

# A COMPARATIVE STUDY ON FINANCIAL PERFORMANCE OF SELECT BANKS CAMEL RATING

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#### Abstract

Finance is regard as the life blood of a business enterprise. Financial statement analysis is a process which examines past and current financial data for the purpose of evaluating performance and estimating future risks and potential. A ratio is an expression of a mathematical relationship between one quantity and another. Bank is very old institution that is contributing toward the development of any economy and its treated as an important service industry in modern world. The concept of financial performance and research into its measurement is well advanced within finance and management fields. Recently a well-judged technique named CAMELS rating is widely used for evaluating performance of financial institutions, especially to banks.

#### INTRODUCTION

Financial statement analysis is a process which examines past and current financial data for the purpose of evaluating performance and estimating future risks and potential. Financial statement analysis is used by investors, creditors, security analysts, bank lending officers, managers, auditors, taxing authorities, regulatory agencies, labour unions, customers, and many other parties who rely on financial data for making economic decisions about a company. Financial statements are merely summaries of detailed financial information. Many different groups are interested in getting inside financial statements, especially investors and creditors. Ratio analysis can disclose relationships which reveal conditions and trends that often cannot be noted by inspection of the individual components of the ratio. Performance of the banking sector under CAMELS frame work, which involves analysis and evaluation of the six crucial dimensions of banking operations. Thus CAMELS consists of a set of performance measures that give a comprehensive view of the banks based on the following rates.

Capital adequacy, Asset quality, Management quality, Earning ability, Liquidity.

# **OBJECTIVES OF THE STUDY**

#### **Primary objective**

• To study the financial performance of select bank.

# **Secondary objective**

- 1. To study the Capital adequacy of select bank.
- 2. To study the Asset quality of select bank.
- 3. To study the Management quality of select bank.
- 4. To study the **E**arning ability of select bank.
- 5. To study the Liquidity of select bank.

#### RESEARCH MEHODOLOGY

#### Nature of Data

The entire study is based on the audited annual reports of selected bank. Thus the study is carried out from the collected secondary data.

# **Tools and Techniques**

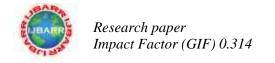
The entire study undertaken uses the ratio analysis and comparative financial statements. Graphical charts further support the ratio analysis and comparative CAMEL rating.

# Correlation

The degree of relationship between the variable is measured through the correlation analysis.

#### Period of study

The period covered by the present study extent over 7 year from 2008-2009 to 2013-2014.



# **Sampling Design**

The study covers selected bank in India which are listed in the National Stock Exchange and Bombay Stock Exchange. The banks are SBI, IOB, CANARA, KVB, SIB, HDFC, and AXIS.

#### Sources of data

Financial data for 7 year for the selected bank were collected from the annual reports. The study is based on secondary data obtained from audited annual report of the selected bank in India were profit and loss A/c and Balance Sheet.

#### REVIEW OF LITERURE

- Singla (2008) examines that how financial management plays a crucial role industrialists growth of banking.
- Meyer C., (2007) Accounting plays a significant role within the concept of generating and communicating wealth of the companies
- Wahab (2001) has analyzed the performance of the commercial banks under reforms. He also highlighted the major issues need to be considered for further improvement.
- Oyerinde D.T., (2009), Number of previous studies explored that accounting information decreased their relevance over the period of time.
- Bernanke, (2007). The banking supervision mainly ensures that the commercial banks operate in a safe and sound manner, and do not take the excessive risks.
- Singla HK (2008), in his paper,' financial performance of banks in India,' in ICFAI Journal of Bank Management No 7, has examined that how financial management plays a crucial role in the growth of banking.
- Cinko & Avci (2008) noticed that globally all the banking supervisory authorities are using CAMEL rating system for many years.
- Bodla & Verma (2006) examined the performance of SBI and ICICI through CAMEL model.

#### **Camel Rating System in Banks**

CAMEL is an acronym for five components of bank safety and soundness

CHIVILL IS all actoryin	for five components of bank safety and soundless
C: Capital adequacy	• DEBT - EQUITY RATIO
	<ul> <li>ADVANCE TO ASSETS RATIO</li> </ul>
	• G-SECURITIES TO INVESTMENT RATIO
A: Asset quality	GROSS NPA TO NET ADVANCE RATIO
	<ul> <li>NET NPA TO NET ADVANCE RATIO</li> </ul>
	<ul> <li>TOTAL INVESTMENT TO TOTAL ASSETS RATIO</li> </ul>
	<ul> <li>NET NPA TO TOTAL ASSETS RATIO</li> </ul>
M:Management quality	CREDIT DEPOSIT RATIO
	<ul> <li>BUSINESS PER EMPLOYEES RATIO</li> </ul>
	<ul> <li>PROFIT PER EMPLOYEES RATIO</li> </ul>
	• BUSINESS PER BRANCH RATIO
	<ul> <li>GROSS PROFIT PER EMPLOYEES RATIO</li> </ul>
E: Earning ability	NET INTEREST MARGIN TO TOTAL ASSETS RATIO
	<ul> <li>INTEREST INCOME TO TOTAL INCOME RATIO</li> </ul>
	<ul> <li>NON -INTEREST TO TOTAL INCOME RATIO</li> </ul>
L: Liquidity	LIQUID ASSETS TO TOTAL ASSETS RATIO
1 2	G- SECURITIES TO TOTAL ASSETS RATIO
	<ul> <li>LIQUID ASSETS TO DEMAND DEPOSITS RATIO</li> </ul>
	<ul> <li>LIQUID ASSETS TO TOTAL DEPOSITS RATIO</li> </ul>
	RETURN ON NET WORTH RATIO

### **Table-1, Debt - Equity Ratio**

Debt-equity ratio = Outsiders' fund
\*100
Shareholder fund



YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	14.71	20.92	17.19	12.25	14.72	12	12.49
2008-2009	16.64	16.93	18.05	12.63	15.63	12	14.46
2009-2010	15.97	17.42	18.16	13.41	17.19	10	11.25
2010-2011	18.83	19.17	16.77	12.99	17.76	11	12.77
2011-2012	15.9	18.41	16.49	13.54	18.6	11	12.52
2012-2013	15.83	18.18	16.5	17.05	16.56	11	10.28
2013-2014	15.15	17	16.43	16.15	16.31	11	10.03
Mean	16.1471	18.29	17.08	14	16.6814	11.25	11.97

The above table shows the debt-equity ratio of the seven banks taken for the study. It is very evident from the table that IOB has high ratio (average being 18.29). A high debt/equity ratio generally means that a company has been aggressive in financing its growth with debt. This can result in fluctuations in the earnings of the company. A low debt equity ratio (in this case HDFC bank with an average of 11.25) indicates that the bank has not borrowed much from outside. All the other banks are also bordering on either very high or very low debt equity ratio. All the banks except HDFC should also try to stabilize their debt-equity ratio. Of these, the average ratio of SBI and SIB are the best.

Table-2, Advance to Assets

Advance to asset ratio = Total advances \* 100

			To	tal asset	S		
YEAR	SBI	IOB	CANARA	KVB	SIB	<b>HDFC</b>	AXIS
2007-2008	57	59	59	64	61	47	54
2008-2009	56	61	62	61	58	53	55
2009-2010	59	60	63	61	61	56	57
2010-2011	61	62	63	63	62	57	58
2011-2012	64	64	62	63	67	57	59
2012-2013	66	65	57	62	63	59	57
2013-2014	67	63	60	65	65	62	60
Mean	61.429	62	60.857	62.71	62.43	55.86	57.14

Source: Annual Report

The above table shows the advance to asset ratio of the seven banks taken for the study. It is very evident from the table that KVB has high ratio (average being 62.71). Advance to asset ratio generally means that it show how efficient capital is managed, here KVB bank is more efficient to manage capital compare to other banks. A low advance to asset ratio (this case HDFC bank with an average of 55.86) indicated less efficient capital managed compared to other banks but there is tremendous increase in every year which shows gradual increase in the ratio. The other bank are also performing well in capital management, SIB and IOB are next best in performance.

Table-3, G- Securities to Investment Ratio

G-Securities to total investment ratio = G-Securities \* 100

Total investment YEAR SBI IOB **CANARA** KVB SIB **HDFC AXIS** 2007-2008 74 90 85 86 78 64 2008-2009 82 87 87 80 66 88 59 2009-2010 80 87 90 86 78 87 61 2010-2011 78 80 87 75 85 76 61 2011-2012 82 91 86 88 87 78 62 2012-2013 77 90 76 80 91 79 63 2013-2014 78 87 81 92 80 79 61 Mean | 78.714 | 87.4286 84.8571 87.143 77.7143 78.14 60.86

Source: Annual Report



The above table shows the G-Securities to total investment ratio of the seven banks taken for the study. It is very evident from the table that IOB has high ratio (average being 87.4286). G-Securities to total investment ratio generally means that it is quick fund of the bank which can be encashed at any point of time, here IOB bank has more securities to meet the risk by using liquid assets compare to other banks. A less liquidity is seen in AXIS bank where the fund reserve are less compared to other banks and even there is fluctuations in every year there is no constant increase in securities, high profit – high risk or low profit – low risk.

Table-4, Gross NPA to Net Advance Ratio

Gross NPA

Gross NPA to Net Advance Ratio = \* 100

Net Advance

YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	3.08	1.65	1.18	2.06	1.8	1.53	0.83
2008-2009	2.87	2.56	1.56	1.97	2.19	1.98	1.09
2009-2010	1.53	4.57	1.52	1.74	1.33	1.43	1.25
2010-2011	4.15	2.76	1.45	1.28	1.12	1.05	1.11
2011-2012	4.44	2.78	1.73	1.34	0.97	1	1.06
2012-2013	4.75	4.12	2.57	0.96	1.36	0.97	1.2
2013-2014	4.95	5.12	2.49	0.82	1.19	0.98	1.34
Mean	3.681	3.37	1.786	1.453	1.42286	1.277	1.126

Source: Annual Report

The above table shows the Gross NPA to Net Advance Ratio of the seven banks taken for the study. It is very evident from the table that AXIS bank has less ratio (average being 1.126). Gross NPA to Net Advance ratio generally means that lower the ratio, better the quality of advances; here AXIS bank has less non- performing asset, there is only less borrower has failed to make interest or principal compare to other banks. The NPA is high in SBI were there is lending of more loans to the customer but they are capable to manage the risk by getting more deposits. Hence larger the business larger will be risk. Here SIB, HDFC, KVB also maintain low risk.

Table-5, Net NPA to Net Advance Ratio

<del>\*1</del>00

Net NPA

Net NPA to Net Advance Ratio = \_\_\_\_\_

Net Advance

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YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	1.78	0.6	0.84	1.83	0.32	0.47	0.42
2008-2009	1.79	1.33	1.56	2.48	1.13	0.63	0.4
2009-2010	1.72	2.52	1.52	2.29	0.38	0.31	0.4
2010-2011	1.63	1.18	1.45	0.77	0.29	0.19	0.29
2011-2012	1.82	1.35	1.46	3.28	0.28	0.18	0.28
2012-2013	2.1	2.51	2.18	0.36	0.78	0.2	0.36
2013-2014	2.57	3.21	1.98	0.41	0.77	0.27	0.44
Mean	1.9157	1.8143	1.57	1.6314	0.5643	0.321429	0.37
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Source: Annual Report

The above table shows the Net NPA to Net Advance Ratio of the seven banks taken for the study. It is very evident from the table that HDFC bank has less ratio (average being 0.321429). Net NPA to Net Advance Ratio means that is used to measure of the overall quality of bank loan, here HDFC bank has less net non-performing asset, which show bank is performing well and it is able to recover its debt. Here as compared to its peers it has lowest ratio which is better. The NPA is high in SBI were there have to maintain high standard in asset quality through appropriate risk management measure and recovered measures as lower NPA level.



#### Table-6, Total Investment to Total Asset Ratio

Total investment

Total investment to total asset ratio = \*100

Total asset

YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	2.6	2.7	2.7	2.4	2.2	3.7	3
2008-2009	2.8	2.5	2.6	2.7	2.3	3.2	3.1
2009-2010	2.7	2.8	2.6	2.9	2.1	2.6	3
2010-2011	2.4	2.7	2.4	2.7	2.2	2.5	2.9
2011-2012	2.3	2.5	2.7	2.7	1.8	2.8	3.2
2012-2013	2.2	2.5	3	2.9	2.2	2.7	3.3
2013-2014	2.2	2.5	2.7	2.5	2.6	2.3	2.9
Mean	2.45714	2.6	2.671	2.686	2.2	2.829	3.057

Source: Annual Report

The above table shows the Total investment to total asset ratio of the seven banks taken for the study. It is very evident from the table that AXIS bank has higher ratio (average being 3.057). Total investment to total asset higher ratio means that the bank has conservatively kept a high cushion of investment to guard against NPA's. However, this affects its profitability adversely. A low ratio is found in SIB, where the investment is less and its risk managing the non-performing assets. The private bank has more investment to safeguard the risks.

Table-7, Net NPA to Total Assets Ratio

Net NPA

Net NPA to Total Assets Ratio = \* 100

**Total Assets** 

YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	0.1	0.35	0.76	0.11	0.19	0.22	0.22
2008-2009	0.09	0.82	0.68	0.15	0.65	0.34	0.38
2009-2010	0.05	1.52	0.67	0.14	0.24	0.17	0.49
2010-2011	0.07	0.74	0.69	0.49	0.18	0.1	0.48
2011-2012	0.11	0.08	0.9	0.28	0.18	0.1	0.46
2012-2013	0.14	1.64	1.2	0.23	0.5	0.11	0.48
2013-2014	0.21	2.05	1.19	0.27	0.51	0.16	0.54
Mean	0.11	1.029	0.87	0.239	0.35	0.171	0.436

Source: Annual Report

The above table shows the Net NPA to Total Assets Ratio of the seven banks taken for the study. It is very evident from the table that SBI bank has lower ratio (average being 0.11). Net NPA to Total Assets Ratio means that the bank is assessing credit risk and to an extent recovering the debts. Total assets considered are net of revaluation reserves lower the ratio better is the performance of the bank. A high ratio is found in IOB as the non-performing asset is more, where recovering the of debt is to be found more risk.

# **Table-8, Credit Deposit Ratio**

Total advance

Credit deposit ratio = \* 100

Total deposits

	100	ar acposit	D .				
YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	77.5	71.62	69.6	75.07	68.97	62.94	68.08
2008-2009	73.1	74.79	73.96	68.93	65.5	69.24	69.48
2009-2010	78.58	71.3	72.16	70.03	68.76	75.21	73.84
2010-2011	81.02	77	72.27	72.05	68.93	76.69	75.25
2011-2012	83.12	78.86	71.09	74.58	74.74	79.26	77.12
2012-2013	86.93	79.33	68.05	76.26	71.87	80.96	77.97
2013-2014	86.76	77.15	71.56	77.68	76.28	85.92	81.89
Mean	81.001	75.7214	71.2414	73.514	70.7214	75.75	74.8



The above table shows the Credit deposit ratio of the seven banks taken for the study. It is very evident from the table that SBI bank has higher ratio (average being 81.001). Credit deposit ratio means that the bank has lends out of the deposits it has mobilize. A higher ratio indicates more reliance on deposits for lending. A ratio of 60% in this respect is considered to be desirable norms. The banks are having more than 60%, where the every bank has efficient lending capacity. The low Credit deposit ratios (in this case SIB bank with an average of 70.7214) indicate low lending deposits compare to other banks.

Table-9, Business Per Employees Ratio

Business employee ratio = Total Business \*100

Total no. of employees

YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	635.2	580	612.3	613.7	606.438	434	728.2
2008-2009	731.9	686	784.5	647.3	622.673	458.7	964.5
2009-2010	841.4	706	983.6	784.9	756.712	564.9	1135
2010-2011	888.4	997	1228	930	893.572	661.1	1254
2011-2012	1022	1166	1374	988.2	1084.9	668.9	1228
2012-2013	1144	1282	1422	1012	1191.88	775.8	1185
2013-2014	1352	1359	1440	1059	1177.34	1001	1209
Mean	945.1	968	1121	862.3	904.789	652.1	1101

Source: Annual Report

The above table shows the Business employee ratio of the seven banks taken for the study. It is very evident from the table that CANARA bank has higher ratio (1121). Business employee ratio means that the bank has more productivity level of the bank employees. The low Business employee ratio (in this case HDFC bank with an average of 652.1) indicates bank is operating with less employees base compare to other banks. The AXIS bank, IOB is followed by CANARA Bank.

Table-10, Profit Per Employees Ratio

Profit per employees ratio = Profit after Tax \* 100

Total no of Employees

YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	3.7552	4.8196	3.6523	2.7198	3.7844	9.30915	5.3021
2008-2009	4.4301	5.1967	4.9756	5.9843	4.2385	9.1475	8.8022
2009-2010	4.5763	2.6289	7.3525	8.0487	4.847	12.5214	11.62
2010-2011	3.7073	4.1597	9.745	9.0859	5.5098	15.1729	12.818
2011-2012	5.4359	3.8373	8.2125	8.8398	7.1462	17.5161	13.366
2012-2013	6.1785	2.0576	6.9645	8.1772	8.2321	22.4296	13.666
2013-2014	4.9053	2.025	5	5.8537	8	29.6624	14.657
Mean	4.7127	3.5321	6.0262	6.9585	6.0946	16.53701	11.462

Source: Annual Report

The above table shows the Profit per employee ratio of the seven banks taken for the study. It is very evident from the table that HDFC bank has higher ratio (average being 16.53701). Profit per employee ratio means that the bank has more productivity level of the bank employees with profit. The low Profit per employee ratio (in this case IOB bank with an average of 3.5321) indicate productivity of bank lags behind when compares with new private sector bank. The new private sector bank has more productivity.

# Table-11, Business per Branch Ratio

Business per Branch ratio = Total Business

\* 100

Total no of Branches



YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	1117.51	781	975.9	762.9	512.197	2158	219.2
2008-2009	1316.33	911.9	1190	817.7	564.988	1712	238.2
2009-2010	1348.69	945.2	1326	978.2	669.554	1699	237.3
2010-2011	1462.45	1174	1555	1153	783.304	1856	238.5
2011-2012	1562.81	1214	1554	1243	911.161	1737	240.3
2012-2013	1762.84	1249	1604	1237	1014.37	1750	230.7
2013-2014	1891.78	1237	1518	1359	1054.42	2006	213.5
Mean	1494.63	1073	1389	1079	787.142	1845	231.1

The above table shows the Business per Branch ratio of the seven banks taken for the study. It is very evident from the table that HDFC bank has higher ratio (average being 1845). Business per Branch ratio means that to measure the efficiency of all the branches of a bank in generating business for the bank. Higher the ratio better is the efficiency of the bank. The low Business per Branch ratio (in this case AXIS bank with an average of 231.1) indicate less efficient in branches of a bank in generating business for the bank. The SBI bank is followed by HDFC bank.

# Table-12, Gross Profit Per Employees Ratio

Gross profit per employees ratio =  $\frac{\text{Gross profit}}{\text{Total no of employees}}$  \* 100

YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	7.3143	8.025	6.5378	8.385	3.59	4.203	1.102
2008-2009	8.7011	9.893	8.9907	8.798	4.05	4.261	1.806
2009-2010	9.1468	6.861	11.667	10.31	4.555	5.845	2.417
2010-2011	11.365	11.1	14.036	13.13	5.207	7.043	2.427
2011-2012	14.653	12.91	14.059	13.33	6.832	7.981	2.341
2012-2013	13.615	13.5	13.796	12.73	7.869	9.991	2.455
2013-2014	14.461	13.45	13.928	12.05	7.137	12.86	2.701
Mean	11.322	10.82	11.859	11.25	5.606	7.454	2.178

Source: Annual Report

The above table shows the Gross profit per employee's ratio of the seven banks taken for the study. It is very evident from the table that CANARA bank has higher ratio (average being 11.859). Gross profit per employee's ratio has surplus earned before tax per employees. The higher the ratio, the higher is the efficiency of the management. The low Gross profit per employees ratio (in this case AXIS bank with an average of 2.178) indicate less efficient in earning surplus before tax. The SBI bank is followed by CANARA bank.

# **Table-13, Net Interest Margin To Total Assets Ratio**

Net Interest Margin

Net interest margin to total assets ratio = \* 100

**Total Assets** 

YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	23.591	75.991	19.596	25.28	23.063	39.26	23.6
2008-2009	21.643	79.633	21.401	24.06	25.652	46.03	24.9
2009-2010	22.471	78.157	21.313	25.66	22.256	33.36	27.7
2010-2011	26.58	67.688	23.278	27.13	24.104	38.01	27.1
2011-2012	32.415	81.481	20.551	24.32	25.309	36.99	28.1
2012-2013	28.304	84.513	18.79	24.72	25.722	40.38	28.4
2013-2014	27.498	82.515	17.85	24.89	25.439	37.94	31.4
Mean	26.072	78.5682	20.397	25.151	24.5065	38.85	27.32

Source: Annual Report

The above table shows the Net interest margin to total assets ratio of the seven banks taken for the study. It is very evident from the table that IOB bank has higher ratio (average being 78.5682). Net interest margin to total assets ratio higher the interest spread will be better the bank in the market. The higher the ratio, the higher is the



efficiency of the management. The low Net interest margin to total assets ratio (in this case CANARA bank with an average of 20.397) indicates less efficient in spreading from earned interest will be less compared to other bank.

#### **Table 14, Interest Income to Total Income Ratio**

Interest Income

Interest Income to Total Income Ratio =

\* 100

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YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS		
2007-2008	84.92	90.8	85.08	87.96	91.3113	81.58	79.6		
2008-2009	83.41	85.8	88.11	84.5	91.1262	80.1	78.9		
2009-2010	82.59	90	86.78	87.68	90.2779	83.23	74.68		
2010-2011	83.72	90.8	89.51	89.35	92.5571	82.13	76.59		
2011-2012	88.13	91.4	91.33	90.33	93.5499	83.51	80.23		
2012-2013	88.18	91.3	91.53	90.36	92.9773	83.41	79.92		
2013-2014	88.02	91.3	90.96	90.06	93.1557	83.68	90.03		
Mean	85.57	90.2	89.04	88.61	92.1365	82.52	79.99		

Source: Annual Report

The above table shows the Interest Income to Total Income Ratio of the seven banks taken for the study. It is very evident from the table that SIB bank has higher ratio (average being 92.1365). Interest Income to Total Income Ratio show the percentage of income generate in bank through interest. The higher the ratio, the higher is the earning. The low Interest Income to Total Income Ratio (in this case AXIS bank with an average of 79.99) indicate less earning but there is constant increase in generating income from its lending operation and earns adverse profit.

Table-15, Non -Interest to Total Income Ratio

Non-Interest

Non- Interest to Total Income Ratio =

\* 100

#### Total Income

YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS	
2007-2008	15.084	9.2027	14.924	12.045	8.6887	18.41525	20.401	
2008-2009	16.594	10.174	11.895	15.498	8.8738	19.90463	21.095	
2009-2010	17.413	10.757	13.225	12.319	9.7221	16.76923	25.32	
2010-2011	14.762	11.975	10.49	10.65	7.4429	17.86707	23.41	
2011-2012	13.092	8.5863	8.6671	9.6653	6.4501	16.49342	19.771	
2012-2013	11.819	8.7105	8.4688	9.6392	7.0227	16.59061	24.863	
2013-2014	11.977	8.7287	9.0449	9.9377	6.8443	16.31679	20.076	
Mean	14.391	9.7334	10.959	11.393	7.8635	17.47957	22.134	

Source: Annual Report

The above table shows the Non- Interest Income to Total Income Ratio of the seven banks taken for the study. It is very evident from the table that AXIS bank has higher ratio (average being 22.134). Non-Interest Income to Total Income Ratio shows the income from operation other then lending. The higher the ratio, the higher is the earning from effective operation of business. The low Non-Interest Income to Total Income Ratio (in this case SIB bank with an average of 7.8635) indicate less earning are less in operation activity compare to other banks.

# Table-16, Liquid Assets to Total Assets Ratio

Liquid Assets

Liquid Assets to Total Assets ratio =

\*100

**Total Assets** 

YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS		
2007-2008	9.95325	9.947	9.859	8.137	1.45438	9.912	7.355		
2008-2009	9.96021	9.859	9.831	8.055	1.39383	9.906	8.116		
2009-2010	9.95811	9.87	9.826	5.705	1.62647	9.905	7.389		
2010-2011	9.96107	9.906	9.915	6.415	1.78166	9.9	8.412		



2011-2012	9.95907	9.921	9.924	6.045	1.66312	9.931	8.314
2012-2013	9.95559	9.925	9.765	4.434	1.45398	9.932	8.824
2013-2014	9.95535	9.905	9.685	5.626	1.40801	9.94	9.937
Mean	9.95752	9.905	9.829	6.345	1.54021	9.918	8.335

The above table shows the Liquid Assets to Total Assets ratio of the seven banks taken for the study. It is very evident from the table that SBI bank has higher ratio (average being 9.95752). Liquid Assets to Total Assets ratio shows better liquidity in the bank. The higher the ratio, the higher is the liquidity to undergo the risks. The low Liquid Assets to Total Assets ratio (in this case SIB bank with an average of 1.54021) indicate less liquidity to face risk compare to other banks. The other bank as HDFC, IOB, CANARA are also has high liquidity.

Table-17,G- Securities to Total Assets Ratio

G-Securities

G-Securities to Total Assets Ratio = -----\* \* 100

Total Assets

YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	19.56	25.39	23.725	20.81	21.01	23.78	18.42
2008-2009	23.533	22.51	23.058	22.36	19.85	28.46	18.88
2009-2010	21.712	25.11	23.555	25.81	22.03	22.95	18.93
2010-2011	19.038	21.81	21.17	23.92	20.69	19.34	18.21
2011-2012	19.296	23.23	23.724	24.54	20.34	22.56	20.49
2012-2013	17.374	22.65	24.589	28.93	20.05	21.21	21.29
2013-2014	17.39	22.29	21.895	25.29	20.92	18.79	18.17
Mean	19.7	23.28	23.102	24.52	20.7	22.44	16.53

Source: Annual Report

The above table shows the G-Securities to Total Assets Ratio of the seven banks taken for the study. It is very evident from the table that KVB bank has higher ratio (average being 24.52). G-Securities to Total Assets Ratio the bank has maintained around 25% of net demand and time liabilities indicating that risk involved in the asset held are less and the quick assets of the bank which can be encashed easily. The low G-Securities to Total Assets Ratio (in this case AXIS bank with an average of 16.53) indicate less quick asset to undergo risk.

Table-18, Liquid Assets to Demand Deposits Ratio

Liquid Assets

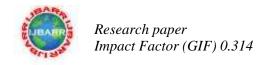
Liquid Assets to Demand Deposits ratio =

- \* 100

			Demand Deposits					
YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS	
2007-2008	7.3181	7.22406	13.4304	7.7087	1.31629	4.59	2.715	
2008-2009	8.6733	9.03753	15.095	9.1809	1.83612	4.889	2.895	
2009-2010	8.5577	10.5306	14.2436	6.1248	3.29131	7.762	2.716	
2010-2011	9.2913	15.0016	13.6014	7.2456	4.86683	5.923	3.09	
2011-2012	13.51	22.6716	25.0567	8.5193	6.3829	7.476	3.097	
2012-2013	13.838	29.8633	27.4945	5.4057	8.5628	7.752	3.017	
2013-2014	15.757	30.2613	27.3493	8.8835	10.014	8.167	3.036	
Mean	10.992	17.7986	19.4673	7.5812	5.18146	6.651	2.938	

Source: Annual Report

The above table shows the Liquid Assets to Demand Deposits ratio of the seven banks taken for the study. It is very evident from the table that CANARA bank has higher ratio (average being 19.4673). Liquid Assets to Demand Deposits ratio the bank has ability to meet the demand from deposits. The low Liquid Assets to Demand Deposits ratio (in this case AXIS bank with an average of 2.938) indicate low ability to meet the deposits compare to other bank.



# **Table-19, Liquid Assets to Total Deposits Ratio**

Liquid Assets

Liquid Assets to Total Deposits Ratio = \* 100

**Total Deposits** 

YEAR	SBI	IOB	CANARA	KVB	SIB	<b>HDFC</b>	AXIS		
2007-2008	13.36	12	13.43	9.455	16.3994	9.243	12.4		
2008-2009	12.94	11.9	15.1	9.1	15.7034	10.85	12.49		
2009-2010	13.05	11.7	14.24	6.517	18.0477	10.59	12.69		
2010-2011	13.05	12.2	1.36	7.334	19.6744	11.16	12.7		
2011-2012	12.74	12.2	25.06	6.575	18.3944	11.44	12.86		
2012-2013	12.96	12	27.49	5.007	16.3572	11.03	13.39		
2013-2014	12.8	11.9	27.35	6.199	16.3021	13.64	13.66		
Mean	12.99	12	17.72	7.169	17.2684	11.14	12.89		

Source: Annual Report

The above table shows the Liquid Assets to Total Deposits Ratio of the seven banks taken for the study. It is very evident from the table that CANARA bank has higher ratio (average being 17.72). Liquid Assets to Total Deposits Ratio has the capacity of the bank to pay out the deposits when claimed by the depositors. The low Liquid Assets to Total Deposits Ratio (in this case KVB bank with an average of 7.169) indicate less ability to pay deposits compare to other banks.

Table-20, Return on Net worth Ratio

Net Profit

Return on Net worth Ratio = \* 100

Net worth

YEAR	SBI	IOB	CANARA	KVB	SIB	HDFC	AXIS
2007-2008	9.3268	11.806	9.9449	17.507	3.1859	2.644766	9.7741
2008-2009	9.458	10.95	9.4008	17.468	2.5778	2.629756	12.289
2009-2010	8.7016	5.3929	11.336	20.479	16.454	2.920606	13.92
2010-2011	6.7538	5.9991	11.979	19.103	9.4331	3.049979	13.961
2011-2012	8.7706	4.7809	8.7735	18.021	6.1538	3.425168	14.852
2012-2013	9.006	2.3185	6.8494	17.066	4.0934	3.869546	15.209
2013-2014	6.0771	2.1889	4.8658	12.779	2.9065	4.014817	16.224
Mean	8.2991	6.2053	9.0214	17.489	6.4006	3.222091	13.747

Source: Annual Report

The above table shows the Return on Net worth Ratio of the seven banks taken for the study. It is very evident from the table that KVB bank has higher ratio (average being 17.489). Return on Net worth Ratio considers reveals how well the resources of a firm are being utilized. Higher the ratio, better are the result. The low Return on Net worth Ratio (in this case HDFC bank with an average of 3.222091) indicate less utilization of resource compare to other bank but there is gradual increase in every year so there is an expectation of better utilization of resource.

# COMPARSION OF CAMEL RATING

**Table-21, Capital Adequacy** 

Name of the bank\Ratio	Debt- Equity Ratio	Advance to Asset Ratio	G- Securities to Investment Ratio
SBI	16.147	61.4	78.714
IOB	18.29	62.9	87.429
CANARA	17.084	60.9	84.857
KVB	14.003	62.7	87.143
SIB	16.681	62.4	77.714
HDFC	11.248	55.9	78.143
AXIS	11.971	57.1	60.857

The above table reveals the capital adequacy ratio of seven banks.

• As per capital adequacy ratio, the minimum ratio is 9% i.e. every bank has to maintain with RBI.



- In case of debt- equity ratio, IOB has the highest ratio as 18.29 and HDFC bank has the lowest ratio as 11.24
- In case of advance to total asset ratio, IOB has the highest ratio as 62.9 and HDFC bank has the lowest ratio as 55.9
- In case of G- securities to investment ratio, IOB has the highest ratio as 87.4 and AXIS bank has the lowest ratio as 60.85
- So, overall position of IOB was good in performing the efficiency capital management, aggressive in financing its growth with debt and quick fund of the bank which can be encashed at any point of time.

**Table-22, Asset Quality** 

NAME OF THE BANK\RATIO	GROSS NPA TO NET ADVANCE RATIO	NET NPA TO NET ADVANCE RATIO	TOTAL INVESTMENT TO TOTAL ASSET RATIO	NET NPA TO TOTAL ASSETS RATIO
SBI		1.92	2.46	0.11
IOB	3.366	1.81	2.6	1.03
CANARA	1.786	1.57		0.87
KVB	1.453	1.63	2.69	0.24
SIB	1.423	0.56	2.2	0.35
HDFC	1.277	0.32	2.83	0.17
AXIS	1.126	0.37	3.06	0.44

The above table reveals the asset quality ratio of seven banks.

- Asset quality determines the robustness of financial institutions against loss of value in the assets. Asset quantity of existing and potential credit risk associated with assets and of balance sheet items.
- In case of gross NPA to net advance ratio, SBI has the highest ratio as 3.68 and AXIS bank has the lowest ratio as 1.12
- In case of net NPA to net advance ratio, SBI has the highest ratio as 1.92 and HDFC bank has the lowest ratio as 0.32
- In case of total investment to total asset ratio, AXIS has the highest ratio as 3.06 and SIB bank has the lowest ratio as 2.2
- In case of net NPA to total assets ratio, IOB has the highest ratio as 1.03 and SBI bank has the lowest ratio as 0.11
- In NPA lower the ratio, better quality of asset and investment higher the ratio, better quality of asset. So overall position of the private bank maintain the safer position in asset quality.

Table-23, Management Quality

NAME OF THE BANK\RATIO	CREDIT DEPOSIT RATIO	BUSINESS PER EMPLOYEES RATIO	PROFIT PER EMPLOYEES RATIO	BUSINESS PER BRANCH RATIO	GROSS PROFIT PER EMPLOYEES RATIO
SBI	81	945.1	4.713	1494.63	11.32
IOB	75.72	968	3.532	1073.15	10.82
CANARA	71.24	1121	6.026	1389.01	11.86
KVB	73.51	862.3	6.958	1078.62	11.25
SIB	70.72	904.8	6.095	787.142	5.606
HDFC	75.75	652.1	1.654	1845.31	7.454
AXIS	74.8	1101	1.146	231.115	2.178

The above table reveals the management quality ratio of seven banks.

- Management efficiency to plan and be proactive in the dynamic environment, leadership, innovativeness and administrative competence of the bank.
- In case of credit deposit ratio, SBI has the highest ratio as 81 and SIB bank has the lowest ratio as 70.72
- In case of business per employees ratio, CANARA has the highest ratio as 1121 and HDFC bank has the lowest ratio as 652.1
- In case of profit per employees ratio, KVB has the highest ratio as 6.958 and AXIS bank has the lowest ratio as 1.146



- In case of business per branch ratio, HDFC has the highest ratio as 1845.31and AXIS bank has the lowest ratio as 231.115
- In case of gross profit per employees ratio, CANARA has the highest ratio as 11.86 and SBI bank has the lowest ratio as 2.178
- In management quality of the entire bank are performing well and there is dynamic leadership between among the banks. But CANARA bank show moderate high performance among the banks.

**Table-24, Earnings and Profitability** 

NAME OF THE BANK \RATIO	NET INTEREST MARGIN TO TOTAL ASSETS RATIO	INTEREST INCOME TO TOTAL INCOME RATIO	NON -INTEREST TO TOTAL INCOME RATIO
SBI	26.0715	85.566	14.39
IOB	78.5682	90.191	9.733
CANARA	20.397	89.041	10.96
KVB	25.1506	88.607	11.39
SIB	24.5065	92.136	7.864
HDFC	38.8529	82.52	17.48
AXIS	27.3169	79.994	22.13

The above table reveals the earnings and profitability ratio of seven banks.

- Earnings reflect quantity and trend of earnings as well as sustainability or quality of earnings.
- In case of net interest margin to total asset ratio, IOB has the highest ratio as 78.5682 and CANARA bank has the lowest ratio as 20.397.
- In case of interest income to total income ratio, SIB has the highest ratio as 92.136and AXIS bank has the lowest ratio as 27.3169.
- In case of non-interest to total income ratio, AXIS has the highest ratio as 22.13 and IOB bank has the lowest ratio as 9.733.
- In earning quality, the net interest margin of IOB bank is very higher compare to other banks as the earn more income from the interest of advance.

Table-25, Liquidity

NAME OF THE BANK\ RATIO	LIQUID ASSETS TO TOTAL ASSETS RATIO	G-SECURITIES TO TOTAL ASSETS RATIO	LIQUID ASSETS TO DEMAND DEPOSITS RATIO	LIQUID ASSETS TO TOTAL DEPOSITS RATIO	RETURN ON NETWORTH RATIO
SBI	9.958	19.7	10.99	12.99	8.2991
IOB	9.905	23.28	17.8	12	6.2053
CANARA	9.829	23.1	19.47	17.72	9.0214
KVB	6.345	24.52	7.581	7.169	17.489
SIB	1.54	20.7	5.181	17.27	6.4006
HDFC	9.918	22.44	6.651	11.14	3.2221
AXIS	8.335	16.53	2.938	12.89	13.747

The above table reveals the management quality ratio of seven banks.

- Liquidity efficiency capability of management to properly identify, measure, monitors and controls the institution's liquidity position.
- In case of liquid assets to total assets ratio, SBI has the highest ratio as 9.958 and SIB bank has the lowest ratio as 1.54
- In case of G-securities to total assets ratio, KVB has the highest ratio as 24.52 and AXIS bank has the lowest ratio as 16.53
- In case of liquid assets to demand deposits ratio, CANARA has the highest ratio as 19.47and AXIS bank has the lowest ratio as 2.938
- In case of liquid assets to total deposits ratio, CANARA has the highest ratio as 17.72and HDFC bank has the lowest ratio as 11.14



- In case of return on net worth ratio, KVB has the highest ratio as 17.489 and HDFC bank has the lowest ratio as 3.2221
- In liquidity of the entire bank is flexible as they have liquid asset efficient to manage in the business. Comparatively the public sector bank is more efficient in liquid cash.

# CORRELATION Table-26. Relationship between Total Deposits And Total Advance

Deposits illia Total
CORRELATION
0.997
0.601
0.997
0.999
0.997
0.990
0.999

The above table shows the correlation between total deposits and total advance for the seven banks. The correlation between total deposits and total advance of the SBI, CANARA, SIB, HDFC, AXIS and KVB are more than r = 0.99 and IOB bank are r = 0.60. Since the correlation for the all banks lies between 0.50 to1 this indicates positive correlation. So the SBI, CANARA, SIB, HDFC, AXIS and KVB banks are "Highly positive correlation" and IOB are "Moderate positive correlation" between total deposits and total advance as they move in positive direction.

Table-27, Relationship between Liquid Assets and Fixed Assets

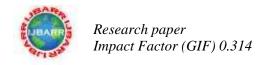
NAME OF THE BANKS	CORRELATION
SBI	0.983
IOB	0.771
CANARA	0.779
KVB	0.912
SIB	0.97
HDFC	0.952
AXIS	0.927

The above table shows the correlation between liquid assets and fixed assets for the seven banks. The correlation between liquid assets and fixed assets of the SBI, SIB, HDFC, AXIS and KVB are more than r = 0.90 IOB and CANARA bank are r = 0.77. Since the correlation for the all banks lies between 0.50 to1 this indicates positive correlation. So the SBI, SIB, HDFC, AXIS and KVB banks are "Highly positive correlation" and IOB and CANARA bank are "Moderate positive correlation" between the liquid assets and fixed assets as they move in positive direction.

Table-28, Relationship between Interest Earned and Interest Expenditure

NAME OF THE BANKS	CORRELATION
SBI	0.996
IOB	0.998
CANARA	0.996
KVB	0.999
SIB	0.9995
HDFC	0.996
AXIS	0.995

The above table shows the correlation between interests earned and interest expenditure for the seven banks. The correlation between interest earned and interest expenditure of the seven bank are more than r = 0.99. Since the correlation for the all banks lies between 0.50 to 1 this indicates positive correlation. So the seven banks are "Strongly positive correlation" between the interests earned and interest expenditure as they move in same direction.



#### **SUMMARY OF FINDING**

#### **Capital Adequacy**

- The debt-equity ratio of IOB is highest (18.29) has been aggressive in financing its growth with debt.
- The advance to asset ratio of KVB is highest (62.71) has been efficiently capital managed.
- The G-Securities to total investment ratio of IOB is highest (87.4286) has quick fund of the bank which can be encashed at any point of time.

#### **Asset Quality**

- The Gross NPA to Net Advance Ratio of AXIS bank is lowest (1.126) has better the quality of advances.
- The Net NPA to Net Advance Ratio of HDFC bank is lowest (0.321429) has the overall quality of bank loan.
- The Total investment to total asset ratio of AXIS bank is highest (3.057) has kept a high cushion of investment to guard against NPA's.
- The Net NPA to Total Assets Ratio of SBI bank is lowest (0.11) has assessing credit risk and to an extent recovering the debts.

### **Management Quality**

- The Credit deposit ratio of SBI bank is highest (81.001) has lends out of the deposits it has mobilized.
- The Business employee ratio of CANARA bank is highest (1121) has more productivity level of the bank employees.
- The Profit per employee ratio of HDFC bank is highest (16.53701) has more productivity level of the bank employees with profit.
- The Business per Branch ratio of HDFC bank is highest (1845) has efficiency of all the branches of a bank in generating business for the bank.
- The Gross profit per employee's ratio of CANARA bank is highest (11.859) has surplus earned before tax per employees.

# **Earning Ability**

- The Net interest margin to total assets ratio of IOB bank is highest (78.5682) has the interest spread will by the bank in the market.
- The Interest Income to Total Income Ratio of SIB bank is highest (92.1365) has income generate in bank through interest.
- The Non- Interest Income to Total Income Ratio of AXIS bank is highest (22.134) has the income from operation other then lending.

#### Liquidity

- The Liquid Assets to Total Assets ratio of AXIS bank is highest (22.134) has better liquidity in the bank.
- The G-Securities to Total Assets Ratio of KVB bank is highest (24.52) has quick assets of the bank which can be encashed easily.
- The Liquid Assets to Demand Deposits ratio of CANARA bank is highest (19.4673) has ability to meet the demand from deposits.
- The Liquid Assets to Total Deposits Ratio of CANARA bank is highest (17.72) has the capacity of the bank to pay out the deposits when claimed by the depositors.
- The Return on Net worth Ratio of KVB bank is highest (17.489) how well the resources of a firm are has utilized.

#### **Camel Rating**

- The capital adequacy ratio overall position of IOB was good in performing the efficiency capital management, aggressive in financing its growth with debt and quick fund of the bank which can be encashed at any point of time.
- In NPA lower the ratio, better quality of asset and investment higher the ratio, better quality of asset. So overall position of the private bank maintain the safer position in asset quality.
- In management quality of the entire bank are performing well and there is dynamic leadership between among the banks. But CANARA bank show moderate high performance among the banks.



- In earning quality, the net interest margin of IOB bank is very higher compare to other banks as the earn more income from the interest of advance.
- In liquidity of the entire bank is flexible as they have liquid asset efficient to manage in the business. Comparatively the public sector bank is more efficient in liquid cash.

#### Correlation

- The correlation between total deposits and total advance, the SBI, CANARA, SIB, HDFC, AXIS and KVB banks are "Highly positive correlation" and IOB are "Moderate positive correlation" between total deposits and total advance as they move in positive direction.
- The correlation between liquid assets and fixed assets, the SBI, SIB, HDFC, AXIS and KVB banks are "Highly positive correlation" and IOB and CANARA bank are "Moderate positive correlation" between the liquid assets and fixed assets as they move in positive direction.
- The correlation between interest earned and interest expenditure the seven banks are "Strongly positive correlation" between the interest earned and interest expenditure as they move in same direction.

#### **CONCLUSION**

In the study, it has been that the performance measurement of a bank under traditional measures as CAMELS rating techniques. Hence the concept of CAMELS rating for performance evaluation of a bank. CAMELS rating system basically quantitative technique, is widely used for measuring performance of banks in India. Due to radical changes in the banking sector in the recent years, the central banks all around the world have improved their supervision quality and techniques. In evaluating the function of the banks, many of the developed countries are now following uniform financial rating system (CAMEL RATING) along with other existing procedures and techniques. Various studies have been conducted in India as well on various banks using CAMEL framework. Different banks are ranked according to the ratings obtained by them on the five parameters. The study shows all the public sector bank has efficient performance in the rating then the private sector bank. As private sector have slight adverse effect in rating, they to maintain good performance by keeping good investment to overtake the non – performing assets. The banks do not have a huge variation because they are top banks in each sector. The public banks have to maintain the non-performing asset in lower ratio. The basis of the study or analysis banking customer has more trust on the public sector banks as compared to private sector banks.

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