

A COMEL MODEL ANALYSIS OF SELECTED PUBLIC AND PRIVATE SECTOR BANKS

T.Thirunavukkarasu, Assistant Professor,

Department of Management Studies, Kalaingar Karunanidhi Institute of technology.

E.Parthiban IInd-Year MBA Student,

Department of Management Studies, Kalaingar Karunanidhi Institute of technology.

ABSTRACT

The present paper analyzes the performance of major 2 private sector and 2 public sector bank for the period 20011-2014 using CAMEL approach. The research aims to evaluate Capital adequacy, Asset quality, Management, Earnings and Liquidity and then determine financial performance, operating soundness and regulatory compliance of banks. The application of CAMEL model to major private and public sector bank for the period 2011 to 2014 allows us to obtain a ranking of banks. We applied debt equity ratio for the analyze of capital adequacy parameter, loan loss provisions to total loans for the analyze of assets quality parameter, return on equity for analyzing management quality parameter, return on assets to analyze earnings ability and deposits on total assets ratio to analyze liquidity ability.

Keywords: Banks, CAMEL approach, Performance evaluation, Ratio analysis.

INTRODUCTION

Banking in India in the modern sense originated in the last decades of the 18th century. The first banks were Bank of Hindustan (1770-1829) and The General Bank of India, established 1786 and since defunct. The largest bank, and the oldest still in existence, is the State Bank of India, which originated in the Bank of Calcutta in June 1806, which almost immediately became the Bank of Bengal. This was one of the three presidency banks, the other two being the Bank of Bombay and the Bank of Madras, all three of which were established under charters from the British East India Company. The three banks merged in 1921 to form the Imperial Bank of India, which, upon India's independence, became the State Bank of India in 1955. For many years the presidency banks acted as quasi-central banks, as did their successors, until the Reserve Bank of India was established in 1935.

In 1969 the Indian government nationalized all the major banks that it did not already own and these have remained under government ownership. They are run under a structure known as 'profit-making public sector undertaking' (PSU) and are allowed to compete and operate as commercial banks. The Indian banking sector is made up of four types of banks, as well as the PSUs and the state banks; they have been joined since the 1990s by new private commercial banks and a number of foreign banks.

BANKING CONTRIBUTION TO ECONOMY

The Indian banking industry plays an important role in the economic development of the country and is the most dominant segment of the financial sector. Banks help channel savings to investments and encourage economic growth by allocating savings to investments that have potential to yield higher returns. India's banking system is a robust one and is classified into commercial banks and co-operative credit institutions. Commercial banks include: 1) scheduled commercial banks (SCBs) and non-scheduled commercial banks. SCBs are further classified into public sector banks (PSBs), private banks, foreign banks and regional rural banks (RRBs). Co-operative credit institutions include the various co-operative banks. As on Mar, 2012 the Indian banking system comprised 87 SCBs, 82 RRBs, 618 Urban Cooperative Banks (UCBs) and 94,531 rural cooperative credit institutions. As on Dec 2012, the Indian banking system comprised 165 SCBs including RRBs. Indian banking industry, valued at Rs 77 trillion (Source: IBEF), is growing at a slower pace and plagued by bad loans. In what could be termed as a challenging year, FY13 witnessed steep increase in bad loans of Indian banks and turning them skeptical to extend loans to companies. As a share of sector loan book, the bad loans

have gone up from 1.3% in March 2009 to 3.4% in March 2013. Public sector banks that account for 60% of the total banking assets have been the worst hit vis-a-vis its private and foreign counterparts.

RBI's hawkish monetary policy stance in order to combat inflation has led to sharp increase in interest rates during FY13. The elevated costs of deposits and limited pricing power ensured margin pressures for most of the banks for major part of FY13.

CAMEL MODEL APPROACH

CAMEL is basically, a ratio based model to evaluate the performance of bank under various criteria. Soundness of a bank measured on a scale of 1 (strongest) to 5 (weakest).

The **CAMELS ratings** or **Camels rating** is a supervisory rating system originally developed in the U.S. to classify a bank's overall condition. It's applied to every bank and credit union in the U.S. (approximately 8,000 institutions) and is also implemented outside the U.S. by various banking supervisory regulators. Bank examiners (trained and employed by the country's central bank) award these ratings on the basis of the adequacy and quality of a bank's Capital, Assets (loans and investments), Management, Earnings, Liquidity, and Sensitivity (to systemic-risk). Banks with a rating of 1 are considered most stable; banks with a rating of 2 or 3 are considered average, and those with rating of 4 or 5 are considered below average, and are closely monitored to ensure their viability. These ratings are disclosed only to the bank's management and not to other banks or the general public. CAMELS' rating is an advanced version of the older MACRO rating. See also bank examination.

REVIEW OF LITERATURE

In order to evaluate the financial performance of banking and financial sector the researchers, academicians and policy makers have investigated several studies in different perspectives and in different time periods. **Bodla and Verma (2006)** recommended that such types of rating would help the Reserve Bank of India to identify the banks whose performance needs special supervisory attention. The main attempt of CAMEL system is to find out problems which are faced by the banks themselves and catch up the comparative analysis of the performance of various banks.

Hirtle and Lopez (1999) stressed that the bank's CAMEL rating is highly confidential, and only exposed to the bank's senior management for the purpose of projecting the business strategies, and to appropriate supervisory staff. CAMEL is an acronym for five components of bank safety and soundness: capital adequacy, asset quality, management quality, earning ability, liquidity.

A study conducted by **Lace and Stephen (2001)** showed that there is definitely a relationship between bank efficiency scores and financial ratios used to proxy a bank's CAMEL rating. **Barretal. (2002)** viewed that "CAMEL rating criteria has become a concise and indispensable tool for examiners and regulators". This rating criterion ensures a bank's healthy conditions by reviewing different aspects of a bank based on variety of information sources such as financial statement, funding sources, macroeconomic data, budget and cash flow.

Said and Saucier (2003) used CAMEL rating methodology to evaluate the liquidity, solvency and efficiency of Japanese Banks, the study evaluated capital adequacy, assets and management quality, earnings ability and liquidity position.

OBJECTIVES

Objective of the Study

The objectives of our study are:

1. To analyze the financial position and performance of TWO PUBLIC and TWO PRIVATE sector bank using CAMEL model.
2. To give recommendations and suggestion for improvement of performance and financial position of private and public sector banks.

CAPITAL ADEQUACY RATIO

The capital adequacy ratio is propounded to ensure that banks can take up a reasonable level of losses arising from operational losses. The higher the CAR ratio, indicates stronger the bank and the more will be the protection of investors. The banks are required to maintain 9% capital adequacy ratio as per latest RBI norms. $CAR = (Tier-I\ Capital + Tier-II\ Capital) / Risk\ Weighted\ Assets$.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	12.44	12.96	12.92	13.86	13.04	3
IOB	10.78	11.85	13.32	14.55	12.62	4
ICICI	18.74	18.52	19.54	19.41	19.10	1
HDFC	16.07	16.80	16.52	16.22	16.40	2

SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE

It is found that ICICI ranked on the top position with highest CAR of 19.10 followed by HDFC (16.40) and SBI (13.04). IOB scored the lowest position.

ADVANCE TO ASSET RATIO

This is a ratio indicates the relationship between the total advances and total assets. This ratio indicates a bank’s aggressiveness in lending which ultimately produces better profitability. Higher ratio is preferred to a lower one.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	65.87	65.29	63.59	61.07	63.95	2
IOB	63.98	65.55	64.07	62.55	64.04	1
ICICI	51.82	48.90	48.35	47.96	49.26	4
HDFC	62.63	60.64	58.30	57.86	59.86	3
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In above table, IOB is on the top position with highest average of 64.04 followed by SBI (63.95) and HDFC (58.86). ICICI scored the lowest position.

DEBT EQUITY RATIO

This ratio represents the degree of leverage of a bank. It shows how much proportion of the bank business is financed through equity and how much through debt. It is calculated by dividing total borrowings with shareholders’ net worth. Higher ratio is an indication of less protection for the depositors and creditors and vice-versa.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	1.38	1.42	1.29	1.51	1.40	2
IOB	1.46	1.66	1.82	1.86	1.70	3
ICICI	2.08	2.19	2.33	2.04	2.16	4
HDFC	0.94	0.91	0.75	0.50	0.77	1
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In above table, ICICI is on the top position with least average of 2.16 followed by SBI (1.40) and IOB (1.70). HDFC scored the lowest position.

GOVERNMENT SECURITIES TO TOTAL INVESTMENT

BANK	2014	2013	2012	2011	AVG	RANK
SBI	75.38	75.45	78.11	75.43	76.09	3
IOB	83.92	88.35	89.92	78.33	85.13	1
ICICI	42.88	42.93	41.42	34.96	40.55	4
HDFC	79.15	76.52	78.74	76.34	77.69	2
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In above table, **IOB** is on the top position with highest average of 85.13 followed by **HDFC** (77.69) and **SBI** (76.09) on second and third positions. **ICICI** scored the lowest position.

COMPOSITE CAPITAL ADEQUACY

BANK	CAR		DEBT-EQUITY		ADVANCE TO ASSET		GOV SEC TO TOT INV		GROUP RANK	
	%	RANK	TIMES	RANK	%	RANK	%	RANK	AVG	RANK
SBI	13.04	3	1.40	2	63.95	2	76.09	3	2.5	3
IOB	12.62	4	1.70	3	64.04	1	85.13	1	2.25	2
ICICI	19.10	1	2.16	4	49.26	4	40.55	4	3.25	4
HDFC	16.40	2	0.77	1	59.86	3	77.69	2	2	1

On the basis of group averages of three ratios of capital adequacy as expressed in table, **HDFC** was at the top position with group average of (2), followed by **IOB** (2.25), **SBI** (2.50). **ICICI** scored the lowest position due to its poor performance in DebtEquity, Advances to Assets ratio, and Government Securities to Total Investment ratios.

ASSETS QUALITY

The quality of assets is an important parameter to examine the degree of financial strength. The foremost objective to measure the assets quality is to ascertain the composition of non-performing assets (NPA) as a percentage of the total assets.

NET NPA TO NET ADVANCES

It is the most standard measure to judge the assets quality, measuring the net nonperforming assets as a percentage of net advances. Net NPA= Gross NPA - Net of provisions on NPA - interest in suspense account.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	2.57	2.1	1.82	1.63	1.72	3
IOB	3.2	2.5	1.35	1.19	2.06	4
ICICI	0.97	0.77	0.73	1.11	0.90	2
HDFC	0.27	0.20	0.18	0.19	0.21	1
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In table, **HDFC** is on the top position with least average of 0.21 followed by **ICICI** (0.90) and **SBI** (1.72) on second and third positions respectively. **IOB** scored the lowest position with highest percentage of 2.06.

TOTAL INVESTMENTS TO TOTAL ASSETS

This ratio indicates the extent of deployment of assets in investment as against advances. This ratio is used as a tool to measure the percentage of total assets locked up in investments. A higher ratio shows the conservative policy of a bank to provide safeguard to the investments against NPA.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	24.16	24.35	25.19	25.43	24.78	1
IOB	25.55	25.10	25.30	27.19	25.79	2
ICICI	35.80	37.89	39.70	39.28	38.17	4
HDFC	23.74	27.21	28.38	25.28	26.16	3
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In table, **SBI** is on the top position with least average of 24.78 followed by **IOB** (25.79) and **HDFC** (26.16). **ICICI** scored the lowest position with highest ratio of 38.17.

NET NPA TO TOTAL ASSETS

This ratio reflects the efficiency of bank in assessing the credit risk and recovering the debts. In this ratio, the Net NPA are measured as a percentage of Total Assets. The lower the ratio reflects, the better is the quality of advances.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	0.79	0.73	0.86	0.72	0.78	4
IOB	0.80	0.89	0.67	0.58	0.74	2
ICICI	0.82	0.64	0.62	0.94	0.75	3
HDFC	0.37	0.33	0.20	0.28	0.29	1
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In table, **HDFC** is on the top position with least average of 0.29 followed by **IOB** (0.74) and **ICICI** (0.75) respectively. **SBI** scored the lowest position with highest ratio of 0.78.

PERCENTAGE CHANGE IN NET NPA

This ratio measures the movement/trend in net NPA in current year in relation to net NPA in the previous year. The higher the reduction in net NPA levels reflect, the better is for the bank.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	81.71	86.67	89.56	105.52	90.87	2
IOB	78.13	54.00	88.15	93.28	78.39	1
ICICI	79.38	94.81	152.05	80.63	101.72	4
HDFC	74.07	90.00	105.56	110.53	95.04	3
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In table, **IOB** is on the top position with least average of 78.39 followed by **SBI** (90.87) and **HDFC** (95.08) respectively. **ICICI** scored the lowest position with highest ratio of 101.72.

COMPOSITE ASSET QUALITY

BANK	NET NPA TO NET ADVANCES		TOTAL INVESTMENT TO TOTAL ASSETS		NET NPA TO TOTAL ASSETS		PERCENTAGE CHANGE IN NET NPA		GROUPRANK	
	%	RANK	%	RANK	%	RANK	%	RANK	AVG	RANK
SBI	1.72	3	24.78	1	0.78	4	90.87	2	2.5	3
IOB	2.06	4	25.79	2	0.74	2	78.39	1	2.25	2
ICICI	0.90	2	38.17	4	0.75	3	101.72	4	3.25	4
HDFC	0.21	1	26.16	3	0.29	1	95.04	3	2	1

On the basis of group averages of four ratios of assets quality as expressed in table, **HDFC** was at the first position with group average of 2, followed by **IOB** and **SBI** with ranking of (2.25). **ICICI** scored the lowest position with 3.25 rank due to its poor performance in net total investments to total assets, total investments to total assets and net NPA to total assets ratios.

MANAGEMENT

ADVANCE TO DEPOSIT RATIO

This ratio evaluate the efficiency and capability of the bank's management in applying the deposits (including receivables) available excluding other funds viz. equity capital, etc. into rich earning advances.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	85.83	85.57	82.26	80.16	83.45	2
IOB	77.15	79.34	78.87	77.00	78.09	4
ICICI	107.74	104.83	103.61	98.81	103.75	1
HDFC	85.93	83.50	80.65	77.22	81.82	3
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In above table **ICICI** is on the top position with highest average of 103.75 followed by **SBI** (83.45) and **HDFC** (81.82) on second and third positions respectively. **IOB** scored the lowest position with least percentage of 78.09

PROFIT PER EMPLOYEE

It is calculated by dividing the profit after tax earned by the bank with the total number of employees. The higher the ratio, higher is the efficiency of the management and vice versa.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	6.53	8.03	7.00	4.90	6.61	3
IOB	2.25	2.21	3.86	3.79	3.03	4
ICICI	12.82	12.73	11.70	15.00	13.06	1
HDFC	12.63	10.44	9.46	7.74	10.07	2
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In table **ICICI** is on the top position with highest average of 13.06 followed by **HDFC**(10.07) and **SBI** (6.61) respectively. **IOB** scored the lowest position with least ratio of 3.03.

BUSINESS PER EMPLOYEE

Business per employee reveals the productivity and efficiency of human resources of bank. It is followed as a tool to measure the efficiency of employees of a bank. Higher the ratio, the better it is for the bank and vice versa.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	117.36	102.85	109.95	109.14	109.82	3
IOB	184.19	153.57	147.15	124.93	152.46	2
ICICI	448.39	260.89	178.60	-75.16	203.18	1
HDFC	184.19	73.92	85.56	91.46	108.78	4
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In above table **ICICI** is on the top position (203.18) followed by **IOB** (152.46) and **SBI** (109.82) respectively. **HDFC** scored the lowest position with least ratio of 108.78.

RETURN ON EQUITY

It is a measure of the profitability of a bank. In calculation of this ratio, Profit after tax is expressed as a percentage of equity.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	18.26	22.18	18.82	12.35	17.90	2
IOB	20.12	24.51	24.56	21.54	22.68	1
ICICI	10.12	8.79	6.89	5.67	7.87	4
HDFC	18.27	14.50	11.24	8.64	13.16	3
SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE						

In the table **IOB** is on the top position with highest average of 22.68% followed by **IOB** (17.90%) and **HDFC** (13.16%) respectively. **ICICI** scored the last position with least average of 7.87%.

COMPOSITE MANAGEMENT EFFICIENCY

BANK	ADVANCE TO DEPOSIT RATIO		PROFIT PER EMPLOYEE		BUSINESS PER EMPLOYEE		RETURN ON EQUITY		GROUPRANK	
	%	RANK	LAKHS	RANK	LAKHS	RANK	%	RANK	AVG	RANK
SBI	83.45	2	6.61	3	109.82	3	17.90	2	2.5	2
IOB	78.09	4	3.03	4	152.46	2	22.68	1	2.75	3
ICICI	103.75	1	13.06	1	203.18	1	7.87	4	1.75	1
HDFC	81.82	3	10.07	2	108.78	4	13.16	3	3	4

On the basis of group averages of four ratios, **ICICI** was at the first position with group average of 1.75, followed by **SBI** (2.50) and **IOB** (2.75) respectively. **HDFC** scored the lowest position with 4 rank due to its poor performance in total advances to total deposits, profit per employee and business per employee ratios.

EARNING QUALITY

OPERATING PROFIT TO TOTAL ASSET

This ratio reflects how much a bank can earn profit from its operations for every rupee invested in its total asset. In this ratio operating profit are expressed as percentage of total assets

BANK	2014	2013	2012	2011	AVG	RANK
SBI	2.82	2.87	3.16	2.76	2.90	2
IOB	2.03	2.15	2.28	2.35	2.20	4
ICICI	2.64	2.46	2.15	2.01	2.32	3
HDFC	3.79	3.96	3.66	3.82	3.81	1
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In the above table **HDFC** is on the top position with highest average of 3.81 followed by **SBI** (2.90) and **HDFC** (2.32) on second and third positions respectively. **ICICI** scored the lowest position with least percentage of 2.20.

NET PROFIT TO TOTAL ASSET

This ratio reflects the return on assets employed or the efficiency in utilization of assets. It is calculated by dividing the net profits with total assets of the bank. Higher the ratio reflects better earning potential of a bank in the future.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	0.60	0.86	0.87	0.68	0.75	3
IOB	0.22	0.23	0.48	0.60	0.38	4
ICICI	1.56	1.50	1.31	1.18	1.39	2
HDFC	1.74	1.69	1.55	1.45	1.61	1
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In table **HDFC** is on the top position with highest average of 1.61 followed by **ICICI** (1.39) and **SBI** (0.75) respectively. **SBP** scored the lowest position with least ratio of 0.38

INTEREST INCOME TO TOTAL INCOME

Interest income is considered as prime source of revenue for banks. The interest income to total income reflects the capability of the bank in generating income from its lending business.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	83.31	83.75	88.13	83.72	84.73	2

IOB	91.27	91.29	91.41	90.81	91.20	1
ICICI	62.19	60.49	57.00	48.84	57.13	4
HDFC	83.68	83.41	83.51	81.38	83.00	3
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In the table, **IOB** is on the top position with highest average of 91.20 followed by SBI (84.73) and **HDFC** (83.00) respectively. **ICICI** scored the lowest position with least ratio of 57.13.

NET INTEREST MARGIN (NIM) TO TOTAL ASSET

NIM is the difference between the interest income and the interest expended. It is expressed as a percentage of total assets. A higher spread indicates the better earnings given the total assets.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	2.82	2.87	3.16	2.76	2.90	2
IOB	2.03	2.15	2.28	2.35	2.20	4
ICICI	2.64	2.46	2.15	2.01	2.32	3
HDFC	3.79	3.96	3.66	3.82	3.81	1
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In The table, **HDFC** is on the top position with highest average of 3.81 followed by **SBI** (2.90) and **ICICI** (2.32) respectively. **IOB** scored the last position with least ratio of 2.20.

COMPOSITE EARNING QUALITY

BANK	OPERATING PROFIT TO TOTAL ASSET		NET PROFIT TO TOTAL ASSET		INTEREST INCOME TO TOTAL INCOME		NET INTEREST MARGIN (NIM) TO TOTAL ASSET		GROUPRANK	
	%	RANK	TIMES	RANK	%	RANK	%	RANK	AVG	RANK
SBI	2.90	2	0.75	3	84.73	2	2.90	2	2.25	2
IOB	2.20	4	0.38	4	91.20	1	2.20	4	3.25	4
ICICI	2.32	3	1.39	2	57.13	4	2.32	3	3	3
HDFC	3.81	1	1.61	1	83.00	3	3.81	1	2	1

On the basis of group averages of four ratios of quality of earning as expressed in above table, **HDFC** was at the top position with group average of 2, followed by **SBI** and **ICICI** with an average of (2.25)

and (3) respectively. **IOB** scored the lowest position with 4.0 rank due to its poor performance in Operating Profit to Total Assets, Net Profit to Total Assets and Net Interest Margin (NIM) to Total Assets ratios.

LIQUIDITY-LIQUIDITY ASSET TO TOTAL ASSET

This ratio measures the overall liquidity position of the bank. The liquid assets include cash in hand, money at call and short notice, balance with Reserve bank of India and balance with banks (India and Abroad). The total assets include the revaluation of all the assets.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	4.76	4.20	4.33	7.24	5.13	2
IOB	2.11	1.66	4.64	5.60	3.50	3
ICICI	2.96	2.86	3.43	3.98	3.31	4
HDFC	5.03	3.59	4.40	9.03	5.51	1
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In above table, **HDFC** is on the top position with highest average of 5.51 followed by **SBI** (5.13) and **IOB** (3.50) on second and third positions respectively. **ICICI** scored the last position with least percentage of 3.31.

LIQUIDITY ASSET TO TOTAL DEPOSIT

This ratio measures the liquidity available to the depositors of a bank. It is calculated by dividing the liquid assets with total deposits.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	12.99	13.06	12.88	13.07	13.00	3
IOB	11.94	12.01	12.21	12.19	12.09	4
ICICI	20.64	21.26	21.24	20.39	20.88	1
HDFC	13.64	13.68	13.74	13.24	13.57	2
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In the table **ICICI** is on the top position with highest average of 20.88 followed by **HDFC** (13.57) and **SBI** (13.00) respectively. **IOB** scored the lowest position with least ratio of 12.09

LIQUIDITY ASSET TO DEMAND DEPOSIT

This ratio reflects the ability of bank to honour the demand from depositors during a particular year. In order to provide higher liquidity for depositors, bank has to invest these funds in highly liquid form. It is calculated by dividing the liquid assets with total demand deposits.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	169.43	156.34	153.21	106.46	146.36	3
IOB	194.18	183.84	177.34	150.02	176.35	1
ICICI	167.25	176.28	166.93	148.93	164.85	2
HDFC	81.67	77.52	74.76	59.57	73.38	4
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In table, **IOB** is on the top position with highest average of 176.35 followed by **ICICI** (164.85) and **SBI** (146.36) respectively. **HDFC** scored the lowest position with least ratio of 73.38.

APPROVED SECURITIES TO TOTAL ASSET

This ratio is calculated by dividing the total amount invested in Approved securities with Total Assets. Approved securities include investments made in the state associate downed bodies like Electricity Corporations, Housing Development Corporations, Regional Rural Banks and corporation bond.

BANK	2014	2013	2012	2011	AVG	RANK
SBI	23.12	23.34	24.55	24.81	23.95	4
IOB	24.38	24.37	24.75	26.58	25.02	3
ICICI	34.86	36.47	37.70	36.69	36.43	1
HDFC	23.56	27.09	28.38	25.25	26.07	2
<i>SOURCE: SBI ,IOB, ICICI, HDFC WEBSITE</i>						

In above table, **ICICI** is on the top position with (36.43) followed by **HDFC** (26.07) and **IOB** (25.02) respectively. **SBI** scored the lowest position with least ratio of 23.95.

COMPOSITE LIQUIDITY

BANK	LIQUIDITY ASSET TO TOTAL ASSET		LIQUIDITY ASSET TO TOTAL DEPOSIT		LIQUIDITY ASSET TO DEMAND DEPOSIT		APPROVED SECURITIES TO TOTAL ASSET		GROUP RANK	
	%	RANK	%	RANK	%	RANK	%	RANK	AVG	RANK
SBI	5.13	2	13.00	3	146.36	3	23.95	4	3	4
IOB	3.50	3	12.09	4	176.35	1	25.02	3	2.75	3
ICICI	3.31	4	20.88	1	164.85	2	36.43	1	2	1
HDFC	5.51	1	13.57	2	73.38	4	26.07	2	2.25	2

On the basis of group averages of four ratios of liquidity as expressed in the table, **ICICI** was at the top position with group average of 2, followed by **HDFC** with average of (2.25) and **IOB** (2.75) respectively. **SBI** scored the last position with 4rank due to its poor performance in Liquid Assets to Total Assets, Liquid Assets to Total Deposits and Liquid Assets to Demand Deposits ratios.

COMPOSITE RANKING (OVERALL PERFORMANCE) OF SELECTED PUBLIC AND SELECTED PRIVATE SECTOR BANKS

BANK	C	A	M	E	L	AVG	RANK
SBI	2.5	2.5	2.5	2.25	3	2.45	2
IOB	2.25	2.25	2.75	3.25	2.75	2.55	3
ICICI	3.25	3.25	1.75	3	2	2.9	4
HDFC	2	2	3	2	2.25	2.2	1

Above the Table depicts the group ranking of the 4 Groups in India for the period of 2011-2014. It is found that under the Capital adequacy ratio parameter **HDFC** were at the top position, while **ICICI** got lowest rank. Under the Asset quality parameter, **IOB** held the top rank while **ICICI** held the lowest rank. Under Management efficiency parameter it is observed that top rank taken by **ICICI** and lowest rank taken by **HDFC**. In terms of Earning quality parameter the capability of **HDFC** got the top rank in the while **IOB** was at the lowest position. Under the Liquidity parameter **ICICI** stood on the top position and **SBI** was on the lowest position.

CONCLUSION

Our study concluded that in terms of Capital adequacy ratio parameter **HDFC** and **IOB** were at the top position, while **ICICI** got lowest rank. The possible reason for this was the poor performance of **ICICI** in debt-equity, advances to assets and government securities to total Investments ratios. In terms of Asset quality parameter, **HDFC** held the top rank while **ICICI** held the lowest rank. The possible reason for this was the poor performance of **ICICI** in total investments to total assets and net NPAs to total assets and percentage change in NPA ratios. Under Management efficiency parameter it is observed that top rank taken by **ICICI** and lowest rank taken by **HDFC**. The possible reason for this was the poor performance of **HDFC** in total advances to total deposits, business per employee, and return on equity ratios. In terms of Earning quality parameter the capability of **HDFC** got the top rank in the while **IOB** was at the lowest position. The possible reason for this was the poor performance of **IOB** in operating profit to total assets, net profit to total assets and net interest margin to total assets ratios. Under the Liquidity parameter **ICICI** stood on the top position and **SBI** was on the lowest position. The possible reason for this was the poor performance of **SBI** in liquid assets to total deposits and liquid assets to demand deposits and Approved securities to Total Assets ratios.

The present study also depicted that though ranking of ratios is different for different banks in selected public and selected private sector banks. But there is no statistically significant difference between the CAMEL ratios. It signifies that the overall performance of selected public and selected private sector banks; this may be because of adoption of modern technology, banking reforms and recovery mechanism. **ICICI** needs to improve its position with regard to asset quality and capital adequacy, **SBI** should improve its liquidity and **IOB** should improve its earning quality.

REFERENCES

- Bodla, B.S. and Verma, R. 2006, 'Evaluating Performance of Banks through CAMEL Model: A Case Study of SBI and ICICI', *The ICFAI Journal of Bank Management*, Vol.5, No.3, pp.49-63.

Gupta, R. 2008, 'A CAMEL Model Analysis of Private Sector Banks in India', *Journal of Gyan Management*, Vol. 2, No. 1, pp. 3-8.

Satish, D; Jutur, Sharath and Surender, V 2005, 'Indian Banking Performance and Development 2004-05', *Chartered Financial Analyst*, Vol. 11, No. 10, pp. 6-15.

Singh, D. and Kohli, G. 2006, 'Evaluation of Private Sector Banks in India: A SWOT Analysis', *Journal of Management Research*, Vol. 6, No. 2, pp. 84-101.

WEBSITES

1. <http://www.moneycontrol.com/>
2. <http://www.bankingawareness.com/bankinggk/banking-history-in-india-post-independence-banking-history/>
3. http://www.researchandmarkets.com/reports/402/indian_banking_industry
4. <http://www.sbi.in>
5. <http://www.sbi.com>
6. <http://www.icici.in>
7. <http://www.hdfc.com>
8. <http://www.iob.in>