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FISCAL PERFORMANCE OF COMMERCIAL BANKS IN INDIA-WITH RESPECT TO SELECTED PUBLIC SECTOR BANKS

Mr.M.Alagesan
Ph.D Research Scholar, Department of Commerce, Chikkanna Govt. Arts College, Tirupur

Dr.N.Bharathi
Assistant Professor and Research Supervisor, Department of Commerce, Alagappa Govt. Arts College, Karaikudi

Abstract

Public sector banks are dominant players which have important role in the growth of Indian economy. The Present research paper aims at examining the profitability and financial performance of the selected public sector banks in India from 2012 to 2016. The data of public sector banks (Sate Bank of India, Bank of Baroda, Punjab National Bank, Central Bank of India and IDBI) for 5 years have been collected from their official sites and annual reports. This study is primarily based on the secondary data, financial ratios and coefficient correlation, are used. Some selected variables are taken to know the financial positions of the selected public sector banks. The study finds that the overall performance of Sate Bank of India is better than the other public sector banks.
***Key Words**: Efficiency, Profitability, Segmentation, Performance Indicators.*

Introduction

The banks are the key financial intermediaries or institutions that serve as “middle men” in the transfer of fund from the servers to those who invest in the real assets such as house, equipment and factories. In the performing this function the financial intermediaries improve the well being of both server and the investor. By improving economic efficiency they raise the living standard of the society. The banking sector is considered to be an important source of financing for most businesses. They play a very important role in the effort to attain stable prices, high level of employment and sound economic growth. They make funds available to meet the needs of the individuals, businesses and the government. In doing this, they facilitate the flow of goods and services and the activities of the governments.

Indian Banking Industry

The last decade saw many positive developments in the Indian banking sector. The policy makers, which comprise the Reserve Bank of India (RBI), Ministry of Finance and related government and financial sector regulatory entities, have made several notable efforts to improve the regulation in the sector. The sector now compares favorably with banking sectors in the region on metrics like growth, profitability and non-performing assets (NPAs). A few banks have established an outstanding track record of innovation, growth and value creation. Banking in India has been defined under Section 5(A) as "any company which transacts banking business" and the purpose of banking business has been

defined under Section 5(B), as "accepting deposits of money from the public for the purpose of lending or investing, repayable on demand through cheque/draft or otherwise". In the process of doing the above-mentioned primary functions, they are also permitted to do other types of business referred to as Utility Services for their customers (Banking Regulation Act, 1949). During Bruisers' time, three residencies' Banks were opened in Bengal (1809), Bombay (1840) and Madras (1843) with powers to issue Notes. In the year 1921, due to banking crisis during the First World War, the three Presidency Banks were merged to form Imperial Bank of India. In the year 1955, after Independence, Imperial Bank of India was nationalized and renamed as State Bank of India (SBI) with a primary mandate to go to rural areas by opening at least 400 branches immediately. In the year 1957, the seven banks that were earlier catering to the rulers of different areas or States viz., Patiala, Bikaner, Jaipur, Indore, Saurashtra, Hyderabad, Mysore, Travancore, became subsidiaries of SBI. In 1969 and 1980, the Government of India nationalized 14 and 6 major banks respectively. After the merger of New Bank of India with Punjab National Bank during the era of Financial Sector Reforms, the number of PSBs became 27, which are under the present study.

Review of Literature

Dr.M.Dhanabhakyam And M.Kavitha (2012) in the article "Financial Performance of Selected Public Sector Banks In India" see the financial performance of the selected public sector banks namely Bank of India, Canara Bank, Indian Overseas Bank, Indian Bank, State Bank of India and Union Bank of India. They are grouped as follows, ratio analysis, correlation and regression. For this study six Public Sector Banks are selected. The Indian banking system faces several difficult challenges. The selected public sector banks have performed well on the sources of growth rate and financial efficiency during the study period. The old private sector banks and new private sector banks play a vital role in the marketing of new type of deposits and advances schemes.

Cheenu Goel and Chitwan Bhutani Rekhi (2013) in their study on "A Comparative Study on the Performance of Selected Public Sector and Private Sector Banks in India" the different proxy indicators are used for measuring productivity of banking sector. Segmentation of the banking sector in India was done on bank assets size. Overall, the analysis supports the conclusion that the new banks are more efficient that the old ones. The public sector banks are as profitable as other sectors are. It means that efficiency and profitability are interrelated. The key to increase performance depends upon ROA, ROE and NIM.

Priya.S (2014) in her study on "An Analysis of Profitability Position of Private Sector Banks In India" The objective of was profitability ratios show a company's overall efficiency and performance of different private sectors banks in India. The various profitability ratios were like interest spread, net profit margin, return on long term loan, return on net worth,

return on asset & adjusted cash margin. Profitability ratios provide different useful insights into the financial health and performance of a company.

Neha Rani, Dr. Dinesh Gaba (2015) took a study on "Analysis of Profitability and Efficiency: Comparison of HDFC and ICICI". This report concentrates on the efficiency of two private banks HDFC and ICICI. The performance of both banks is compared to find out which one is more efficient. The analysis about the performance is done on the basis of Total Income, Total Expenses, Net Profit, Operating Profit etc. and on the basis of this analysis it is found that the performance and efficiency of HDFC bank is better than ICICI.

Nikhil Kumar and Narendra Kumar (2016) for their study on "A Comparative Financial Performance Analysis of Selected Public Sector Banks in India" selected public sector banks (SBI, PNB, BOB and BOI) for the period of (2011 to 2015) This study is based entirely on secondary data and tools used to Ratio analysis selected public sector banks. This study found that SBI, PNB and BOB financially sound well other than BOI.

Objectives of the Study

1. To study the profit earning and financial performance of the selected public sector banks from the year 2012 to 2016.
2. To investigate the factors affecting the profit earning of the selected public sector banks during the period.

Research Methodology

Research Design: This present study is conducted by following a Descriptive Design**.**

Sample Unit: Any single bank operating in India

Sample Size: For the in-depth analysis of the profitability, top five major public sector banks are selected on the basis of their market capitalised from the year 2012 to 2016.

Public Sector Banks	Market Capital(Rs. in Cr)	Rank
State bank of India	1,75,826.90	1
Bank of Baroda	35,627.14	2
Punjab National Bank	25,418.77	3
Central Bank of India	17,277.56	4
IDBI	15,132.29	5

Source: www. moneycontol.com

Sampling Technique: Judgmental sampling.

Data Collection: The data were collected through Reserve Bank of India monthly bulletins, annual reports, moneyrediff, money control, banks websites etc. The public sector banks were selected on the basis of their market capitalized.

Data Analysis: Suitable statistical techniques are used for data analysis like ratios and coefficient correlation.

Limitation of Study

1. The study is related to selected public sector banks only.
2. The study is based on the secondary data only.
3. The study is related to a period five year from 2012 to 2016.
4. The study constrains on limited variable only for analyzing the performance of the selected public sector banks.

Variables of the Study

The following ten variables have been selected to analyse the profitability of selected public sector banks.

1. Demand Deposit Ratio
2. Saving Deposit Ratio
3. Net interest Margin Ratio
4. Debt Equity Ratio
5. Return on Asset
6. Return on Equity
7. Operating profit margin Ratio
8. Net profit margin Ratio
9. Capital Adequacy Ratio
10. Non-Performing Asset Ratio

Data Analysis and Interpretation

1) Demand Deposit Ratio

The sum of money that is given to a bank can be withdrawn as per the requirement of the depositor. Amounts that are lying in the savings and current accounts are known as demand deposits because they can be used at any point of time.

Demand Deposit Ratio = Demand Deposit / Total Deposit.

Table 1

YEAR	SBI (%)	BOB (%)	PNB (%)	CBI (%)	IDBI (%)
2012	8.4	7.52	7.5	6.46	15.07
2013	11.01	7.52	7.62	6.41	14.65
2014	8.12	8.79	6.97	5.63	10.61
2015	7.9	8.54	6.69	5.16	11.71
2016	8.07	6.03	6.53	4.49	10.97
MEAN	**8.700**	**7.680**	**7.062**	**5.630**	**12.602**
SD	**1.303**	**1.089**	**0.482**	**0.839**	**2.104**
CV	**14.986**	**14.182**	**6.839**	**14.908**	**16.698**

Source: compiled from the annual reports of the banks

As shown in the above table the ratio of demand deposit is more in IDBI bank (12.602) followed by SBI (8.700). Demand deposit is more in IDBI banks than in other banks and variation is maximum in case of IDBI (12.602) and least in case of PNB (6.839). It may be because no interest is paid on these accounts except in special cases where a large dormant balance is kept which could otherwise be transferred to the savings deposits.

2) Saving Deposit Ratio

Accounts that get interest and can be withdrawn on demand offered by banks, credit unions, and Savings and Loans.

Saving Deposit Ratio = Saving Deposit / Total Deposit.

Table: 2

YEAR	SBI (%)	BOB (%)	PNB (%)	CBI (%)	IDBI (%)
2012	32.27	19.37	27.83	26.65	9.03
2013	35.45	17.78	31.53	26.14	10.46
2014	34.79	16.95	31.31	27.68	12.02
2015	33.44	17.836	29.95	28.88	13.36
2016	34.53	20.33	30.63	30.98	14.99
MEAN	**34.096**	**18.453**	**30.250**	**28.066**	**11.972**
SD	**1.251**	**1.365**	**1.4877**	**1.937**	**2.344**
CV	**3.671**	**7.399**	**4.918**	**6.904**	**19.579**

Source: compiled from the annual reports of the banks

As shown in the above table the ratio of savings deposit to total deposit is maximum in case of SBI (34.096) followed by PNB (30.250). It is an account at a bank in which the customer deposits money for any non-immediate use and the chart shows that there is very less variation in case of SBI bank and more variation in IDBI bank.

3) Net Interest Margin

A measure of the return on a Company's investments is related to its interest, expenses. The net interest margin helps a company determine whether or not it has made wise investment decisions. A negative net interest margin indicates that the interest expenses exceed investment returns and that the company therefore has a net negative return. A positive net interest margin indicates the opposite.

Net Interest Margin = (Interest Received - Interest Paid) / total Assets

Table: 3

YEAR	SBI (%)	BOB (%)	PNB (%)	CBI (%)	IDBI (%)
2012	3.94	3.09	2.94	2.27	1.57
2013	3.44	2.07	3.11	3.28	1.67
2014	3.36	1.81	2.94	2.26	1.84
2015	2.69	1.85	2.75	2.34	1.62
2016	2.52	1.89	2.31	2.34	1.65
MEAN	**3.190**	**2.142**	**2.810**	**2.498**	**1.670**
SD	**0.581**	**0.539**	**0.307**	**0.438**	**0.102**
CV	**18.230**	**25.172**	**10.931**	**17.564**	**6.121**

Source: Compiled from the annual reports of the banks

The above table shows that the net interest margin of SBI is more than any other bank, i.e. 3.190 which shows that interest earned by SBI bank is much more than expended. IDBI learns less interest than any other bank. The chart shows that there is very less variation in case of IDBI (6.121) bank and more variation in BOB (25.172) bank.

4) Debt Equity Ratio

The debt-to-equity ratio (debt/equity ratio, D/E**)** is a financial ratio indicating the relative proportion of the entity's equity and debt used to finance an entity's assets. If the ratio is increasing, the company is being financed by creditors rather than from its own financial sources which may be a dangerous trend. A debt-to-equity ratio is calculated by taking the total liabilities and dividing it by the shareholders' equity:

Debt-to-equity ratio = Debt / Equity

Table: 4

YEAR	SBI (%)	BOB (%)	PNB (%)	CBI (%)	IDBI (%)
2012	13.94	14.86	15.8	19.81	15.02
2013	11.85	15.65	13.79	18.17	15.04
2014	13.33	16.83	14.48	18.79	13.49
2015	13.87	16.38	14.51	17.99	14.19
2016	13.54	15.11	17.27	18.45	15.16
MEAN	**13.306**	**15.766**	**15.170**	**18.642**	**14.580**
SD	**0.850**	**0.832**	**1.380**	**0.719**	**0.721**
CV	**6.394**	**5.282**	**9.100**	**3.859**	**4.948**

Source: compiled from the annual reports of the banks

As shown in the above table debt equity ratio is maximum in case of CBI (18.642) bank. The ratio is least in case of SBI (13.306) and variation is least in case of CBI (3.859) and maximum in case of PNB (9.100).

5) Return on Assets

The return on assets (ROA) is the ratio of annual net income to average total assets of a business during a financial year. It measures the efficiency of the business in using its assets to generate the net income.

ROA= Net income / Total assets

Table: 5

YEAR	SBI (%)	BOB (%)	PNB (%)	CBI (%)	IDBI (%)
2012	0.87	1.11	1.06	0.23	0.69
2013	0.9	0.81	0.99	0.37	0.58
2014	0.6	0.68	0.6	-0.43	0.34
2015	0.63	0.47	0.5	0.19	0.24
2016	0.44	-0.8	-0.59	-0.46	-0.97
MEAN	**0.688**	**0.454**	**0.512**	**-0.020**	**0.176**
SD	**0.194**	**0.738**	**0.661**	**0.393**	**0.665**
CV	**28.210**	**162.642**	**129.227**	**-1969.14**	**378.142**

Source: compiled from the annual reports of the banks

The above indicate that the return on asset is highest in case of SBI followed by PNB and BOB. i.e. 0.688, 0.512 and 0.454 respectively. The variation is more in case of IDBI and least in case of CBI. This return is related to the overall profitability.

6) Return on Equity

One of the most important profitability metrics is Return on Equity (or ROE for short). The return on equity reveals how much profit a company earned in comparison to the total amount of shareholder equity fund on the balance sheet.

ROE= Net Income/ Shareholders Fund

Table: 6

YEAR	SBI (%)	BOB (%)	PNB (%)	CBI (%)	IDBI (%)
2012	13.94	18.22	18.52	5.96	11.56
2013	14.26	14.01	15.19	8.58	9.66
2014	9.2	12.61	9.69	-10.24	5.11
2015	10.2	8.53	8.12	3.87	3.85
2016	6.89	-13.42	-11.2	-9.85	-16.57
MEAN	**10.898**	**7.990**	**8.064**	**-0.336**	**2.722**
SD	**3.161**	**12.459**	**11.552**	**9.019**	**11.240**
CV	**29.014**	**155.933**	**143.262**	**-2684.48**	**412.953**

Source: compiled from the annual reports of the banks

The above table reveals that the return on equity is maximum in case of SBI (10.898) followed by 8.064 of PNB and CBI return on equity is very less compared to the other public sector banks. CBI has the least variation in this and IDBI has more variation.

7) Operating Margin Ratio

The operating margin ratio or return on sales ratio is the ratio of operating income of a business to its revenue. It is profitability ratio showing operating income as a percentage of revenue.

Operating margin = Operating Profit/ Total Revenue

Table: 7

YEAR	SBI (%)	BOB (%)	PNB (%)	CBI (%)	IDBI (%)
2012	22.54	17.96	22.49	9.49	17.07
2013	22.23	20.93	22.9	12.57	17.81
2014	20.72	21.54	23.82	12.28	19.21
2015	22.91	23.36	23.65	13.48	19.3
2016	26.12	26.07	26.12	13.7	15.92
MEAN	**22.904**	**21.972**	**23.796**	**12.304**	**17.862**
SD	**1.981**	**3.003**	**1.408**	**1.682**	**1.439**
CV	**8.649**	**13.671**	**5.918**	**13.674**	**8.058**

Source: compiled from the annual reports of the banks

The table above explains that the operating margin of PNB is maximum 23.796 followed by SBI 22.904. The operating margin is directly concerned with profitability. PNB has the least variation and CBI has more variation which states that PNB bank's profitability doesn't change much.

8) Net Profit Margin Ratio

Net profit margin is the percentage of the revenue remaining after all operating expenses, interest, taxes and preferred stock dividends (but not common stock dividends) deducted from a company's total revenue.

Net Profit Margin = Net Profit/Total Revenue

Table: 8

YEAR	SBI (%)	BOB (%)	PNB (%)	CBI (%)	IDBI (%)
2012	9.69	15.13	12.02	2.59	7.97
2013	10.39	11.54	10.3	4.31	6.65
2014	7.03	10.46	6.99	-4.79	3.79
2015	7.49	7.17	5.86	2.14	2.72
2016	5.19	-11	-7.32	-4.02	-11.65
MEAN	**7.958**	**6.660**	**5.570**	**0.0460**	**1.896**
SD	**2.101**	**10.272**	**7.619**	**4.152**	**7.862**
CV	**26.401**	**154.248**	**136.796**	**9026.172**	**414.671**

Source compiled from the annual reports of the banks

The above table point out that SBI bank enjoys more net profit than the other public sector bank at 7.958 and followed by BOB at 6.660 and variation is also the least in case of SBI bank and much higher variation in CBI.

9) Capital Adequacy Ratio

Capital adequacy ratio is the ratio which determines the bank's capacity to meet the time liabilities and other risks such as credit risk, operational risk etc.

CAR= Capital (Tier I+TierII+TierIII) / Risk Weighted Asset

Table: 9

YEAR	SBI (%)	BOB (%)	PNB (%)	CBI (%)	IDBI (%)
2012	13.86	14.67	12.63	12.4	14.58
2013	12.92	13.3	12.72	11.49	13.13
2014	12.96	12.28	12.11	11.96	11.68
2015	12	12.6	12.89	10.9	11.76
2016	13.12	13.17	11.28	10.41	11.67
MEAN	**12.972**	**13.204**	**12.326**	**11.432**	**12.564**
SD	**0.662**	**0.918**	**0.653**	**0.797**	**1.286**
CV	**5.111**	**6.960**	**5.299**	**6.980**	**10.233**

Source: compiled from the annual reports of the banks

The table above discloses that BOB has the capacity to meet the time liabilities and other risks such as credit risk, operational risk etc. at 13.204 followed by SBI, IDBI and PNB at 12.972, and 12.564 and12.326 respectively. The variations are more in case of IDBI and the least variation in SBI.

10) Non-Performing Asset Ratio

NPA is a classification used by financial institutions that refer to advances that are in jeopardy of default. Once the borrower has failed to make interest or principal payments for 90 days the loan is considered to be a non-performing asset.

Non-Performing Asset Ratio=NPA/Net Advances

Table: 10

YEAR	SBI (%)	BOB (%)	PNB (%)	CBI (%)	IDBI (%)
2012	1.82	0.54	1.52	3.09	1.61
2013	2.1	1.28	2.35	2.9	1.58
2014	2.57	1.52	2.85	3.75	2.48
2015	2.12	1.89	4.06	3.61	2.88
2016	3.81	5.06	8.61	7.36	6.78
MEAN	**2.484**	**2.058**	**3.878**	**4.142**	**3.066**
SD	**0.788**	**1.749**	**2.800**	**1.833**	**2.150**
CV	**31.741**	**84.996**	**72.221**	**44.257**	**70.143**

Source: compiled from the annual reports of the banks

According to the above table for CBI bank NPA level is the highest at 4.142 and followed by IDBI at3.066 compared to any other public sector bank and variation is maximum in case of BOB (84.996) and the least in case of SBI (31.741).

Correlation Analysis

Correlation is the degree of association between two variables and it is represented in terms of coefficient known as correlation coefficient, which helps in measuring the magnitude and direction of the relationship between the variables. The correlation coefficient of selected independent variables with the bank's profitability has been worked out to identify the variables, which show higher association with the dependent variables. Correlation matrix is a table used to display correlation coefficients between these variables.

1. Correlation Co – Efficient Matrix: SBI Bank

	DD	SD	NIR	DER	ROA	ROE	OPR	NPMR	CAR	NPA
DD	1									
SD	0.540	1								
NIR	0.355	-0.301	1							

DER	-0.939*	-0.794	-0.163	1						
ROA	0.681	-0.181	0.819	-0.433	1					
ROE	0.662	-0.219	0.798	-0.403	0.998**	1				
OPR	-0.214	-0.037	-0.645	0.216	-0.530	-0.501	1			
NPMR	0.708	-0.134	0.785	-0.472	0.997**	0.995**	-0.549	1		
CAR	0.088	-0.301	0.673	0.055	0.333	0.314	0.040	0.263	1	
NPA	-0.312	0.397	-0.701	0.091	-0.854	-0.854	0.732	-0.855	-0.010	1
*Correlation is significant at 0.05 level (2 – tailed) ** Correlation is significant at 0.01 level (2 – tailed)										

The above table displays that demand deposit is highly negatively associated with debt equity at -0.939, which is significant 5 percent level. Return on asset is high degree of positively correlated with return on equity at 0.998. It also shows that return on asset and net profit margin, return on equity and net profit margin are positively associated at 1 percent significant level.

2. Correlation Co – Efficient Matrix: BOB Bank

	DD	**SD**	**NIR**	**DER**	**ROA**	**ROE**	**OPR**	**NPMR**	**CAR**	**NPA**
DD	1									
SD	-0.897*	1								
NIR	-0.146	0.382	1							
DER	0.814	-0.871	-0.678	1						
ROA	0.675	-0.581	0.523	0.178	1					
ROE	0.706	-0.619	0.483	0.225	0.999**	1				
OPR	-0.400	0.275	-0.775	0.146	-0.926*	-0.911*	1			
NPMR	0.707	-0.618	0.484	0.225	0.999**	1.000**	-0.910*	1		
CAR	-0.434	0.593	0.946*	-0.873	0.302	0.256	-0.594	0.256	1	
NPA	-0.699	0.594	-0.507	-0.202	-0.999**	-0.999**	0.914*	-0.999**	-0.281	1
*Correlation is significant at 0.05 level (2 – tailed) ** Correlation is significant at 0.01 level (2 – tailed)										

The above table indicates that net interest margin is highly positively associated with capital adequacy at 0.946. Return on asset is highly negatively correlated with operating profit at -0.926. Operating profit and net profit, saving deposit and demand deposit are negatively correlated, which is 5 percent significant level. Further return on equity is high degree of positively associated with net profit at 1.000. It also shows that return on asset and return on equity, return on asset and net profit are highly positively correlated at the same value at 0.999. Further return on asset and non performing asset, return on equity and non performing asset, net profit and non performing asset are highly negatively correlated and these values are significant at 0.01 level.

3. Correlation Co – Efficient Matrix: PNB Bank

	DD	SD	NIR	DER	ROA	ROE	OPR	NPMR	CAR	NPA
DD	1									
SD	-0.186	1								
NIR	0.844	0.019	1							
DER	-0.488	-0.368	-0.844	1						
ROA	0.852	-0.263	0.957*	-0.734	1					
ROE	0.835	-0.317	0.940*	-0.703	0.998**	1				
OPR	-0.829	0.354	-0.918*	0.691	-0.993**	-0.996**	1			
NPMR	0.821	-0.287	0.947*	-0.730	0.998**	0.999**	-0.993**	1		
CAR	0.570	-0.264	0.771	-0.769	0.857	0.855	-0.888*	0.862	1	
NPA	-0.809	0.264	-0.952*	0.721	-0.989**	-0.992**	0.976**	-0.994*	-0.812	1

*Correlation is significant at 0.05 level (2 – tailed)
** Correlation is significant at 0.01 level (2 – tailed)

This table asserts that net interest margin and return on asset are highly positively associated at 0.957.Non-performing asset and net profit margin is highly negatively associated at -0.994. It also shows that net profit margin and net interest margin, return on equity and net profit are positively correlated. Non-performing asset and net interest, operating profit and net interest are negatively associated at 5 percent significant level.

This table indicates further that the return on equity is highly positively associated with net profit at 0.999. Operating profit is high degree of negatively associated with return on equity at -0.996. Further return on asset and return on equity, return on asset and net profit, operating profit and non-performing asset are positively correlated and also

net profit and non-performing asset, operating profit and net profit, return on equity and non-performing asset , return on asset and non-performing asset are negatively correlated at -0.994, -0.993, -0.992, -0.989. These values are significant at 0.01 level.

4. Correlation Co – Efficient Matrix: CBI Bank

	DD	SD	NIR	DER	ROA	ROE	OPR	NPMR	CAR	NPA
DD	1									
SD	-0.981**	1								
NIR	0.458	-0.494	1							
DER	0.466	-0.339	-0.425	1						
ROA	0.692	-0.674	0.553	-0.005	1					
ROE	0.695	-0.666	0.552	0.029	0.998**	1				
OPR	-0.756	0.652	0.152	-0.919*	-0.361	-0.386	1			
NPMR	0.652	-0.624	0.579	-0.029	0.995**	0.997**	-0.326	1		
CAR	0.845	-0.824	-0.040	0.751	0.307	0.308	-0.889*	0.241	1	
NPA	-0.855	0.913*	-0.330	-0.184	-0.732	-0.706	0.527	-0.666	-0.735	1

*Correlation is significant at 0.05 level (2 – tailed)
** Correlation is significant at 0.01 level (2 – tailed)

The above table reveals that Non-performing asset is highly positively associated with saving deposit at 0.913. Operating profit and debt equity, operating profit and capital adequacy are negatively correlated at -0.919 and at -0.889. These relations are significant at 0.05 level. It also shows that the return on asset is high degree of positive association with return on equity at 0.998. Saving deposit is highly negatively correlated with demand deposit at -0.981. Net profit and return on asset, net profit and return on equity are positively associated at significant 0.01 level.

5. Correlation Co – Efficient Matrix: IDBI Bank

	DD	SD	NIR	DER	ROA	ROE	OPR	NPMR	CAR	NPA
DD	1									
SD	-0.842	1								
NIR	-0.591	0.180	1							
DER	0.593	-0.123	-0.751	1						
ROA	0.640	-0.879*	-0.014	-0.238	1					

ROE	0.653	-0.883*	-0.032	-0.220	1.000**	1				
OPR	-0.236	-0.103	0.468	-0.850	0.551	0.540	1			
NPMR	0.640	-0.878	-0.017	-0.237	1.000**	1.000**	0.552	1		
CAR	0.931*	-0.883*	-0.559	0.514	0.612	0.622	-0.302	0.611	1	
NPA	-0.628	0.866	-0.022	0.248	-0.998**	-0.997**	-0.569	-0.998**	-0.581	1
*Correlation is significant at 0.05 level (2 – tailed) ** Correlation is significant at 0.01 level (2 – tailed)										

The above table point out that capital adequacy ratio is highly positively associated with demand deposit at 0.931. Capital adequacy and saving deposit, return on equity and saving deposit are highly negatively associated at -0.883. And also saving deposit and return on asset are negatively correlated at 5 percent significant level. This table also shows return on asset and return on equity and also net profit and return on equity are very highly positively associated at 1.000. Non-performing asset and return on asset, non-performing asset and net profit are highly negatively correlated at -0.998 and also non-performing asset and return on equity are highly negatively correlated at 1 percent significant level.

Findings and Conclusions

The profitability and financial performance of the selected public sector banks are analysed using different parameters. The selected public sector banks, SBI, BOB, PNB, CBI and IDBI in India were satisfactory over the period and growing, contributing to the national growth.

1. The foregoing analysis for SBI has revealed that the overall profitability i.e. SD, NIM, ROA, ROE and NPMR are at very top position as compared to the other public sector banks. It is good when correlated with ROA and ROE. Demand deposit and Debt Equity are not well associated.
2. For BOB bank CAR is very high as compared to the other banks .NIM is less and need to gear up the NIM i.e. spread. It is positively associated with NIM and CAR. Operating profit and net profit, SD and DD are negatively associated. The bank NPA concentration is good.
3. For PNB the operating profit is high but the other profitable variable is accepted as normal and they have good association with NIM and ROA. Net interest margin needs increase interest income as compared to interest expended.
4. CBI has revealed that the overall profitability is not high because there DD, ROA, ROE, OPR, NPMR and CAR is very less, which is need to be increased which in impact of the profitability .NPA and SD are positively correlated. The bank needs concentration of the NPA.

5. For IDBI bank Demand Deposit is high as compared to any other bank and is postively associated with CAR. NIM is less and needs increase interest income as compared to interest expended. It is negativly correlated with CAR and SD, ROA and SD. Net interest margin is less and it needs to increase interest income as compared to interest expended.

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