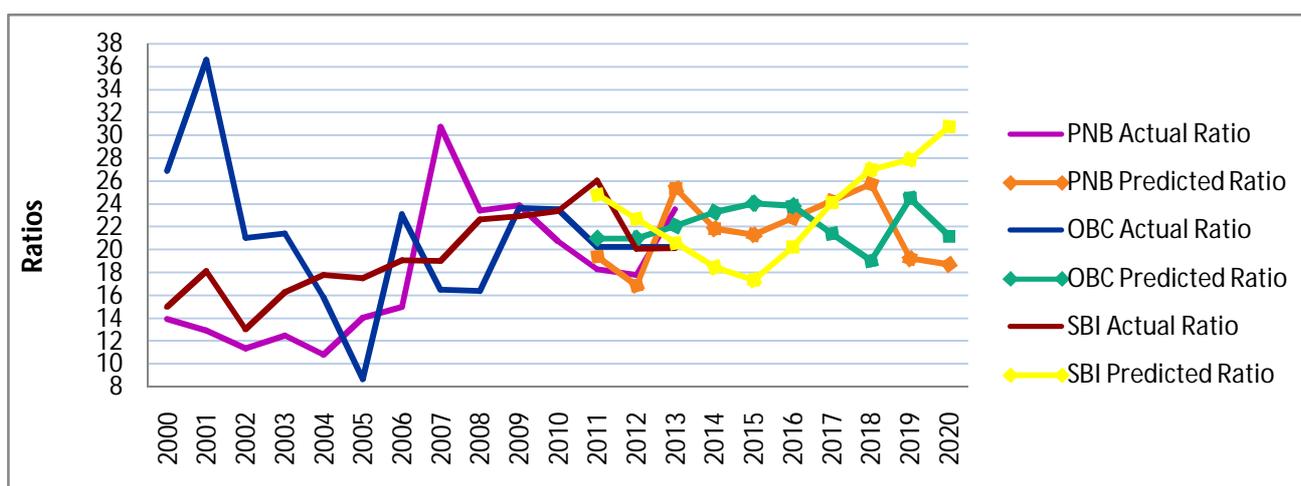
<b>Earning Retention Ratio of Public Banks</b>												
<b>Years</b>	<b>PNB</b>				<b>OBC</b>				<b>SBI</b>			
	<b>Actual Value</b>	<b>Predicted values</b>	<b>Absolute Error</b>	<b>Standard Error</b>	<b>Actual Value</b>	<b>Predicted values</b>	<b>Absolute Error</b>	<b>Standard Error</b>	<b>Actual Value</b>	<b>Predicted values</b>	<b>Absolute Error</b>	<b>Standard Error</b>
<b>2011</b>	81.73	83.04	-1.31	-1.60	79.82	77.88	1.94	2.43	73.97	75.66	-1.69	-2.28
<b>2012</b>	82.25	81.16	1.09	1.33	79.76	79.10	0.66	0.83	79.94	77.76	2.18	2.73
<b>2013</b>	76.49	79.28	-2.79	-3.65	79.79	81.45	-1.66	-2.08	79.88	78.85	1.03	1.29

Cash Earning Retention Ratio of Public Banks												
Years	PNB				OBC				SBI			
	Actual Value	Predicted values	Absolute Error	Standard Error	Actual Value	Predicted values	Absolute Error	Standard Error	Actual Value	Predicted values	Absolute Error	Standard Error
2011	82.73	82.12	0.61	0.74	80.98	78.73	2.25	2.78	76.76	78.28	-1.52	-1.98
2012	83.25	81.42	1.83	2.20	81.46	83.07	-1.61	-1.98	81.53	79.31	2.22	2.72
2013	77.97	74.61	3.36	4.31	81.51	78.33	3.18	3.90	81.38	81.34	0.04	0.05

Adjusted Cash Flow Times of Public Banks												
Years	PNB				OBC				SBI			
	Actual Value	Predicted values	Absolute Error	Standard Error	Actual Value	Predicted values	Absolute Error	Standard Error	Actual Value	Predicted values	Absolute Error	Standard Error
2011	66.73	65.93	0.80	1.20	87.18	88.53	-1.35	-1.55	100.91	91.36	9.55	9.46
2012	73.33	71.43	1.90	2.59	125.48	120.45	5.03	4.01	82.08	89.22	-7.14	-8.70
2013	77.29	76.94	0.35	0.45	121.22	118.12	3.10	2.56	78.90	77.19	1.71	2.17

**Note:** Standard Error of 10% is taken into consideration in the process of prediction. The ratios that give a standard error beyond 10% are presumed not to be predicted accurately by SPSS and thus, would be eliminated.

## VII DATA ANALYSIS & INTERPRETATION



**Fig 1: Dividend Payout Net Profit Ratio of Public Banks**

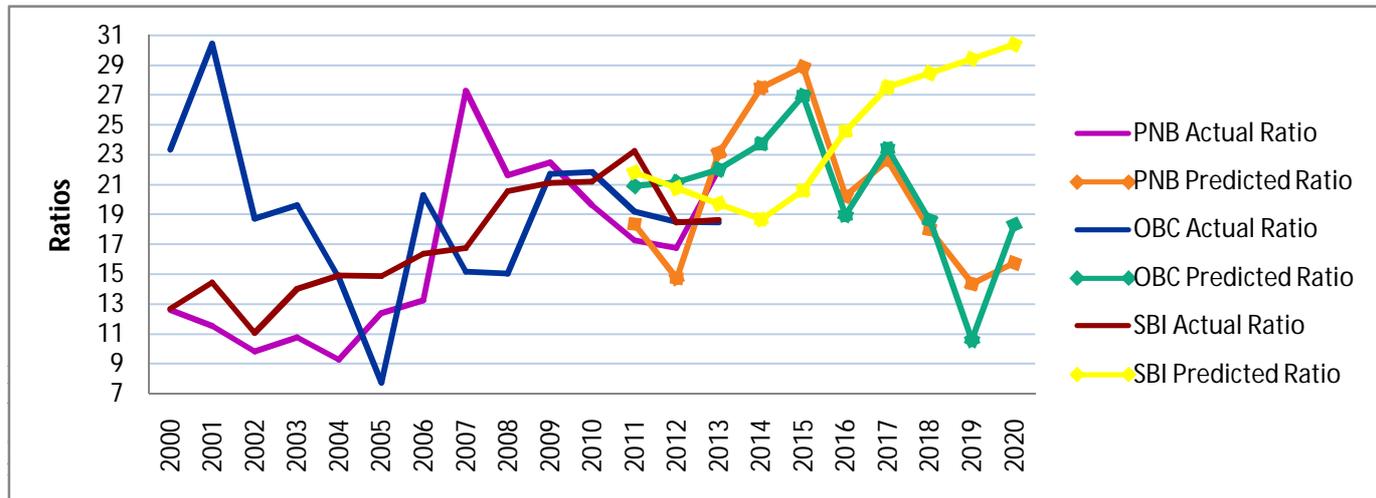
The Dividend Payout ratio of **PNB** bank is expected to decrease by 13.86% during 2014 and further 2.42% during 2015. After this, the bank would slowly increase its dividend ratio upto 7% over the period of 2016 to 2018. It can further be seen that due to widespread turbulence in the global financial markets as well as a slowdown of

economic growth in India, the ratio may decline by 25.29% during 2019 and again by 2.70% in 2020.

In case of **OBC** bank, it is forecasted that this ratio would increase by 5.37% in 2014 and 3.26% in 2015. As per this growth rate, the bank would be able to pay larger dividend with the help of more earnings in the future. During the

period 2016 to 2018, the ratio would show a declining trend upto 11.05%. In 2019, it is forecasted that there would be an acceleration of 28.68%. It is expected that the bank would be able to pay off most of its fixed obligations with the help of this growth rate. During 2020, the ratio is forecasted to take a downward swing by 13.53%.

As per the results obtained, the **SBI** bank would show a declining trend ranging from 6.05% to 10.23% during the period of 2014 to 2015. It can be assumed that the factors like inefficient earnings would significantly influence this ratio. But from 2016 to 2020, the ratio would depict an acceleration upto 19.19%. It is than expected that due to higher growth rate in the profitability of the bank, its dividend policy is highly affected in future.

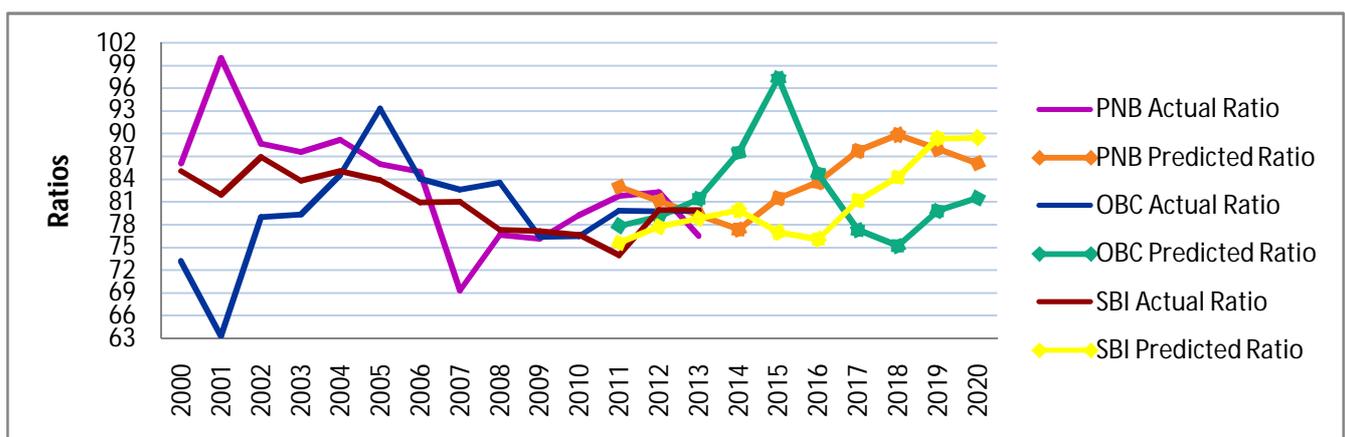


**Fig 2: Dividend Payout Cash Profit Ratio of Public Banks**

It can be seen that due to better growth opportunities, the **OBC** would show an upward swing upto 13.55% for the period 2014 to 2015. However, due to the macroeconomic instability there may be a sudden decrease of 29.64% in dividend payout during the year 2016. Afterwards, the ratio would be increasing and decreasing between a high range of 20% to 75% approximately from 2017 to 2020.

Therefore, the bank may face the high inflation rate, which would affect their dividend payout ratio in future.

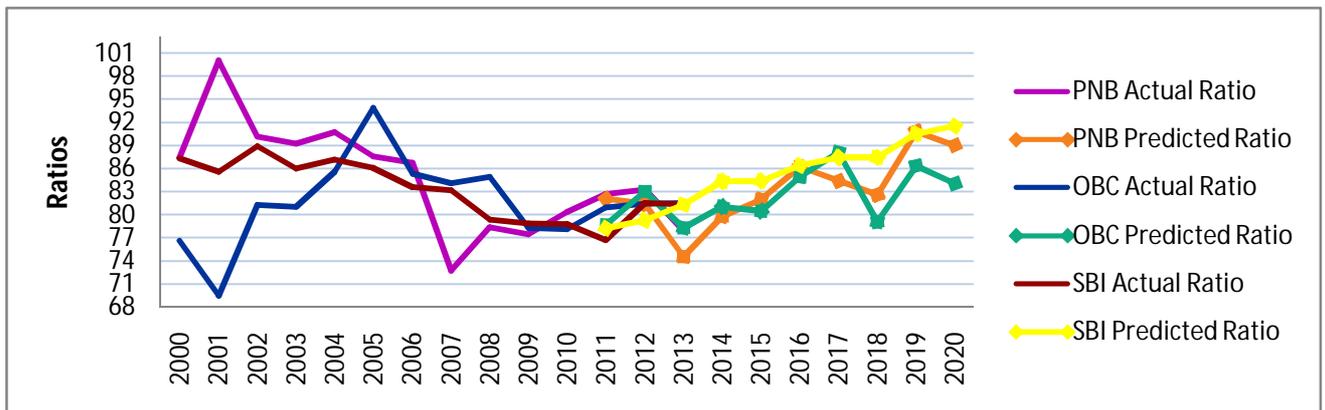
In case of **SBI**, the ratio would decrease by 5.31% during the year 2014. Over the period 2015 to 2020, the ratio would illustrate an increasing trend upto 19.17%. Therefore, this depicts that the bank with higher cash earnings and better liquidity position would result into higher dividend pay-outs.



**Fig 3: Earning Retention Ratio of Public Banks**

In **PNB** bank, the Earning Retention ratio would decrease forecasted that the ratio would decrease by 2.09% and by 2.37% in the year 2014. During 2015 to 2018, it is 2.14% over the period 2019 and 2020. Therefore, the assumed that the bank may concentrate on higher deposit fluctuating trend of this ratio may be the outcome of slower and thus lead to increase this ratio upto 5%. It is further cash margin of the bank.

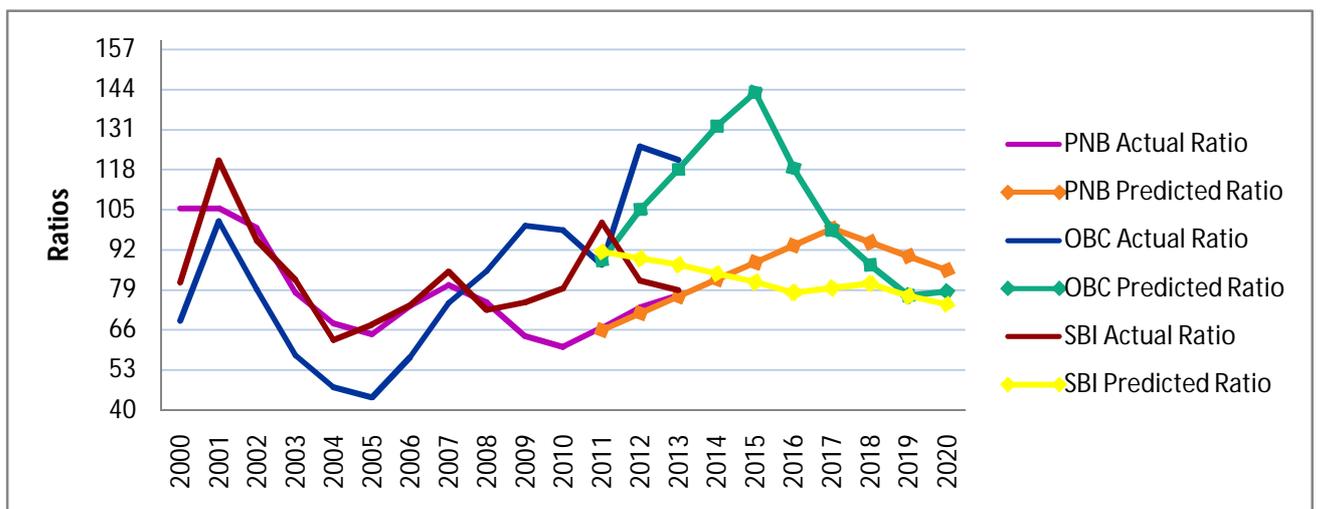
In case of **OBC** bank, it can be observed that the bank's As per the forecasts made, the **SBI** bank would show an better liquidity position would lead to an increasing trend increasing trend of 1.38% during the year 2014 in this in Earning Retention ratio by 7.49% to 11.17% during the ratio. It can be seen that, over the period 2015 to 2016, this period of 2014 and 2015. It can be assumed that the bank is ratio would raise upto 3.64%. From 2017 to 2020, factors majorly relying on doing good business with their like efficient earnings, inflation, and higher growth customers and clients to see an increasing trend in its opportunities may influence the earning retention ratio of retained earnings. During 2016 to 2018, the ratio would go SBI in future. Therefore, the ratio is depicting an increasing down upto 12.91%.It is expected that unstable cash inflows trend upto 6.69% over this period. would significantly influence the earning retentions of the bank.



**Fig 4: Cash Earning Retention Ratio of Public Banks**

In case of **PNB** bank, the ratio is expected to incline upto 2015, again accelerate by 5.54% in 2016 and 3.72% in 6% during 2014 to 2016. But the forecast depicts that the 2017. But it is assumed that limited profits of the bank may ratio would than show a sudden decline by 2.09% in 2017 decline cash earnings ratio by 10.23% in 2018. The ratio and 2.12% in 2018. From 2019 to 2020, the ratio would would than again accelerate by 9.18% in 2019 and decline repeat these upward and downward swings by 10% by 2.67% in 2020. These variations can require bank to approximately. It can also be presumed that availability of change its investment plans frequently in the next decade. fewer amounts of free cash flows with the bank leads to persuade cash earnings retention ratio.

In case of **OBC** bank, the ratio can be increased by 3.50% induring the period 2014 to 2020. Therefore, it is expected 2014. It is expected that the bank with the higher cash that the bank may have lower dividend payout liability earnings would go for more investment opportunities induring the next decade. future. This ratio would than show a little decline of 0.69%



**Fig 5: Adjusted Cash Flow Time Ratio of Public Banks**

In **PNB** bank, this ratio can increase upto 7.15% during themight be deployed to write off the non-cash or the period 2014 to 2017. It is assumed that the bank with thenon-operating expenses by the bank. help of planned and controlled growth may increase its liquidity. During 2018 to 2020, this ratio can decrease upto 5%.

In Oriental bank of commerce (**OBC**), the ratio would increase by 11.88% and 8.24% during the years 2014 and 2015 respectively. This inclination trend reflects that the(a) bank may have better liquidity position in future. But this ratio can depict a gigantic decline upto 17.14% due to political, economic, social and technological factors which are external and difficult to control. However, there can be a slight improvement of 1.67% in this ratio in the year 2020.

In case of **SBI** bank, the ratio would show a dwindling trend ranging from 3% to 4% approximately during the period of 2014 to 2016. In 2017 and 2018, the ratio would increase by 1.91% and 1.80% respectively. But it is forecasted that the ratio would again rise by 5.03% and 3.43% during 2019 and 2020. Therefore, it can be assumed that this fluctuating trend would occur because of high inflation and huge competition in the banking industry.

## VII CONCLUSION

Public sector banks should emphasize more on improving the services like ATM cards, Debit cards & Credit cards to enhance the flow of cash in the economy. These cash flow ratios have demonstrated that the public sector banks have a strong financial position. Investors would be confident about investing in their stocks because they would know that by investing in these stocks, not only their money would be safe, but they would also get good returns every year.

The dividend pay-out ratios clearly indicates that out of all the three public banks, State Bank of India would be declaring more and more dividend pay-outs out of its profits every year. This would not be due to lack of expansion and growth strategies but it would be the result of stability and efficiency in operations of the State Bank. However, all the other two banks would also enhance its dividend pay-outs to gain a competitive edge.

A fluctuating trend in the Earning retention ratio & Cash Earning retention ratio of all the banks depicts that contribution of retained earnings from the earnings would be affected by the immense investment opportunities that would be available with the banks. However, looking at the dynamic government policies regarding globalization and liberalizations banks might not be able to deploy these to the fullest and contributions to the retained earnings might get enhanced. The adjusted cash flow time ratio suggests that huge amount of cash flow would be available to be used in the coming recent times but a deep fall also indicates that these

## VIII SUGGESTIONS & RECOMMENDATIONS

### For Punjab National Bank

- (i) **Improving the Assets' Quality-** The bank has displayed a fluctuating trend in terms of its Dividend Payout ratio Net Profit. This study suggests that with the existing turbulence in the financial market, Punjab National Bank should focus on improving its asset quality in the current environment.
- (ii) **Regulation of Non-Performing Assets (NPAs)-** The study recommends that the Punjab National Bank should regulate its NPA's to generate more earnings in the form of interest. This would add more to the its Profitability, Liquidity and Solvency.
- (iii) **Generation of Free Cash Flows-** This study suggests that PNB should also take some initiatives to enhance the banking habits of its target customers. This would help the bank to have good cash inflows.
- (iv) **Application of Personalized Risk Retention Regulations-** To survive into the competitive market, it is suggested that the bank should work for the implementation of the Personalized Risk Retention regulations that should vary in different markets with difference on the basis of specific parameters, such as risk attitudes of banks and investors, riskiness of underlying assets, etc.
- (v) **Retention of Planned and Controlled Growth-** To improve the liquidity, the study suggests the bank can maintain its current growth through proper planning and forecasting. This would add to the growth of the bank.

### (b) For Oriental Bank of Commerce

- (i) **Widening of Net Interest Margins-** As indicated by the forecasted trends of Dividend Payout ratio, the OBC is advised to maintain its current growth rate and should go for proper accumulation of its retained earnings. This can be achieved through flaring of its net interest margins.

- (ii) **Hedge Against Inflation-** This study suggests that the Oriental Bank of Commerce should avail the sector's growth opportunities to improve its profitability. This as a result would enhance bank's cash flows acting as a hedge against the inflation.
  - (iii) **Generation of Higher Premium Revenues-** This study recommends that OBC by predicting and preventing coverage lapses can generate higher premium revenues which would further improve the liquidity position of the bank in future.
  - (iv) **Controlling of capital expenditures-** As indicated by the Cash Earning Retention ratio, the bank should try to reduce its capital expenditures. Therefore, it would lead to improve the cash earnings of the bank.
  - (v) **Ready for Economic, Social and Technological Change-** To improve the adjusted cash flow times, the bank is suggested to be proactive in terms of response to economic, social, and technological changes. Further, it should also regulate its investment portfolios for enhancing the earnings.
- (c) **For State Bank of India**
- (i) **Efficient Earnings and Capital to Risk Weighted Assets-** This study recommends that SBI should concentrate on generating more earnings by reaching at untouched markets of the country. Moreover, maintenance of minimum capital to risk weighted assets would help the bank during the financial crisis and uncertainties.
  - (ii) **Retaining High Liquidity -** This study suggests that the bank should try to retain its liquidity position in the industry. This would be achieved by spreading its operations and huge network across the globe.
  - (iii) **Analyze current market conditions and shareholders' expectations-** As indicated by the Cash Earning Retention ratio, the study recommends that the State Bank of India should consider various important parameters like market conditions and shareholders' expectations more while making its dividend policy.
  - (iv) **Multiple Interest Rate Scenarios -** In order to improve its Adjusted Cash flows, the SBI is suggested to generate multiple interest rate scenarios, and then the cash flows should be determined under each of the scenarios. This would help the bank to select the best and appropriate rate.
  - (v) **Risk Appetite and Risk Tolerance Levels -** This study suggests that the State Bank of India should clearly defend its risk appetite and risk tolerance levels. This would be done by keeping in 'past and forward looking view' on the likely internal and external risk environment. Risk tolerance level would work as an indicator of financial risk and would ultimately help the bank to maintain its liquidity.

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