

FINANCIAL PERFORMANCE ANALYSIS OF SELECTED PUBLIC SECTOR BANKS: A CAMEL MODEL APPROACH

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Abstract: Banking industry is one of the crucial and important industry of Indian economy. There are many banking companies working in India. Banking Industry is growing at a faster pace and thus the competition too. Due to passage of time there has been a constant change in the performance of banks, which leads to change in ranking and position of the banks every year. It may be very difficult to compare the performance and ranks and this study will help to find out which bank is better among leading banks and where the investors and customers should invest money into. There are many aspects to measure the performance of banks like WACC, Regression Analysis and CAMEL Model is one important of them and thus it is being used in study to measure and compare the financial performance of leading five public sector banks, on the basis of total assets and consolidated basis, in India for 5 years from 2009-2014. The banks include Bank of Baroda, State Bank of India, Punjab National bank, Bank of India, and Canara Bank. The data is collected from annual reports of these banks and various ratios have been calculated measuring the aspects of CAMEL which includes capital adequacy, asset quality, management efficiency, earning quality and liquidity. After calculating these ratios, it is found that Bank of Baroda is leading in all the aspects of CAMEL followed by Punjab National Bank in Capital Adequacy, Management efficiency and Earning capacity and Bank of India in Asset Quality.

Key Words: Banking, CAMEL Model, Financial Performance, Ratios.

1. INTRODUCTION

1.1 Banking Sector

Bank is a financial intermediary that accepts deposits and lend money to the people and an institution providing the service of transferring money and generating income. The word 'Bank' basically means 'bench or counter' and comes from the middle French word named banque. Due to the significance of banks in

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the financial system and national economies, they are highly regulated in most countries and now become the part and parcel of everybody's life.

1.2 Different types of Banks in the world

There are different types of banks being present in the world. Some of the types are: Commercial Banks, Community Development Banks, Cooperative Bank, Credit Unions, Ethical Banks, Exchange Bank, Federal or National Banks, Indigenous Bank, Industrial Development Bank, Internet Banking, Investment Bank, Islamic Banks, Land Development Bank, Merchant Banks, Mortgage Banks, Postal Savings Bank, Private Bank, Savings Banks.

1.3 Types of Banks in India

- (a) Public Sector Banks
- (b) Private Sector Banks

1.4 CAMEL Rating System

1.4.1 Concept

It was developed in USA to describe the bank's overall condition. It is applied to approximate 8000 institutions i.e. covering every bank and credit union in USA and now being implemented in other parts of the world by various banking supervisory regulators.

1.4.2 Components of CAMEL Rating System

The banks are rated on the basis of camel where 'C' means Capital adequacy, 'A' is for Assets Quality, 'M' for Management Efficiency, 'E' is for Earnings Quality and 'L' for Liquidity.

Table 4.1
Showing The CAMEL Model with Its Ratios

<i>Camel</i>	<i>Ratios</i>	<i>Formulas</i>	<i>Elaborated Formula Content:</i>
C	Capital Adequacy Ratio	Tier 1 Capital + Tier 2 Capital/ Risk Weighted Assets	Tier 1 Capital= (Paid Up Capital + Statutory Reserves + Disclosed Free Reserves)-(Equity Investments In Subsidiary + Intangible Assets + Current & B/F Losses)
	Debt-Equity Ratio	Total Debt/Total Shareholder's Funds	Tier 2 Capital= A) Undisclosed Reserves + B) General Loss Reserves + C) Hybrid Debt Capital Instruments

	Advance to Asset Ratio	Total Advances/ Total Assets	And Risk Can Be either Weighted Assets Or Minimum Capital Requirement
	Government Securities to Total Investment	Government Securities/ Total Investments	Total Debt= Long-Term + Short-Term Borrowings
A	Net NPA to Total Assets	Total Non-Performing Assets/ Total Assets	
	Net NPA to Net Advances	Total Non-Performing Assets/Total Advances	
	Total Investments to Total Assets	Total Investments/Total Assets	
	Percentage Change In NPA		
M	Total Advances to Total Deposits	Total Advances/Total Deposits	
	Profit Per Employee	Revenue – Operating Expenses/ Full Time Equivalent	
	Business Per Employee	Revenue/Number of Employees	
	Return On Net Worth	Net Income/ Shareholder's Equity	
E	Operating Profit to Average Working Funds	Operating Profit/ Working Funds	Working Funds= Average of Total Assets / Liabilities
	Percentage Growth in Net Profit		
	Net Profit to Average Assets	Net Profit/ Average Assets	
L	Liquid Assets to Demand Deposits	Liquid Assets/Demand Deposits	Liquid Assets = Cash In Hand, Balance With The RBI, Balance With Other Banks (Both In India And Abroad), and Money At Call And Short Notice.
	Liquid Assets to Total Deposits	Liquid Assets/ Total Deposits	Total Deposits = Demand Deposits, Savings Deposits, Term Deposits And Deposits Of Other Financial Institutions.
	Liquid Assets to Total Assets	Liquid Assets/ Total Assets	
	Government Securities to Total Assets	Government Securities/ Total Assets	
	Approved Securities to Total Assets	Approved Securities/ Total Assets	Approved Securities = Investments made in The State-Associated Bodies Like Electricity Boards, Housing Boards, Corporation Bonds, Share Of Regional Rural Banks

2. LITERATURE REVIEW

Sangmi and Nazir (2010) have taken two major banks of north India namely, Punjab national bank and Jammu and Kashmir Bank on the basis of their role and participation in influencing the financial condition of North India. They applied the Camel Model on these two banks by taking the annual report data from 2001-2005, and found out that both the banks were financially sound and suitable as far as their capital adequacy, asset quality, management capability and liquidity is concerned.

Mishra and Kumari (2011) selected 12 public and private sector banks on the basis of market capture and measured the efficiency and soundness by Camel Model. From the analysis they ranked the banks. They said that HDFC takes the lead followed by ICICI and Axis Bank. Bank of Baroda and Punjab National Bank follows the fourth position helded by IDBI and Kotak Mahindra Bank. Public Sector Banks like SBI and Union Bank takes the back seat. It donates that Private Sector Banks are performing better than Public Sector Bank.

Jha and Hui (2012) tried to find out the factors affecting the performance of Nepalese Commercial Banks By using various camel ratios such as return on asset (ROA), return on equity (ROE), capital adequacy ratio (CAR) etc. As Public sector banks have higher total assets compared to joint venture or domestic private banks, thus ROA was found higher whereas overall performance of public sector was unsound because ROE and CAR of joint venture and private banks was found superior. The financial performance of public sector banks is being eroded by other factors such as poor management, high overhead cost, political intervention, low quality of collateral etc.

Kumar (2012) has given a definition to camel rating system, according to him it is a mean to categorize bank based on the overall health, financial status, managerial and operational performance. In his study he has chosen the SBI and its associates for checking the performance and concludes that State Bank of India is always in the lead than its associates in every aspect of camel.

Aspal and Malhotra (2013) measured the financial performance of Indian public sector banks' asset by camel model and applying the tests like Anova, f test and arithmetic test for the data collected for the year 2007-2011. They concluded that the top two performing banks are bank of Baroda and Andhra bank because of high capital adequacy and asset quality and the worst performer is united bank of India because of management inefficiency, low capital adequacy and poor assets and earning quality. Central bank of India is at last position followed by UCO bank and bank of Maharashtra.

Kumar and Sharma (2013) analyzed the performance of top 10 and highest market capitalized banks in India with the help of camel model approach, for the year 2006-10, their study found that Kotak Mahindra Bank is on the lead and on highest position in terms of capital adequacy followed by ICICI bank and they both are more efficient in managing their liquidity. SBI has highest NPA level among their peer group followed by ICICI bank whereas PNB is highly management efficient with the highest grading in this parameter. Earning quality of SBI and PNB are on top but overall SBI is ranked first followed by PNB and HDFC.

Lakhtaria (2013) has selected the top 3 public sector banks, i.e. Bank of Baroda, Punjab National Bank and State Bank of India for his study using camel model and has ranked the banks according to the performance and data interpreted. According to him Bank of Baroda stood first followed by Punjab National Bank and State Bank of India is on third position as per the data analyzed.

Matkar (2013) has conducted a study on MSC banks by using camel model. From his study he concluded that there has been an increase in the profits and business per employee and capital adequacy ratio is also enhanced. Due to the increase in the net non-interest income and decrease in operating expenses, staff level cost for the last few years, the banks have displayed a good growth. Retail banking and its products has also shown a progress in MSC banks.

Misra and Aspal (2013) did the study on whole state bank group by using camel model approach and applying the tests like Anova, kolmogorov-smirnov, and shapiro-wilk and found out that though state bank of India is bigger entity than its other associates It got the lowest rank in every aspect whether the liquidity or the asset quality while state bank of Bikaner and Jaipur and state bank of Patiala is at the top position. The reason for getting lowest rank for SBI is that SBI has not been able to perform well in debt-equity, government securities to total investment ratios, advances to assets etc.

Chaudhary (2014) conducted a study to measure the right performance of public and private sector banks by the use of secondary data collected from annual reports, periodicals, website etc. for the year 2009-2011 and found out that in every aspect private sector bank has performed better than public sector banks and they are growing at faster pace.

Hoti and Alshiqi (2014) need to analyze the financial performance of the banking system in Kosovo from 2006-2012 using camel model and by calculating return on investment. They concluded that they did not find any significance difference in the overall performance of the banks and this thing can only happen in the times of global financial crisis which was earlier faced by Kosovo, letting less sensitive effect. Most banks were found with health balance sheet with a small level of reserves for loans.

3. RESEARCH METHODOLOGY

3.1 Objective of the Study

1. To Evaluate the Financial Performance of Selected Public Sector Banks using the CAMEL model approach.
2. To Compare the Banks and their Performance of 5 years.

3.2 Research Design

3.2.1 Type of Research

The present study is a descriptive research.

3.2.2 Sources of Data

The secondary data has been used for the study, which is taken from the annual reports of the banks.

3.2.3 Samples

For conducting this research, Leading 5 Public sector banks have been nominated based on the total assets namely State Bank of India, Bank of Baroda, Punjab National bank, Bank of India and Canara Bank as per consolidated basis.

3.2.4 Parameters for Measuring Financial Performance:

CAMEL Model has been used to conduct the Research.

4. ANALYSIS AND INTERPRETATION

4.1 Capital Adequacy

4.1.1 Capital to Risk-weighted Assets Ratio (CRAR)

Table 4.1.1
Showing CRAR of Selected Banks

SR No.	Banks	BASEL II – CRAR (%)					Average	Rank
		2014	2013	2012	2011	2010		
1	SBI	12.96	12.92	13.86	11.98	13.39	13.02	3
2	BOB	12.87	13.30	14.67	14.52	14.36	13.94	1
3	PNB	12.69	13.16	12.63	12.42	14.16	13.01	4
4	BOI	11.15	11.11	12.03	12.24	13.00	11.91	5
5	CB	11.14	12.40	13.76	15.38	13.43	13.22	2

Analysis and Interpretation

All the four Banks namely Bank of Baroda, Canara Bank, State Bank of India and Punjab National Bank has approximately equal amount of CRAR with 13.94,13.22,13.02,13.01. It Implies that these banks have greater capacity to adapt to the loss if occurs though Bank of Baroda has highest ranking in CRAR in Basel II. On the other hand Bank of India has taken the last positions with CRAR 11.91%, which is the least. So, Bank of Baroda does not have much capacity to adapt to its losses. But all the banks have followed the guidelines of RBI and has maintained the CRAR of 9%.

4.1.2 Debt-Equity Ratio

Table 4.1.2
Showing Debt-Equity Ratio of Selected Banks

SR No.	Banks	Debt-Equity Ratio (%)						
		2014	2013	2012	2011	2010	Average	Rank
1	SBI	13.54	14.16	14.30	16.17	14.44	14.52	2
2	BOB	16.23	15.24	13.77	14.28	15.65	15.03	3
3	PNB	13.51	12.80	13.65	14.55	15.36	13.97	1
4	BOI	17.08	17.05	16.37	18.18	15.12	15.16	5
5	CB	14.69	14.80	14.76	14.97	16.02	15.05	4

Analysis and Interpretation

Punjab National bank Secures first Position in Debt-Equity ratio with 13.97 followed by State Bank of India with 14.52. Canara Bank and Bank of India stands at last with average of 15.05 and 15.16 times. It means that the Creditors and depositors of Punjab National Bank and State Bank of India are more secured as they are using less debt than other 3 banks, Whereas Creditors and Depositors of Bank of Baroda and Bank of India are at higher risk as they are focusing more on Debt than the shareholder's wealth and Bank of India stays last with the highest risk and by Debt-Equity Ratio of 15.16

4.1.3 Advances to Assets Ratio:

Table 4.1.3
Showing Advances to Assets Ratio of Selected Banks

SR No.	Banks	Advances to Asset Ratio (%)						
		2014	2013	2012	2011	2010	Average	Rank
1	SBI	65.87	65.28	63.59	61.07	59.95	63.15	2
2	BOB	59.71	59.64	63.85	63.37	62.51	61.82	4
3	PNB	63.68	64.49	64.05	64.13	62.95	63.86	1
4	BOI	64.45	63.68	64.43	60.54	61.05	62.83	3
5	CB	60.31	57.81	61.39	62.34	63.58	61.09	5

Analysis and Interpretation

Punjab National Bank has got the highest position in advances to assets ratio by 63.86% followed by State Bank of India with 63.15%, Whereas Bank of Baroda and Canara Bank holds the last positions with 61.81% and 61.09%. Though the average of all the Banks were approximately same, it means that all the banks have a good lending policy. But Punjab National Bank and State Bank of India has adopted a better lending policy than other banks because there ratios are higher, which will definitely increase the profits of the banks.

4.1.4 Government Securities to Total Investments Ratio

Table 4.1.4
Showing Government Securities to Total Investments of Selected Banks

SR No.	Banks	Government Securities to Total Investment (%)						
		2014	2013	2012	2011	2010	Average	Rank
1	SBI	76.36	76.33	78.88	76.29	75.14	77.00	5
2	BOB	83.12	84.98	84.61	85.13	83.4	84.25	1
3	PNB	77.91	82.39	84.61	85.13	83.40	82.69	4
4	BOI	83.40	83.82	84.04	80.21	87.81	83.86	3
5	CB	80.94	80.80	84.34	83.06	90.88	84.00	2

Analysis and Interpretation

The four Banks namely, Bank of Baroda, Canara Bank, Bank of India, Punjab National Bank has invested equal amount of money in government securities in proportion of its total investments. It indicates that Investments of Bank of Baroda Canara Bank, Bank of India, and Punjab National Bank are on safer side though Bank of Baroda secures first position with 84.25% of investments in government securities. On the other hand State Bank of India secures last position with low percentage of 77.00% which states that investments of State Bank of India in debt instruments are at higher risk as compared to other four Banks.

4.2 Assets Quality

4.2.1 Net NPAs to Net Advances Ratio

Table 4.2.1
Showing Net of Assets to Net Advances Ratio of Selected Banks

SR No.	Banks	NNet NPA to Net Advances (%)						
		2014	2013	2012	2011	2010	Average	Rank
1	SBI	2.57	2.10	1.82	1.63	1.72	1.97	5
2	BOB	1.52	1.28	0.54	0.35	0.34	0.81	1
3	PNB	2.85	2.35	1.52	0.85	0.53	1.62	4
4	BOI	2.00	2.05	1.47	0.91	1.31	1.55	2
5	CB	2.00	2.17	1.46	1.10	1.06	1.56	3

Analysis and Interpretation

Bank of Baroda secures first position with lower NPA of 0.81% against Net Advances followed by Bank of India and Canara Bank with 1.55 and 1.66%. It states that Bank of Baroda has adopted a better lending policy and managing the Non-performing assets in a better way than other four banks. Whereas State Bank of India has higher NPA with 1.97% and securing the last position indicating the poor management and lending policy.

4.2.2 Total Investments to Total Assets Ratio

Table 4.2.2
Showing Total Investments to Total Assets Ratio of Selected Banks

SR No.	Banks	Total Investments to Total Assets (%)						
		2014	2013	2012	2011	2010	Average	Rank
1	SBI	24.15	24.34	25.19	25.43	27.77	25.37	3
2	BOB	18.06	22.45	18.95	20.24	22.21	20.38	1
3	PNB	25.96	25.12	26.72	25.08	26.10	26.20	4
4	BOI	20.14	21.11	22.71	24.55	24.60	22.62	2
5	CB	27.03	30.41	28.09	25.50	26.68	25.54	5

Analysis and Interpretation

Bank of Baroda stands at first position in Investments to assets ratio with 20.38% followed by Bank of India with 22.62%. It means that both the Banks are focusing on advancing the money rather investing, for the future growth of the business and adopting an aggressive policy. Whereas, Punjab national Bank and Canara Bank is focusing on making a cushion against Nonperforming assets by investing the money more with the investments to assets ratio of 26.20 and 25.54%. These both banks are using conservative policy and are more feared of nonperforming assets.

4.2.3 Net NPAs to Total Assets Ratio

Table 4.2.3
Showing Net NPA to Total Assets Ratio of Selected Banks

SR No.	Banks	Net NPA to Total Assets (%)						
		2014	2013	2012	2011	2010	Average	Rank
1	SBI	1.76	1.34	0.86	0.75	0.75	1.09	5
2	BOB	0.89	0.75	0.33	0.21	0.21	0.48	1
3	PNB	1.72	1.45	0.95	0.53	0.32	0.99	4
4	BOI	1.28	1.30	0.94	0.55	0.80	0.97	3
5	CB	1.2	1.25	0.89	0.69	0.67	0.94	2

Analysis and Interpretation

Bank of Baroda secures first position with the lowest NPA of 0.48 followed by Canara Bank with 0.94%, Bank of India, Punjab National Bank and State Bank of India with 0.97, 0.99 and 1.09%. It states that Bank of Baroda has better Credit Policy and are able to recover the loan from the debtors than the other banks. They are at lower risk of increasing Non-performing assets. Whereas, the NPA of other four banks is comparatively high, it means that these banks are not making much efforts to decrease their NPA's as Bank of Baroda is doing.

4.2.4 Percentage Change in Net NPAs Ratio

Table 5.2.4
Showing Percentage Change in Net NPA Ratio of Selected Banks

SR No.	Banks	Percentage change in NPA (%)						
		2014	2013	2012	2011	2010	Average	Rank
1	SBI	46.63	36.44	28.12	13.59	12.32	25.42	1
2	BOB	43.95	171.57	95.18	31.30	34.14	75.23	3
3	PNB	37.04	62.46	118.5	107.7	272.06	119.55	5
4	BOI	24.71	62.66	87.99	-11.88	251.38	82.97	4
5	CB	13.02	55.86	45.34	30.43	19.40	32.81	2

Analysis and Interpretation

State Bank of India stands at first position with average change in NPA of 25.32 followed by Canara Bank with 32.81. It is comparatively lower than Bank of Baroda, Bank of India and Punjab National Bank with 75.23, 82.97, and 119.5. It means that State Bank of India and Canara Bank has less fluctuations in their NPAs. They are constantly increasing or decreasing at lower rate. Whereas, other three banks are showing greater fluctuations. Like in Bank of India percentage change in NPA was 251.38% and in 2011 it goes negative with -11.38% and rises again with 87.99%. Which shows high fluctuation and is bad for bank. On the other hand Punjab National Bank stands at last position with average of 119.5. Though it is at last, the percentage change in NPA is constantly decreasing which is a good sign for the bank. In addition, State bank of India stands at first but their NPA is increasing constantly.

4.3 Management Efficiency

4.3.1 Total Advances to Total Deposits

Table 4.3.1
Showing Total Advances to Total Deposits Ratio of Selected Banks

SR No.	Banks	Total Advances to Total Deposits (%)						Rank
		2014	2013	2012	2011	2010	Average	
1	SBI	85.82	85.57	82.25	80.16	77.88	82.34	1
2	BOB	69.60	69.12	74.39	74.48	72.25	72.25	4
3	PNB	79.37	80.27	78.39	78.34	62.95	75.86	2
4	BOI	77.85	75.86	78.18	71.34	73.36	75.32	3
5	CB	71.64	68.16	71.19	72.10	72.26	71.07	5

Analysis and Interpretation

State Bank of India Stands at First Position with Advances to Deposits ratio of 82.34% followed by Punjab National Bank with 75.86%, Bank of India with 75.32%, and Bank of Baroda with 72.25% and Canara Bank secures last position with 71.07%. It states that State Bank of India has made efficient and appropriate utilization of Its Depositor's deposits by advancing the money for maximum growth of the bank. Whereas, other four banks namely, Bank of Baroda, Punjab National Bank, Bank of India, Canara Bank has approximately equal Ratio of Advances to Deposits following State Bank of India. It means that they have utilized the money in good way but not as efficient as State Bank of India.

4.3.2 Return on Net Worth

Table 4.3.2
Showing Return on Net worth Ratio of Selected Banks

SR No.	Banks	Return on Net worth (%)						Rank
		2014	2013	2012	2011	2010	Average	
1	SBI	9.83	14.65	14.90	13.39	14.46	13.45	4
2	BOB	14.59	13.00	19.11	21.42	22.19	18.06	1
3	PNB	9.69	15.19	15.2	20.22	23.08	17.07	2
4	BOI	8.87	11.20	12.49	14.11	13.35	12.00	5
5	CB	8.58	11.72	14.09	19.00	21.80	15.04	3

Analysis and Interpretation

Bank of Baroda is at the peak with 18.06% of Return on Net worth followed by Punjab National Bank with 17.07%. It means that Bank of Baroda and Punjab National Bank are earning good amount of Profits which in result benefitting the shareholders. Higher the Profits, Higher the return on equity or money invested in the banks. Canara Bank stands at middle position with good rate of return, whereas State Bank of India and Bank of India has least Rate of Return with 13.45 and 12.00%.

4.3.3. Profit per Employee

Table 4.3.3
Showing Profit per Employee of Selected Banks

SR No.	Banks	Profit per employee (Cr.)						Rank
		2014	2013	2012	2011	2010	Average	
1	SBI	0.048	0.064	0.053	0.038	0.044	0.05	5
2	BOB	0.098	0.10	0.12	0.106	0.078	0.10	1
3	PNB	0.054	0.080	0.084	0.083	0.073	0.075	2
4	BOI	0.062	0.064	0.064	0.062	0.044	0.06	4
5	CB	0.05	0.069	0.082	0.097	0.073	0.074	3

Analysis and Interpretation:

Higher the Profit Per employee, better is it for the employees and company. In this Bank of Baroda stands at first position with profit per employee of 10 lakhs followed by Punjab National Bank with 5.5 lakhs and Canara Bank with 5.4 Lakhs. It states that employees of Bank of Baroda are earning good amount of profits than other four banks. Whereas, employees of Bank of India and State Bank of India are earning least amount of profits with 6 lakhs and 5 lakhs.

4.3.4 Business per employee

Table 5.3.4
Showing Business per Employee of Selected Banks

SR No.	Banks	Business per employee (Cr.)						Rank
		2014	2013	2012	2011	2010	Average	
1	SBI	10.64	9.44	7.98	7.04	6.36	8.29	5
2	BOB	18.65	16.89	14.66	12.29	9.81	14.46	1

3	PNB	12.83	11.65	11.32	10.18	8.08	10.81	4
4	BOI	19.63	15.82	13.60	12.84	10.11	14.40	2
5	CB	14.42	14.20	13.74	11.96	9.83	12.83	3

Analysis and Interpretation

Higher the business per employee, higher is the productivity of the human resources. The above table shows that Bank of Baroda and Bank of India stands at leading positions in case of business per employee i.e. having a good amount of business per an individual worker with 14.46 and 14.40 crores. It means that Human Resources of these both banks is more efficient. Whereas, State Bank of India stands at last with a low business per employee of 8.29 Crore, which is lower than other four banks. The efficiency and productivity of Employees of State Bank of India is quite low.

4.4 Earning Quality

4.4.1 Operating Profit to Total Assets

Table 4.4.1
Showing Operating Profit to Total Assets of Selected Banks

SR No.	Banks	Operating Profit to Total assets (%)						
		2014	2013	2012	2011	2010	Average	Rank
1	SBI	1.34	1.46	2.38	2.17	1.75	1.82	3
2	BOB	1.61	1.88	2.19	2.22	2.03	1.99	2
3	PNB	1.98	2.19	2.59	2.72	2.70	2.44	1
4	BOI	1.46	1.63	1.81	1.78	1.88	1.71	4
5	CB	1.51	1.56	1.72	2.15	1.50	1.69	5

Analysis and Interpretation

Higher the operating profit, better are the operations. Punjab National Bank has properly utilized the Money invested in the assets and thus leads in operating profit to assets ratio with 2.44%. Followed by Bank of Baroda with 1.99%. Whereas, Bank of India and Canara Bank could not utilize the rupee in an efficient way as stands at last with Ratio of 1.71 and 1.69%.

4.4.2 Net Profit to Total Asset

Table 4.4.2
Showing Net Profit to Total Assets of Selected Banks

SR No.	Banks	Net Profit to Total Assets (Times)						
		2014	2013	2012	2011	2010	Average	Rank
1	SBI	0.64	0.93	0.91	0.72	0.87	0.81	4
2	BOB	0.74	0.86	1.27	1.36	1.22	1.09	1
3	PNB	0.58	0.95	1.03	1.14	1.28	1.00	2
4	BOI	0.53	0.65	0.72	0.79	0.70	0.68	5
5	CB	0.56	0.74	0.90	1.28	1.17	0.93	3

Analysis and Interpretation

Higher the net profit, better is the earning potential of the bank. The above table shows that Bank of Baroda is leading in net profit to assets ratio with 1.09 followed by Punjab National Bank with 1.00. It means that both the banks are earning good amount of return on their assets. Whereas, the condition for Bank of India is Poor. The earning potential of Bank of India is 0.68 like half of that of Bank of Baroda.

4.4.3 Percentage Change in Net Profit

Table 4.4.3
Showing Percentage Change in Net Profit of Selected Banks

SR No.	Banks	Percentage Change in Net Profit (%)						
		2014	2013	2012	2011	2010	Average	Rank
1	SBI	-20.89	16.77	43.6	-8.93	5.11	5.53	3
2	BOB	4.09	-8.47	18.38	39.46	33.36	15.36	1
3	PNB	-26.99	-1.41	9.85	15.16	24.26	4.17	4
4	BOI	6.03	3.49	5.18	42.26	-42.11	3.37	5
5	CB	-10.85	-11.06	-15.17	34.49	46.90	8.46	2

Analysis and Interpretation:

A lot of fluctuation have been found in the Net profits of all the five banks for five years but the negative fluctuation was less for Bank of Baroda i.e. why Bank of Baroda leads in Average change in Net profits with the highest ratio of 15.36% and currently is in profits. Whereas, Punjab National Bank and Bank of India has got bigger fluctuation and stands at last with the ratio of 4.17 and 3.37%. Canara Bank

is in continuous losses from 3 years though it ranks second. Beside the fluctuations, three banks, State Bank of India, Punjab National Bank, and Canara Bank is in losses currently.

4.5 Liquidity

4.5.1 Liquid Assets to Total Assets

Table 4.5.1
Showing Liquid Assets to Total Assets of Selected Banks

SR No.	Banks	Liquid Assets to Total Assets (%)						
		2014	2013	2012	2011	2010	Average	Rank
1	SBI	6.97	6.80	6.97	9.43	8.40	7.71	4
2	BOB	16.99	13.14	14.38	14.04	12.86	14.28	1
3	PNB	8.15	5.66	6.4	7.78	7.98	5.19	5
4	BOI	10.68	12.13	9.15	10.67	11.36	10.80	2
5	CB	8.9	8.3	5.45	9.07	5.4	8.22	3

Analysis and Interpretation

Higher the Liquidity, Better is the solvency and working capital of the banks, which is required for day to day operations. Bank of Baroda stands at first position with Liquid assets of 14.28% followed by Bank of India with 10.80%. Whereas Punjab National Bank and State Bank of India has low liquid assets of 5.19 and 7.71%. It means that Bank of Baroda and Bank of India is more solvent and has great potential to fulfil demand than State bank of India and Punjab National Bank.

4.5.2 Liquid Assets to Total Deposits

Table 4.5.2
Showing Liquid Assets to Total Deposits of Selected Banks

SR No.	Banks	Liquid Assets to Total Deposits (times)						
		2014	2013	2012	2011	2010	Average	Rank
1	SBI	0.09	0.09	0.09	0.12	0.11	0.10	3
2	BOB	0.19	0.15	0.17	0.165	0.15	0.165	1
3	PNB	0.10	0.07	0.07	0.09	0.09	0.084	5
4	BOI	0.13	0.14	0.11	0.13	0.14	0.13	2
5	CB	0.10	0.09	0.086	0.10	0.084	0.092	4

Analysis and Interpretation

Higher the Liquid Assets to Total Deposits, Higher is the amount of cash available for the Depositors of the banks. The above table state that Bank of Baroda and Bank of India is Keeping 17% or 0.17 times and 13% or 0.13 times of the money for their depositors to fulfil their demand, Whereas Canara Bank and Punjab National Bank has kept only 9.2% and 8.4% cash. It states that Bank of Baroda and Bank of India has greater capacity to fulfil the demand and advance the money to the people.

4.5.3 Liquid Assets to Demand Deposits

Table 4.5.3
Showing Liquid Assets to Demand Deposits of Selected Banks

SR No.	Banks	Liquid Assets to Demand Deposits (%)						Rank
		2014	2013	2012	2011	2010	Average	
1	SBI	118.59	106.78	105.25	100.74	84.00	103.47	5
2	BOB	225.43	201.69	223	217	189	211.22	2
3	PNB	144.76	92.4	104.51	110.90	101.56	110.83	4
4	BOI	283.91	270.82	196.4	222.67	198	234.36	1
5	CB	253	236.24	192.7	125.83	108.06	183.17	3

Analysis and Interpretation

Higher the liquid assets to demand deposits, better ability to fulfil the short term or emergency demand of the customer or the depositors. Bank of India stands at first position with 234.36% followed by Bank of Baroda with 211.22% which shows that both the banks have greater ability to fulfil the demand of the depositors. On the other hand Punjab national Bank and State Bank of India has very low liquidity ratio of 110.83 and 103.47, and has taken the back seat in Liquid assets to Demand Deposits.

4.5.4 Government Securities to Total Assets

Table 4.5.4
Showing Government Securities to Total Assets of Selected Banks

SR No.	Banks	Government Securities to Total Assets (%)						Rank
		2014	2013	2012	2011	2010	Average	
1	SBI	12.86	12.76	19.86	19.40	21.95	15.37	4
2	BOB	15.01	19.08	16.03	15.2	18.51	15.17	5

3	PNB	20.22	22.35	21.79	20.89	22.07	21.46	2
4	BOI	16.80	15.49	19.09	19.7	21.61	18.94	3
5	CB	21.88	24.57	23.56	21.05	24.05	23.02	1

Analysis and Interpretation

Higher is the government securities, lesser is the risk, more are the safe assets. Canara Bank and Punjab National Bank has Government securities of 23.02% and 21.46% in proportion of total assets. It states that Assets of these two banks are on safer side and less chances of getting insolvent. Whereas, State Bank of India and Bank of Baroda has lesser Government securities with 15.37 and 15.17% of assets. It states that these banks Prefers to take more risk.

4.5.5 Approved Securities to Total Assets

Table 4.5.5
Showing Approved Securities to Total Assets of Selected Banks

SR No.	Banks	Approved Securities to total assets (%)						
		2014	2011	2012	2011	2010	Average	Rank
1	SBI	0.16	0.13	0.11	0.16	0.20	0.152	2
2	BOB	0.16	0.16	0.08	0.17	0.30	0.174	1
3	PNB	0.05	0.04	0.04	0.09	0.16	0.076	3
4	BOI	0.025	0.021	0.039	0.079	0.16	0.064	4
5	CB	0.033	0.035	0.024	0.09	0.13	0.062	5

Analysis and Interpretation

Higher is the Approved securities, lesser is the risk, more are the safe assets. Bank of Baroda and State Bank of India has approved securities of 0.174% and 0.152% in proportion of total assets. It states that Assets of these two banks are in safer hands, Canara Bank and Bank of India has lesser Approved securities with 0.062 and 0.064% of assets. It states that these banks Prefers to take more risk.

5. FINDINGS

According to research conducted by CAMEL Model for Leading Five Public Sector Banks It is found out that:

Bank of Baroda has performed better in Capital Adequacy followed by Punjab National Bank. It states that both these Banks has good risk management system and has greater capacity to meet's its additional capital needs. The Findings of our study are similar to Lakhtaria (2013)

Bank of Baroda has good quality assets and performs better than other four Banks followed by Bank of India. It shows that these two banks have managed their Assets and NPA's in a better way and has invested their assets at right place. The Findings of our study are similar to Ravinder and Prasad (2012), Aspal and Malhotra (2013), Lakhtaria (2013).

Bank of Baroda has better management efficiency and ranks at first position followed by Punjab National Bank. So, both these banks has greater productivity and good working management and takes the corrective measures if any conflict occurs. The Findings of our study are similar to Lakhtaria (2013).

Bank of Baroda has better earning capacity and secures first position in earning quality followed by Punjab National Bank. It shows that both these banks have capacity to earn regular cash inflows and can earn better profits in future so as to sustain in the market. The Findings of our study are similar to Lakhtaria (2013).

Bank of Baroda has secured first position in Liquidity followed by Bank of India. It shows that both these banks have invested their cash in High return securities and has good amount of working capital. The Findings of our study are similar to Ravinder and Prasad (2012), Aspal and Malhotra (2013), Lakhtaria (2013), Gupta (2014).

6. CONCLUSION

The results of study shows that Bank of Baroda is leading in all the aspects of CAMEL followed by Punjab National Bank in Capital Adequacy, Management efficiency and Earning capacity and Bank of India in Asset Quality, which is almost Similar to Lakhtaria (2013), whereas State Bank of India has not performed well according to the study though it hold highest amount of assets and cash reserves. Canara Bank has always remained in the middle position. There has been a significant change in the performance of these banks throughout the years. Bank of Baroda has really performed well. Due to radical change in the banking sector in the recent years Central banks all around the world has increases their supervision quality and techniques. According to the Study conducted by Aspal and Malhotra (2013), Punjab National Bank Leads in Earning Quality and Canara Bank in Capital Adequacy but as the time passes both Bank of Baroda and Punjab National Bank shares first position in earning quality as shown in the study of Lakhtaria (2013) and as the performance of Bank of Baroda increases it surpasses

Punjab National Bank in earning quality and Canara bank in Capital Adequacy. If we compare the overall Performance of the Selected Banks, study is similar to every study. Whether it is Lakhtaria (2013), Aspal and Malhotra (2013) or Gupta (2014), in which Bank of Baroda has performed better than all other selected banks. But due to passage of time there is fluctuations in the performance of other four Banks.

7. SUGGESTIONS

1. The Study recommends that State Bank of India needs to improve its Assets Quality, Management efficiency and Liquidity. Similarly Punjab National Bank has to improve its Liquidity and Assets Quality and Bank of India should focus on Capital Adequacy and Earning Quality.
2. Due to Passage of time, the ranking of Canara Bank and Punjab National bank has decreased, which is a negative sign for the Banks. They both need to increase their overall productivity and efficiency in order to compete with the tough banks like Bank of Baroda.

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