

## PERFORMANCE EVALUATION OF PRIVATE SECTOR BANKS IN INDIA THROUGH CAMEL APPROACH

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### **Abstract**

Today's banking system is becoming more and more complex. Due to the nature of banking and the important role of banks in the mobilization, allocation of capital, progress and development in an economy, banks should be more closely watched than any other type of economic unit in the economy. For ensuring stable and healthy banks and protecting the interests of various stakeholders, the performance of banks are evaluating from time to time. This paper analyzes the performance of three leading private sector banks of Indian banking sector namely J & K bank, HDFC bank, ICICI bank. Tools used for comparing the performance of selected banks are camel approach, compound annual growth rate, Mean, and Standard deviation. The study analyses how well the Jammu and Kashmir bank financially performs relative two leading new private sector banks, this objective is achieved by comparing the performance of this old private sector bank with two new private sector banks and the relative performance analysis of these three private sector banks is undertaken by camel analysis. The selected banks were found at par each other in all the parameters and it was found that j & k bank performs at par with its counter parts.

**Keywords:** Camel Rating, CAGR, Parameters, Stakeholders, Economic Growth, Development.

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## Introduction

The banking system is the heart and soul of economy and plays a vital role in economy, irrespective of whether it is state economy or national economy or international economy. The health of economy is closely related to the health and soundness of banking system, so healthy banking system is prerequisite for sound and healthy economy. Modern trade and commerce would almost be impossible without the availability of suitable banking services and it facilitates innumerable ways. A bank as matter of fact is just like heart in the economic system and capital provided by it is like life blood in it. Banks have to play a role of intermediary by borrowing this life blood from those who have surpluses and supply those who have deficits. Without efficient banking system, these surplus savings will remain idle with their savers and those who need money for productive purposes cannot get it for productive purpose which hampers and dampens the development. Sound banking system promotes development in numerous ways. First of all, banking promotes savings. All manner of people, from the ordinary laborers and workers to the rich land owners and businessmen, can keep their money safely in banks and saving centers. Secondly, banking promotes investments. Banks easily invest the money they get in industry, agriculture and trade. They either invest it directly or advance loans to other investors. Thirdly, it is most through banks that foreign trade is carried on. Whether we export or import, it is through banks that money is transferred from one country to another. For example, bills of exchange and letters of credit are the regular ways banks use to transfer money. So banks play an important role in functioning of financial system and progress and development of economy. To ensure sound and healthy banking system for sound functioning of economy, it is due to this back drop that performance of banks are evaluated from time to time for ensuring sound banking system and the reasons for under taking banking performance evaluation are numerous and varied for achieving one or other objectives and at the same time different users need different information to evaluate the performance of banks. As financial statement fail to convey full and understandable information with regard to business, it necessitates an in-depth analysis of such statements. Generally tools like comparative analysis, ratio analysis and trend analysis are used to measure performance parameters which finally depict the strength of a business with regard to capital adequacy, asset quality, profitability, liquidity or their solvency.

From the opening paragraph, the inevitability of evaluating the performance of banks is to ensure the safe and sound banking system for smooth functioning of financial system and to ensure the healthy functioning of economy and to protect the various stake holders in banks. Evaluation of performance of banks is of great importance; to banks and their various parties. It means weighing or assessing financial condition and soundness of a bank which can be observed by analyzing its financial statements to identify various strengths and weaknesses. During the analysis of financial statements various parameters of performance during a select period are compared with their similar historical or standard financial parameters to find out improvements or deteriorations. Hence the present is undertaken to evaluate the performance of three leading private sector banks namely Jammu and Kashmir bank, HDFC bank and ICICI bank.

**Profile of Selected Banks**

The J & K bank incorporated on 1st October 1938, commenced its business on July 4th 1939 with its first branch at residency road Srinagar. The Corporate head quarters of the bank are in Srinagar and offer a range of banking and financial services primarily deposits & loans. The bank was the first in the country as a state owned bank. As on 31st march 2012, bank is operating with a branch network and ATM network of 603 and 508 respectively offering world class banking products and services to its customers.

HDFC bank was incorporated in August 1994 in the name of 'HDFC Bank Limited', with its registered office in Mumbai. HDFC Bank commenced its operations as a Scheduled Commercial Bank in January 1995. HDFC bank operating with a branch network of 2544 and ATM network of 8913 as on 31st March 2012.

ICICI Bank was promoted by the erstwhile Industrial Credit Investment Corporation of India Limited (ICICI Ltd.) and the erstwhile Shipping Credit and Investment Corporation of India Limited (SCICI Ltd.) by an initial capital contribution in the proportion of 75:25 respectively. Bank was also merged with ICICI Bank. Till now ICICI bank has expanded a branch net work of 2752 and 9006 ATMs across the country as on 31st March 2012.

**TABLE 1- OVERVIEW OF HDFC, ICICI AND J&K BANKS FROM 2005-2012**

*Amt in crores*

YEARS/	2005	2006	2007	2008	2009	2010	2011	2012	MEAN	CAGR
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BANK											
J & K BANK	TB	33,162	37,968	42,274	47,476	53,935	60,294	70,870	86,424	54,050	13
	GTB	19	14	11	12	14	12	18	22	-	-
	TA	24,423	26,449	28,647	32,756	37,694	42,547	50,508	60,270	37,912	12
	GTA	15	8	8	14	15	13	19	19	-	-
HDFC Bank	TB	61,921	90,858	1,15,243	1,64,196	2,41,695	2,93,235	3,68,569	4,42,127	2,22,230	28
	GTB	29	47	27	42	47	21	26	20	-	-
	TA	51,506	73,587	91,319	1,33,251	1,83,359	2,22,557	2,77,429	3,37,972	1,71,372	27
	GTA	22	43	24	46	38	21	25	22	-	-
ICICI BANK	Br	562	614	755	1,262	1,419	1,707	2,529	2,752	1,450	22
	TB	1,88,811	3,11,246	4,26,376	4,70,047	4,36,659	3,83,222	4,41,968	5,09,228	3,95,945	13
	GTB	46	65	37	10	-7	-12	15	15	-	-
	TA	1,68,435	2,52,059	3,45,312	4,00,417	3,79,850	3,63,867	4,06,678	4,74,075	3,48,837	14
	GTA	34	50	37	16	-5	-4	12	17	-	-

TB-Total business, GTB-Growth rate of total business, TA-Total assets, GTA-Growth rate of total assets

Table 1 portrays the picture of total business, total assets, annual growth rates, mean and compound annual growth of total business and total assets. It gives us insight of banks under study regarding the size, business volume and their growth, mobilization strength and disbursement strength. The comparability of the aforesaid things is done by mean and CAGR.

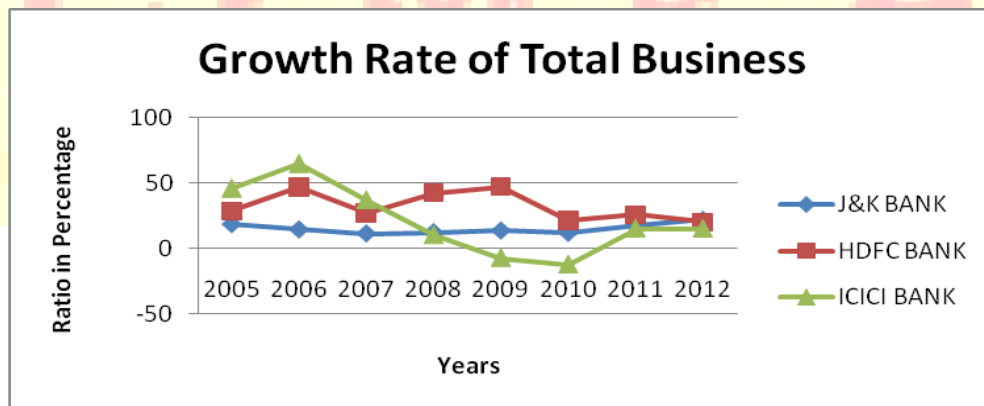


Figure.1

Figure 1 shows the growth rate of total business of the banks under study. As per the figure the growth rates of the banks are fluctuating but the fluctuation in case of ICICI and HDFC is more compared to J&K bank. This fluctuation is much drastic in case of ICICI bank due to the shock of financial crisis. The growth rate of Jammu and Kashmir bank is stable in the form of straight line during the study period including the years of worldwide turmoil (2008, 2009). The compound annual growth rate of total business is highest in case of HDFC bank with 27.85 per cent followed by ICICI bank with CAGR of 13.20 per cent but there is great fluctuation with regard to their annual growth rates, the J&K bank with the CAGR of 12.71 per cent but with smooth annual growth rates. As a result of CAGR, HDFC has first rank followed by ICICI and third rank goes to J&K bank but as per the stability the ranks are vice versa. CAGR shows the smooth growth for a period without annual fluctuations.

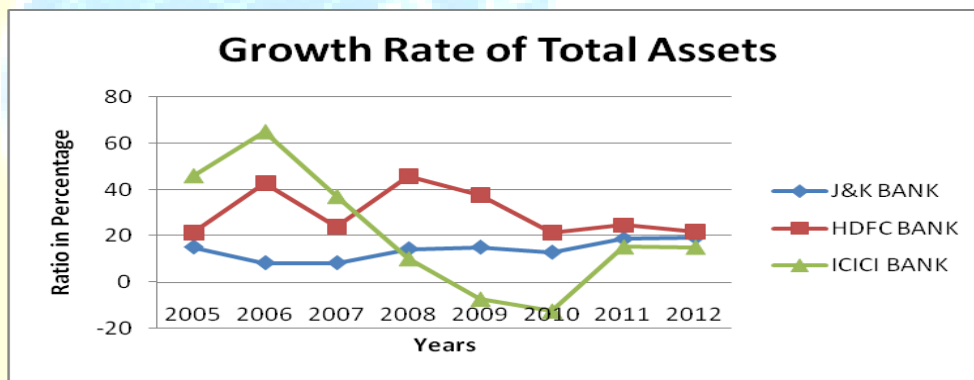


Figure.2

Figure 2 depicts the annual growth of total assets of the three banks under study which includes one old private bank and new generation private sector banks. The comparability of CAGR shows that HDFC bank is having highest CAGR of 26.51 per cent followed by ICICI bank with 13.80 per cent and finally J&K bank having a CAGR of 11.95 per cent but the annual growth rate of assets of ICICI bank is showing steep fall from 2006 onwards up to 2010 and it increased in 2011 and maintained its status quo in 2012. The annual growth rate of HDFC bank is fluctuating in a random walk. The growth of assets of J&K bank is stable with minor fluctuations. As per the CAGR criteria HDFC bank is ranked 1<sup>st</sup> and ICICI bank ranked 2<sup>nd</sup> and J&K bank at 3<sup>rd</sup> rank.

## Review of Literature

Smooth functioning of banking system is prerequisite for the sound and stable economy. To ensure sound and smooth banking in economy, performance of banks are evaluated from time to time and in short intervals. So the process of evaluation of banks performance is ongoing and continuous phenomena, the academicians, scholars and administrators have made several studies on the CAMEL model but in different perspectives and in different periods.

In the study conducted by subroto chowdhury (2001-2009), an inquiry into the financial soundness of commercial banks in India using camel approach. The study was conducted aftermath of recent financial crisis which posed serious challenges to the financial system. To face such shocks and challenges in future, it becomes inevitable to look at the financial soundness of commercial banks. The study was conducted on twelve banks for a period 2000-2009 from data taken from various secondary sources like annual reports, RBI, and analyzed through camel rating parameters. The categorization of banks were based on mean, standard deviation and banks were first ranked according to individuals banks parameters and final ranking was on average of all parameters ranking and average of cumulative score.

Uyen Dang (2011) studied 'The CAMEL rating system in banking supervision. A case study American International Assurance Vietnam (AIA) .the aim of the research was to determine whether camel framework plays a crucial role in banking supervision. Furthermore the purpose is to identify the benefits as well as drawbacks which camel rating system brings to AIA. The period of study for analyzing performance of bank cover from 2007 -2010 and data was collected from both primary and secondary sources. The performance was analyzed by assigning ranks to various camel parameters and finally composite ranking score was obtained for assessing overall performance. The findings revealed that camel rating system is a useful supervisory tool in the US and is an internationally standardizing rating and evaluation

K.Sriharsha Reddy (2012) made a research on 'relative performance of commercial banks in India using camel approach. The objective for undertaking the study was to ascertain the relative position of banks, this was achieved by camel ratio analysis for banks for panel data taken from statistical tables relating to banking published by RBI .The banks covered in the study included 26 public sector banks, 19 domestic private banks,16 foreign banks. The performances of banks were assessed through various ratios. Finally overall rank for each bank

was computed for year 1999 and 2009. then comparison was made between 1999 and 2009 to determine improvements or deterioration of individual banks and overall ranking of banks

Prasad and Ravinder has evaluated (2012) the performance of twenty nationalized banks in India using camel model for the period from 2005-2010. The banks were selected on the average of the banks and the average was found out by the parameters fixed by the researchers. The analysis results that one on the other aspects some banks are in the top position. It is concluded that the following banks were holding top five positions namely Andhra Bank is ranked first followed by Bank of Baroda, Punjab & Sindh Bank, Indian bank and Corporation Bank. It is also found that Central Bank of India, Bank of Maharashtra, UCO Bank, United Bank of India, and vijaya Bank were holding least five banks.

Sangmi and Nazir (2010) have studied the financial performance of commercial banks in India application of CAMEL model. The researcher has chosen the north Indian nationalized and private sector banks such as Punjab National Bank and Jammu & Kashmir Bank respectively and analyzed the financial performance for the period from 2001-2005. It is found that the analysis and the discussion in the proceeding pages reveals that both the banks are financially viable as both have adopted prudent policies of financial management. The result of the camel model shows that the PNB has a good financial performance than J&K bank.

### **Objectives of the Study**

The objectives of the study are-

- (i) To analyze the financial performance of selected private sector banks.
- (ii) To assess the capital adequacy, assets quality, management efficiency, earnings quality and liquidity position of the selected banks.
- (iii) To offer suggestions and recommendations for effective and efficient performance of banks under study.

### **Methodology of the Study**

The present study has been carried out to evaluate the performance of selected private commercial banks. The selected banks are Jammu and Kashmir bank (J&K), ICICI bank, HDFC bank. This study is been based on data from secondary sources collected for a period of eight years from 2005-2012. The relevant data and information were collected from CMIE, Annual Reports of commercial banks etc. For the purpose of the present study, the research instrument

used is the CAMEL Model which is standard tool for financial performance evaluation of banks. CAMEL is an acronym for five measures (capital adequacy, assets quality, management soundness and earnings). In this analysis the five indicators which reflect the soundness of the institution framework are considered.

### Theoretical Prescription of Camels Framework

The Basle Committee on Banking Supervision of the Bank of International Settlements(BIS) has recommended using capital adequacy, assets quality, management quality, earnings and liquidity (CAMEL) as criteria for assessing a Financial Institution (FI) in 1988 (ADB 2002). CAMEL framework is a common method for evaluating the soundness of FIs. As mentioned above, it consists of five components; capital adequacy, asset quality, management, earnings and liquidity and a brief glimpse of them is given below.

**Capital adequacy** indicates the measurement of the financial strength of a bank and indicates whether the bank has enough capital to absorb unexpected losses. It is required to maintain depositor's confidence and preventing the bank from going bankrupt. It is a measure of how much capital is used to support the banks' risk assets. While this ratio has positive relation with the financial soundness of the bank, it is negatively related to a possible failure.

**Asset quality** Asset quality is the key to understanding the financial health and soundness of the banking system. This indicates what types of advances the bank has made to generate interest income.. It shows the risk level of assets and rate of financial strength within a bank. In addition, it has a crucial role in the assessment of the current condition and financial capacity in the future.

**Management Quality** is not just dependent on the current financial performance. This component consists of a large range of issues such as the education level and expertise of the management. Thus, it is the hardest one to measure when compared to others. This parameter is used to evaluate management quality so as to assign premium to better quality banks and discount poorly managed ones. It involves analysis of efficiency of management in generating business (top-line) and in maximizing profits (bottom-line).

**The earnings ability** parameter lays importance on how a bank earns its profits. This also explains the sustainability and growth in earnings in the future. Some of the ratios considered to



assess the earnings ability of the banks were net income as a percentage of total assets, net-interest income as a percentage of total assets, ROA, ROE, Pre-tax profit/total assets, income spread to total assets, cost to income ratio, operating profit to total assets, interest income to total income and non - interest income to total income.

*The liquidity* of bank connotes the ability of the bank to meet its obligations as and when they arise. Banks are in a business where liquidity is of prime importance. Business of banking depends on the confidence of public which in turn depends on the ability of bank to meet its obligations in timely and efficient manner. Among assets cash and investments are the most liquid of a bank's assets.

### ANALYSIS AND FINDINGS

#### 1. Capital Adequacy

Capital Adequacy of sample banks is done by the analysis of basic ratios. Shareholder's Equity/ (Loan + Market + Principle Amount Subject to Operational Risk) , owner's funds to total assets.

(i). CRAR (Capital to risk assets ratio), (ii). Owners funds to total assets

**Table 2 CAPITAL ADEQUACY ANALYSIS**

Banks	Years	2005	2006	2007	2008	2009	2010	2011	2012	Mean	SD
J&K BANK	CRAR (%)	15.15	13.52	13.24	12.80	13.46	14.81	13.30	12.53	13.60	0.91
	Owner's funds/TA (%)	6.68	6.80	6.95	7.02	6.95	7.07	6.88	6.80	6.89	0.12
HDFC BANK	CRAR (%)	12.16	11.41	13.08	13.60	15.09	16.45	15.32	15.71	14.10	1.80
	Owner's funds/TA (%)	8.85	7.20	7.04	8.62	8.20	9.67	9.14	8.85	8.44	0.92
ICICI BANK	CRAR (%)	11.78	13.35	11.69	14.92	15.92	19.14	17.63	16.26	15.08	2.68
	Owner's funds/TA (%)	7.58	8.91	7.12	11.68	13.04	14.18	13.54	12.74	11.09	2.80

Source: Computed from Annual report, CRAR-Capital to risk assets ratio, TA-total assets, ADV-Advances

Table 2 shows the capital adequacy analysis of the banks under study. According to table two, it is evident that the banks have been able to conform to the capital requirements stipulated by the financial authority which is currently 9 per cent and their capital is more than prescribed limit. Capital adequacy is measured by two parameters in the study viz CRAR, owner funds to

total assets,. The ratios with their interpretations are explained below under their respective charts.

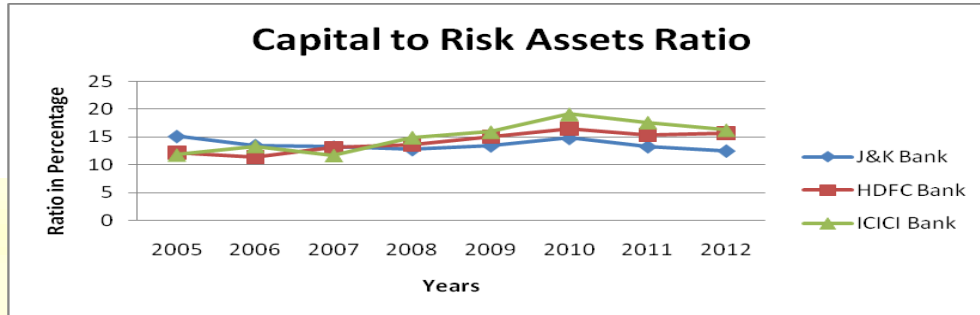


Figure 3

Capital to risk assets ratio measures the risk absorbing capability of the bank. From the analysis it is found that all the banks are having CRAR above the prescribed limit of 9 per cent. Variability of this ratio depends not only on the variability of capital but this ratio can also vary by change in the risky assets, so variability can be effected by these two factors. From the figure it is seen that CRAR is fluctuating but the fluctuations are above the stipulated limit i.e. variation is in surplus from minimum requirement. The ICICI bank is having highest average of 15.08 for last eight years followed by HDFC bank with an average of 14.10 percent and J&K bank with a lowest average of 13.60 with least standard deviation of 0.91 which indicates the stability of CRAR over a period of time in comparison to counter parts.

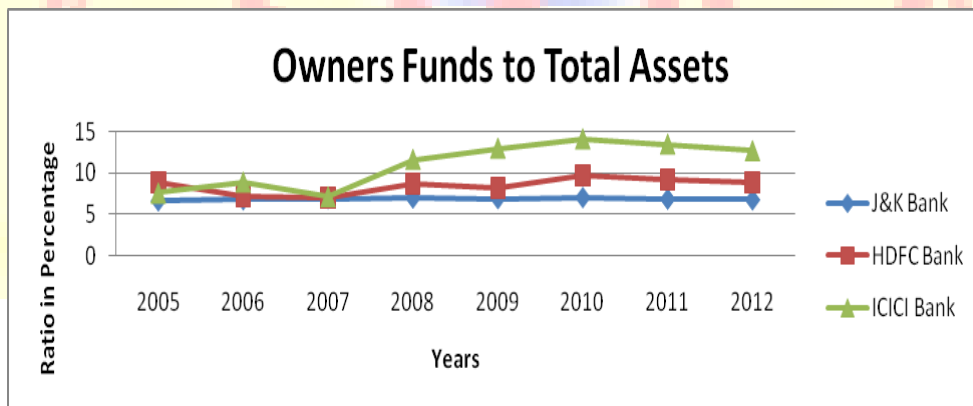


Figure 4

Owner's funds to total assets ratio is another way to check the capital strength or support for the bank. It shows the proportion of assets financed by owner's funds; higher ratio indicates higher percentage of assets financed by owner's funds and vice versa. There is no need for worry

for lower ratio in case of banking because huge portion of funds are mobilized by banks in the form of deposits and which are used for advancing loans and these constitute the two main activities of banking business. From figure it is found that ICICI banks ratio has come down in 2007 and after wards started in upward trend and maintained stability with minor fluctuations. The percentage of owners to total assets is on increasing trend in all the three banks but it show decrease in 2011 and 2012. The reason for this is due to conservative lending due financial turmoil in 2011-2012 banks started again for liberal credit policy due to economic revival which resulted in increase in banking assets which pulled the ratio downwards.

**TABLE.3 ASSET QUALITY ANALYSIS**

Banks	YEARS	2005	2006	2007	2008	2009	2010	2011	2012	Mean	SD
J&K BANK	% OF GNPA	2.70	2.50	2.90	2.53	2.64	1.97	1.95	1.54	2.34	0.46
	% OF NNPA	1.41	0.92	1.13	1.08	1.38	0.28	0.20	0.15	0.81	0.52
HDFC BANK	% OF GNPA	1.60	1.40	1.40	1.30	1.98	1.43	1.05	1.02	1.39	0.30
	% OF NNPA	0.24	0.44	0.43	0.50	0.60	0.30	0.20	0.20	0.36	0.15
ICICI BANK	% OF GNPA	3.00	1.50	2.10	3.30	4.32	5.06	4.47	3.62	3.42	1.21
	% OF NNPA	1.65	0.72	1.02	1.55	2.09	2.12	1.11	0.73	1.37	0.56

Source: Computed from Annual report, GNPA-Gross Non Performing Assets, Net Non Performing Assets

Table 3 highlights the major indicators which are used to judge the quality of assets in the portfolio of bank and which will also show the riskiness of its assets portfolio. The survival and prosperity performance of a the bank depends upon quality of assets it is having in its basket. As per the table above, assets quality is analysed by measurement and analysis of gross non performing assets, net non performing. The above tabel show the ratios related to asset quality for last eight years with their meann and standard deviation which are interpreted beolw their respective figures.

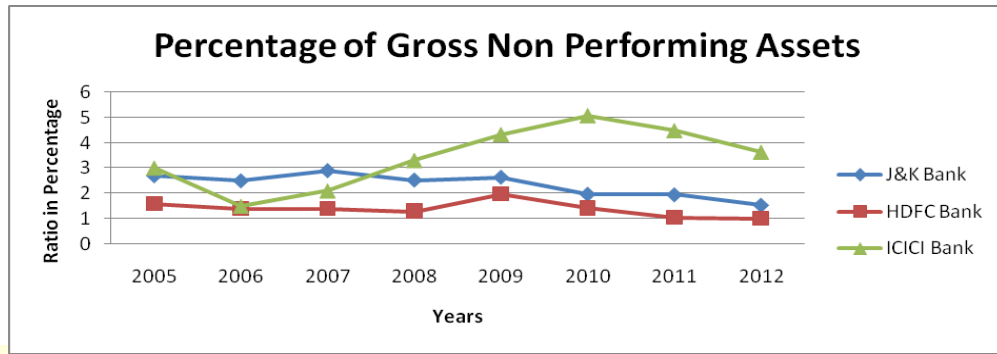


Figure 5

Figure 5 depicts the gross nonperforming assets as a percentage of gross advances. The lesser the value of ratio, better is the quality and management of assets of bank. From the figure it is seen that the ratio is fluctuating year to year in all the three banks but the fluctuation is more in case of ICICI bank. The GNPA ratio of ICICI bank started to increase from 2006 till 2010 after that it started to come down, in case of HDFC and J&K bank there GNPA ratio is going in tandem but with varying levels i.e. the level of gross nonperforming assets is more in case of J&K bank relative to HDFC bank but both have maintained them in some level..The HDFC bank is having lower level of GNPAS with a mean of 1.39 percent and ranked first followed by J&K bank at second rank having mean of 3.34 percent and ICICI bank at third position with a mean of 0.46 percent.

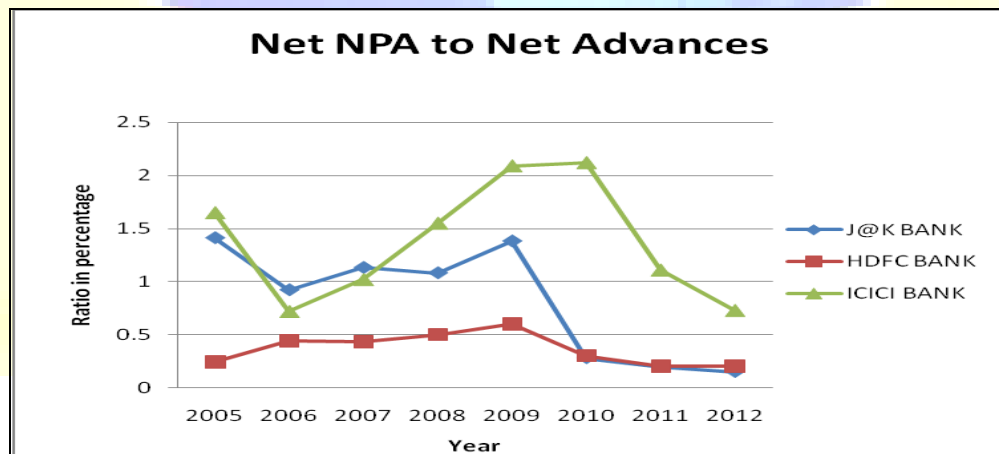


Figure 6

Figure 6 depicts the net non performing assets as a percentage of net advances. Lower ratio indicates lower net non performing assets which is a sign of good and efficient asset management. It is seen that there is wide fluctation of NNPA in case of ICICI bank and J&K

bank but final direction is in favourable direction i.e. down side . The level of NNPA ratio is different in all three banks. The level of NNPA has decreased in all three banks in 2012. HDFC bank has shown good performance in management of NPA with lowest mean of 0.36 percent, so ranked first followed by J&K bank at second position with mean of 0.81 percent and ICICI bank at third position with a mean of 0.56 percent.

**TABLE.4 MANAGEMENT CAPABILITY ANALYSIS**

Banks	YEARS	2005	2006	2007	2008	2009	2010	2011	2012	Mean	SD
J&K BANK	Credit-deposit ratio	51.61	57.61	64.84	66.86	64.63	62.62	60.13	60.47	61.09	4.86
	PPEMP	0.02	0.03	0.04	0.05	0.05	0.07	0.08	0.09	0.05	0.02
HDFC BANK	Credit deposit ratio	64.87	65.79	66.08	65.28	66.64	72.44	76.02	78.06	69.39	5.30
	PPEMP	0.09	0.07	0.06	0.05	0.04	0.06	0.07	0.08	0.06	0.01
ICICI BANK	Credit-deposit Ratio	89.17	87.59	83.83	84.99	91.44	90.04	87.81	92.23	88.38	2.94
	PPEMP	0.11	0.10	0.09	0.10	0.11	0.09	0.10	0.11	0.10	0.01

Source: Computed from Annual report, BPEMP-Business Per Employee, PPEMP-Profit Per employee

Table 4 shows the ratios which are used for analyzing management efficiency and capability. Four ratios have been calculated to find the management quality and efficiency namely credit-deposit ratio, business per employee, profit per employee, which will be comparatively analyzed and interpreted under below corresponding graphs.

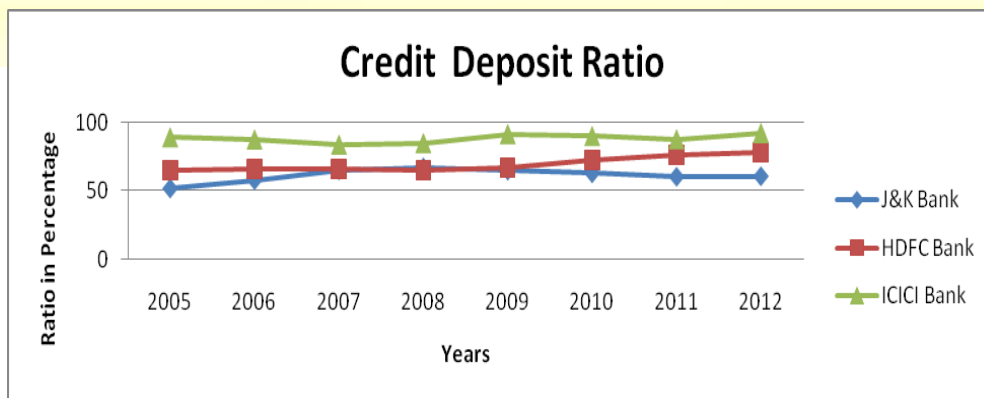


Figure 7

Figure 7 show the credit deposit ratio of banks under study. It will portray the amount of mobilized funds disbursed in the form of credit. From the figure it is seen that ICICI is converting on an average ninety percent of its funds into credit followed by HDFC giving on an average 69 percent of funds as credit and J&K bank is giving on average sixty one percent of funds as credit. Higher this ratio is better because mobilized funds are supposed to be given credit and these constitute two main activities of banking. ICICI bank is ranked first, followed by HDFC bank and J&K bank at third position.

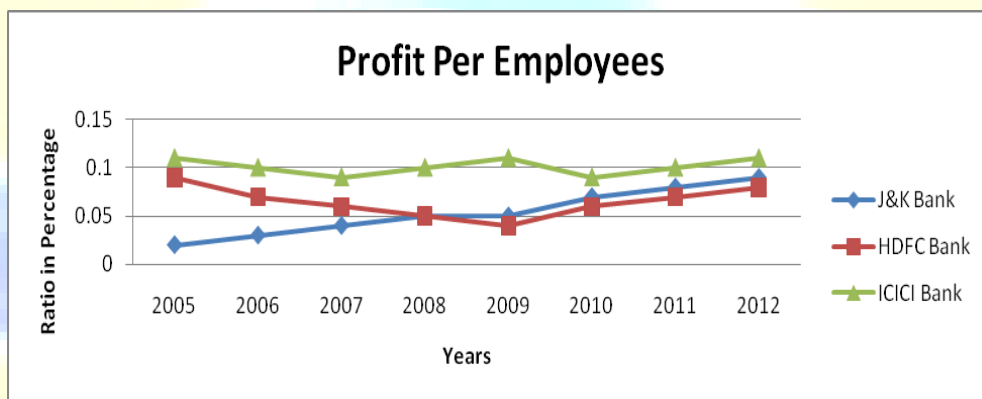


Figure 8

Profit per employee shows the financial gains from every employee generated for owners. According to figure 12 profit per employee of ICICI bank and HDFC bank is fluctuating from year to year but in case J&K bank it is progressively going upwards. The average profit for last eight years is highest in case of ICICI bank with a mean of 0.10 crore, at second rank –the HDFC bank with average of 0.06 crore and J&K bank at third position with average of 0.05 crore profit per employee.

Bank	Ratio/Year	2005	2006	2007	2008	2009	2010	2011	2012	Mean	SD
J & K BANK	ROA %	0.47	0.67	0.96	1.09	1.09	1.20	1.22	1.56	1.03	0.33
	II as a % to WF	7.64	7.60	7.87	8.36	8.77	8.11	8.31	9.38	8.25	0.60
	NII as % of WF	0.47	0.59	0.66	0.84	0.72	1.10	0.82	0.65	0.73	0.19

HDFC BANK	ROA %	1.47	1.38	1.33	1.32	1.28	1.53	1.58	1.77	1.45	0.16
	II as a % to WF	6.85	7.11	7.73	8.42	9.28	8.39	8.04	9.37	8.14	0.91
	NII as % of WF	1.44	1.79	1.76	1.90	1.87	2.07	1.75	1.80	1.79	0.17
ICICI BANK	ROA %	1.48	1.30	1.09	1.12	0.98	1.13	1.35	1.50	1.24	0.19
	II as a % to WF	6.94	7.30	7.69	8.29	8.11	7.19	6.80	7.79	7.51	0.54
	NII as % of WF	2.52	2.13	2.42	2.37	1.98	2.09	1.74	1.74	2.12	0.29

II-Interest Income, NII-Non Interest Income, WF-Working Funds, B-Bank, Y-Year

Table 5 shows the analysis of the earnings quality of banks under study and quality of earnings is analyzed by three ratios namely ROA, Interest income as a percentage of working funds and non interest as a percentage of working funds. The quality earnings are necessary and inevitable for success and survival of business. The ratios are calculated for eight years and analysis is done with mean and standard deviation and interpretation is given below under corresponding figures.

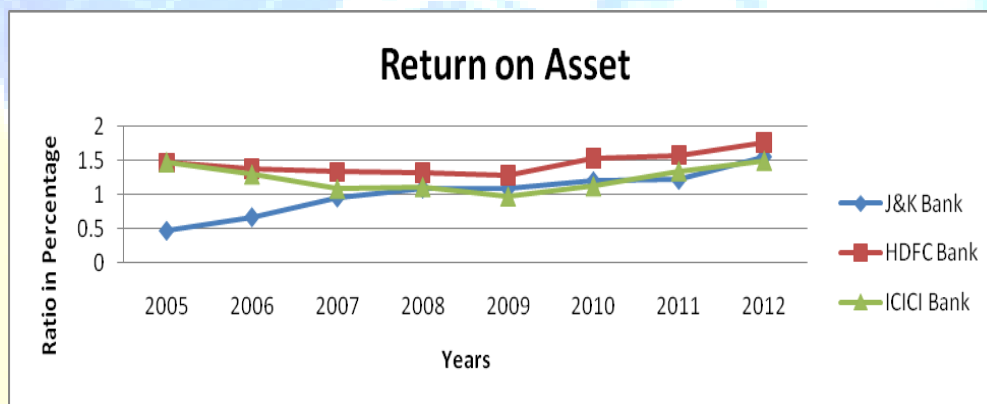


Figure 9

Figure 9 shows the return on assets of the banks under study. ROA tell how much profit or return a company has generated for each rupee of assets. The return on assets is on increasing trend in all the three banks but the level of return on assets is at different levels for the banks in the study. HDFC bank is at higher level of ROA from the beginning with a mean of 1.45 per cent for last 8 years followed by ICICI bank with a mean of 1.24 per cent and finally the mean for J&K bank for the last 8 years is 1.03 percent

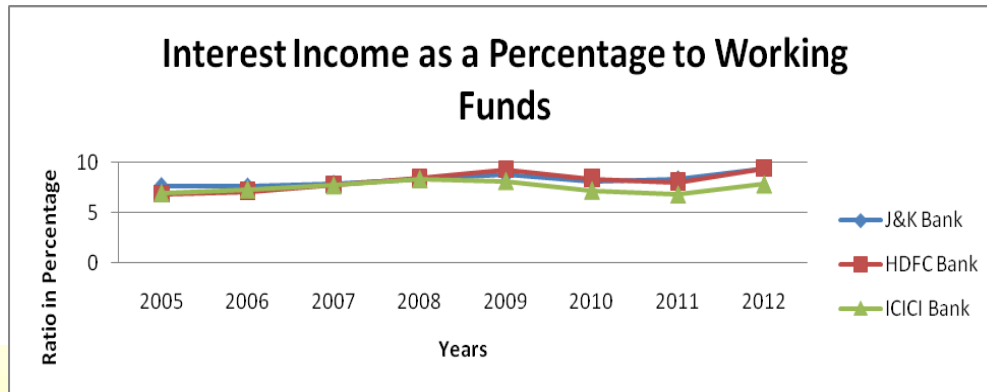


Figure 10

Interest income as a percentage of working funds is given in table 5 and drawn in the form of chart in above figure. The primary source of income for banks is the interest income and higher this ratio better is the position of bank. From the table and graph, it is found that interest income is improving over a study period in all the three banks. By comparing the means of last 8 years it is found out that J&K bank is at the top and having highest mean of 8.25 per cent followed by HDFC bank at second position with a mean of 8.14 and ICICI bank at third position with a mean of 7.51 for the study period.

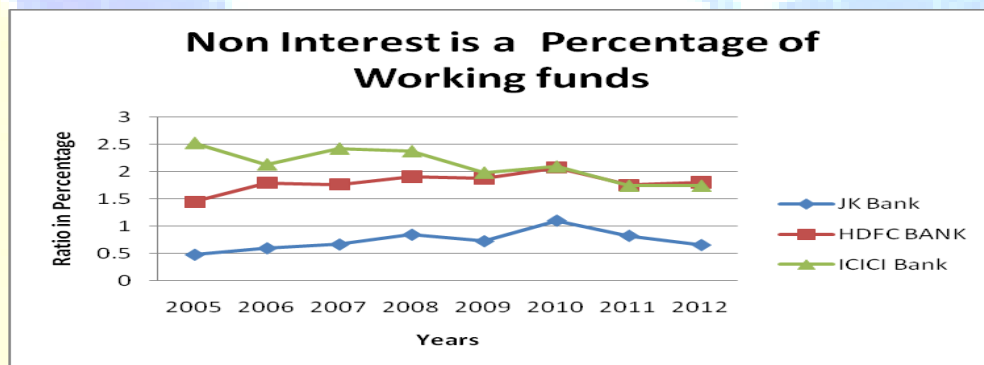


Figure 11

Figure 11 shows the non interest income as a percentage of working funds. Non interest is earned in a variety of ways like commission, fee, rent etc. Non interest income as a source of income is gaining importance because its share in the total income of the bank is increasing, due to increase in fee based services of banks. From the figure it is seen that ICICI bank is having highest proportion of non interest income over the period but from 2008 onwards it started to decline till 2012 and having a mean of 2.12 per cent, next to this is HDFC bank which is having



stable with minor fluctuation in non interest income with a mean of 1.79 per cent and finally J&K having a mean of 0.73 per cent and being a third position.

**TABLE.6 LIQUIDITY MANAGEMENT ANALYSIS**

Banks	YEAR	2005	2006	2007	2008	2009	2010	2011	2012	Mean	SD
J&K BANK	GS/TA (%)	23.68	24.00	19.30	21.17	20.17	19.84	20.44	19.15	20.96	1.88
	LA/DP (%)	41.64	36.96	36.45	39.90	39.08	35.09	31.07	30.00	36.27	4.10
HDFC BANK	GS/TA (%)	21.79	26.67	24.68	23.76	28.44	22.93	19.33	22.55	23.76	2.85
	LA/DP (%)	43.22	47.61	46.26	46.09	48.78	48.38	39.94	39.38	44.95	3.69
ICICI BANK	GS/TA (%)	20.47	20.31	19.59	18.85	16.70	18.84	15.98	18.43	18.64	1.60
	LA/DP (%)	47.53	41.34	45.45	46.46	42.79	53.18	43.94	48.38	46.13	3.70

Govt Sec-Government Securities, LA-Liquid Assets

Table 6 analyses the liquidity management which is the fifth component of camel approach. For analyzing liquidity few selected ratios has been calculated for last 8 years with their mean and standard deviation. The liquidity demonstrates the ability of the bank to meet its short term liability requirements and higher the ratio better the liquidity of the bank but profitability should not be sacrificed at the cost of liquidity, there should be tradeoff between the two. Liquidity management of the banks are analyzed with the help of ratios in the table 6 for last eight years namely cash deposit ratio, Government securities to total assets ratio, liquid assets to deposits ratio.

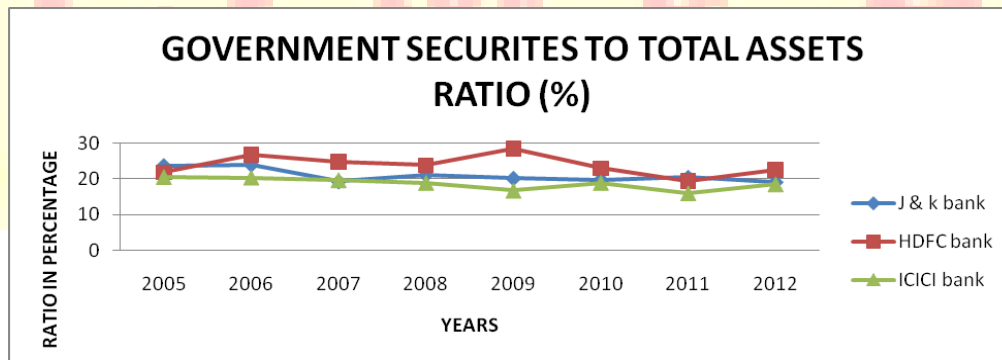


Figure 12

The above figure shows the proportion of government securities in total assets in the form of percentage. A specified portion of funds to be invested in government securities is prescribed

by law and which vary from time to time. The percentage of investment in government securities is almost same in all three banks and close to twenty percent with minor fluctuations. From the average of last eight years it is seen that HDFC is having highest means of 23.76 per cent of total assets in government securities followed by J&K bank with a mean of 20.96 per cent and ICICI bank lowest mean of 18.64 per cent among the three banks. It can be also inferred from this ratio that lower the credit take off higher will be this ratio.

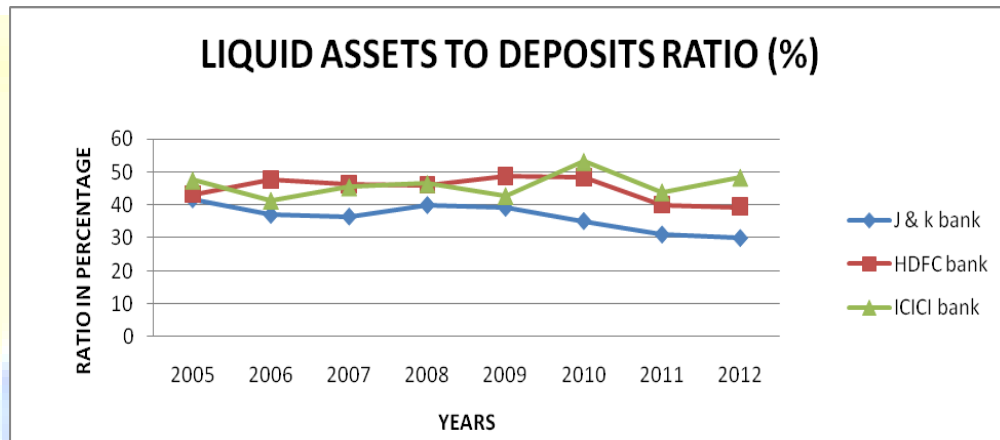


Figure 13

The above figure depicts the liquid assets of deposits ratio in percentage terms. This ratio is fluctuating in all the three banks during the study period of 2005 to 2012 in a random fashion. ICICI is having highest average of 46.13 of liquid assets to deposits ratio in the last eight years followed by HDFC bank with average of 44.95 percent and finally J&K bank having average of 36.27 percent which is lowest among the three banks under study.

### Conclusion

CAMEL approach is significant and widely approved tool to assess the individual and relative financial strength of a bank and to suggest necessary measures to improve weaknesses of a bank. The camel analysis of the three banks under study reveals that all the three banks are financially viable and have adopted prudent policies of financial management. The capital adequacy of all the three banks is much above the stipulated limit prescribed by financial regulators, it shows their ability to bear losses without having any impact on their survival, and the reason for this is their huge cushion for facing losses.

The growth of J & K bank in terms of assets and total business is in the form of a smoothed line and is very less impacted by economic crisis. The assets of banks are different in

size as well as quality but size difference is more than quality difference. Gross nonperforming assets ratio HDFC and J & K bank are going in the form of horizontal line with minor fluctuations but GNPA ratio of ICICI bank is fluctuating and at higher level with a mean of 3.42 percent and a standard deviation of 1.21. NNPA of ICICIC and J & K bank is fluctuating annually but the final direction is in downward direction.

From the analyses of management quality it has been supported by the evidence that the quality of management of the banks are at par to each other. All the management ratios of J&K bank are progressive in relation to its needs and in comparison to its counter parts.

The quality of earnings is good and composition of earnings consists of both interest and non interest income but the position of J&K bank is week in case of non interest income in comparison to counter parts, so operation should be diversified to garner income in the form of non interest income.

The liquidity in a bank is what blood is in a human body but there should be tradeoff between liquidity and profitability. For this an appropriate strategy of liability and assets management is designed. From the comparison of liquid assets to deposits, ICICI bank is keeping on an average 46 per cent of deposits in the form of liquid assets, followed by HDFC which is having average 44 per cent liquid assets and finally J&K bank which is keeping on average 36 per cent liquid assets in relation to deposits. So from the analysis discussion and inferences, it is found that J & Bank performing at par with the star performers and making its path to fly high and higher.

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