PERFORMANCE ANALYSIS OF BANKEX BANKS THROUGH CAMEL MODEL

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ABSTRACT

Banks are barometer of every economy. Indian banks are well known for their closed and cautious operations. A sea change is experienced in operations of Indian banking sector due to varied reasons like tough competition from private banks, expectation of 24x7 banking services, financial inclusion and corporate as new entrant in banking sector. Indian banks have been always appraised for their accuracy and firm foot-holding in the odd times, when other global banks were feeling the hiccups of financial turmoil such as subprime mortgage and recession. The report card of banks is evaluated on its operational efficiency and risk management practices adopted by banks. Fundamental ratio based analysis is a popular tool to appraise the performance of the banks. CAMEL model provides the roadmap of key ratios that can be utilized for evaluating the performance of the banks. Using, the renowned CAMEL Model, the paper comments on the performance of 14 major banks, which constitute the 'Bankex' indices.

Descriptive research has been adopted to evaluate the 14 banks (7 public and private each) on CAMEL Model for a cross sectional data of 14 years period (2000-2013) over 22 variables (ratios). All the secondary data have been gathered from ACE Analyzer database and Moneycontrol website.

Based on the composite ranking as per CAMEL analysis it was found that ICICI, IndusInd, Kotak Mahindra, Yes Bank and IDBI come in the cadre of top five banks. Bottom five banks list constituted of SBI, PNB, UBI, BOI and Axis. The major limitation of the study was that more banks could have been taken for study. Time horizon could have been expanded.

Keywords: *Bankex, Banking Sector, CAMEL Model, Performance, Public Banks, Private Banks*

INTRODUCTION

The Indian banking sector has witnessed resilience with unprecedented growth in global charter. Major attributes of growth in the banking sector are strong economic growth, low defaulter ratio, regular intervention by Central bank, proactive adjustment of monetary policy and so called close banking culture has favoured the Indian banking industry to withstand the global financial turmoil. From providing plain vanilla banking services, banks have gradually transformed themselves into s

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From providing plain vanilla banking services, banks have gradually transformed themselves into universal banks. ATMs, Internet banking, mobile banking and social banking have made 'anytime anywhere banking' a recent buzzword. Banking to unbanked population through financial inclusion is referred to as a major initiative of the central bank. A new financial inclusion revolution would create a landmark history in the Indian banking sector. Enterprising steps like opening of no-frills accounts, engaging intermediaries to provide financial and banking services and offering low cost products and services to rural population are imperative elements of financial inclusion. Rolling out of fresh bank licenses to corporate would make the competition tougher for existing banks in terms of sharing the pie of business.

Indian banking industry is currently grappling with a host of negative issues like overall slowdown in the economy impacting credit growth, deteriorating asset quality and rising Non Performing Assets (NPAs), accompanying Basel III implementation. The sector to some extent is cushioned with factors like positive demographic profile, increasing investment in infrastructure, innovation in technology and constructive regulatory policies. Amidst the mixed environment, every bank has to perform to the full potential to stay ahead of the rival bank. The performance of the banks depends on the operational efficiency and adoption of prudent risk management techniques. Banking sector has been an outperformer on the Indian bourses. Present study tries to evaluate the performance of 14 major banks constituting the bankex indices on Bombay Stock Exchange (BSE). The performance of banks is assessed using the CAMEL Model.

LITERATURE REVIEW

Many studies have been carried out by research scholars in the field of CAMEL model. The summary of the study is depicted in the Table I.

Table I. Snapshot of Literature Review

Author	Data Duration Used in the Study	Number of Banks Studied	Outcome of the Study
Bodla & Verma (2006)	Not Mentioned	Not Mentioned	Camel model is a rating model which assists in interbank performance comparison.
Dang U. (2011)	Performance of bank from 2007-2010 (4 Years)	1 (Bank X at American International Assurance Vietnam)	Internationally standardized rating the Camel rating is significant to banking supervision and it is popular among regulators.
Gilbert, R.A., Meyer, A.P. & Vaughan, M. D. (2000)	1993-1998 (6 Years)	All banks of US	Use of both bank failure model and a CAMEL downgrade model in bank surveillance may be better than choosing to use one of these models.
Gupta (2008)	2003-07 (5 Years)	20 old and 10 new Indian private sector banks.	Based on CAMEL Model ranked the top five and bottom five banks.

Joshi & Joshi (2002)	Not Mentioned	Not Mentioned	It is a mode of ranking and rating of banks.
Kumar, M.A., Harsha, G.S., Anand, S. & Dhruva, N. R. (2012)	2000-2011 (11 Years)	12 Commercial Banks	Private sector banks are on the top list of performance in terms of soundness in comparison to public sector banks.
Prasad K. & Ravinder G. (2012)	2006 to 2010 (5 Years)	39	Top performers were Andhra bank Bank of Baroda, Punjab and Sind bank, Indian bank and Corporation bank. Bottom performers were Bank of Maharashtra, UCO bank, and United bank of India and Vijaya bank.
Prasuna (2003)	2003-04	65 banks	Rivalry among banks benefitted the customers in terms of better service, innovative products and good negotiations.
S. Kumar (2011)	2005-2009 (5 Years)	6 banks (3-public sector and 3-private sector)	Public sector banks outperformed private sector banks with regard to Camel framework.
S. Kumar (2011)	Empirical research on banker's opinion regarding various ratios under Camel model	200 Respondents	Significant difference was noticed in the opinion of banker's regarding various ratios under

(Source: Authors Compilation)

RESEARCH OBJECTIVE

1. To theoretically comprehend the CAMEL Model.
2. To evaluate the performance of 14 banks (constituting bankex indices) based on CAMEL Model.

RESEARCH METHODOLOGY

Descriptive research design has been used in the study. Non probability purposive sampling technique was used for deciding the appropriate sample size. A sample of 14 banks was selected for the study. Sampling element mainly consisted of BSE "Bankex" indices. Sampling unit comprised of those public and private sector banks which made the "bankex" index. The 14 banks actually constituted 'bankex' indices of BSE. Out of the total banks under study 7 banks each belonged to the public sector and private sector. The data of private sector banks in the study were Axis Bank Ltd. (Axis), The Federal Bank Ltd. (Federal), HDFC Bank Ltd. (HDFC), ICICI Bank Ltd. (ICICI), IndusInd Bank Ltd. (IndusInd), Kotak Mahindra Bank Ltd. (Kotak Mahindra) and Yes Bank Ltd. (Yes). The data of public sector banks used in the study were Bank of Baroda (BOB), Bank of India (BOI), Canara Bank (Canara), IDBI Bank Ltd. (IDBI), Punjab National Bank (PNB), State Bank of India (SBI) and Union Bank of India (UBI). The period starting from 2000 to 2013, (i.e. 14 years) was sample duration for collecting the secondary data of banks for the study. Time series data on annual basis for 22 ratios (variables) were computed for analyzing the performance of banks through CAMEL Model. Thus the cross sectional data was obtained for 14 banks with respect to 14 years time horizon and 22 variables (ratios). In some of the exceptional cases the data was obtained for less than 14 years such as for Canara bank (13 years), IDBI bank (11 years), Kotak bank (12 years) and Union Bank of India (13 years). Data was retrieved from Ace Analyzer database and moneycontrol website. Data was managed through Microsoft Excel 2007. Yearly data with respect to individual ratio was used to compute the average of a particular ratio. In order to obtain the correct mean for those banks in which data was not available for all 14 years, average was computed with respect to the availability of the data. Based on the average, the rank was given to a particular ratio of a particular bank, with respect to the time horizon of 14 years. Average group rank was calculated for the set of ratios belonging to a particular component of the acronym. Finally, the composite ranking of average group rank was made over the data analyzed for 14 banks over a 14 year period, to evaluate the performance of the bank based on CAMEL Model. Banks were ranked in the ascending or descending order based on the individual sub-parameter. The major limitation of the study was that more banks could have been taken for study. Time horizon could have been expanded.

CAMEL Model

CAMEL model is composition of various ratios. The acronym is composed of Capital Adequacy ratio, Asset Quality ratio, Management Efficiency ratio, Earnings Quality ratio and Liquidity ratio. The brief explanation of main ratio components of model and sub-components of main ratio is depicted in Table II.

Table II. Description of Components of CAMEL Model

Ratio	Formula	Significance	Evaluation Criteria
Capital Adequacy Ratio		It measures the bank leverage. It indicates overall financial position of bank and its capacity to meet the need of additional capital, thereby maintaining the depositors confidence and preventing banks from going bankrupt.	
Capital Adequacy Ratio (%)	TierI +TierII+TierIII/Risk Weighted Assets	It measures the banks capacity to absorb operational losses. The latest CAR to be maintained by banks as per RBI norms is 9%.	Higher is better.
Debt-Equity Ratio (Times)	Total Borrowings+Deposits/ Owners Funds	It measures the degree of leverage and indicates the quantum of bank's business financed through debt and equity.	Lower is better.
Total Advances to Total Assets (%)	Advances/ Total Assets	It reflects the bank's aggressiveness in lending which finally results in better profitability.	Higher is better.
Government Securities to Total Investments (%)	G-Securities/ Total Investments	It reflects the risk appetite of banks in constructing their portfolio of investments. If a bank has invested in safest option of G-Sec, then it describes the adoption of low risk low profits and vice-versa.	Higher is better.
Asset Quality Ratio		It gauges the kind of asset quality with respect to the total assets. It reflects the quality of debtors that banks have made in their loan portfolio. It helps to identify the level of NPA.	
Net NPA to Net Advances (%)	Net NPA/Net Advances	It measures the kind of assets quality which may turn-out to be non-performing amongst the total corpus of lending undertaken by bank.	Lower is better.
Total Investments to Total Assets (%)	Total Investments/Total Assets	It reflects that how much percentage of total assets is locked up in investments. Principally amount invested cannot be loaned and it does not form part of bank's core income. A higher percentage devoid bank from income but provides safeguard against the NPA.	Lower is better.
Net NPAs to Total Assets (%)	Net NPA/Total Assets	It measures the quality of advances with respect to the total lending done by banks. It discloses the efficiency of bank in measuring credit risk and recovery of debts.	Lower is better.
% Change in Net NPAs	Net NPA at the end of the year-Net NPA at the beginning of the year/ Net NPAs at the beginning of the year	It measures the movement in NPA on year on year basis. Higher reduction in Net NPA proves that risk of bad debts for banks is less and it is better for its business.	Higher is better.
Management Efficiency Ratio		It subjectively judges the efficiency and effectiveness of management. It comments on the survival or growth of the bank. It basically evaluates the service quality of the bank.	
Total Advances to Total Deposits (%)	Total Advances/ Total Deposits	It refers the churning strategy of the banks. It measures the bank's ability to convert its deposits into high earning advances.	Higher is better.
Business Per Employee (Crores)	Total Business/ Total Number of Employees	It measures the working productivity of banks employees in service industry. It computes employee's efficiency in generating business for banks.	Higher is better.

Profit Per Employee (Crores)	Profit after Tax/ Total Number of Employees	It is a branch specific measure to evaluate efficiency of employees in earning surplus for bank.	Higher is better.
Return on Net Worth (%)	PAT/Average Net Worth	It is calculates the profitability of a bank as a percentage of average Net-Worth.	Higher is better.
Earnings Quality Ratio		It measures the profitability, sustainability and consistent growth in earnings of bank. It tries to identify the income generated from core-activity and non-core activity.	
Operating Profit to Average Working Funds Ratio (%)	Operating Profit/ Average Working Funds	It determines how much profit a bank can earn from its operations (after deducting operating expenses) with respect to every rupee spent on working funds. It reflects the utilization of working funds in generating profits.	Higher is better.
Net Interest Margin to Total Assets (%)	Interest Income – Interest Expended /Total Assets	A higher income from lending operations i.e. bank's core activity vis-a-vis interest paid on deposits depicts the revenue earning capacity of the banks.	Higher is better.
Net Profit to Average Assets (%)	Net Profit/ Average Assets	It quantifies the efficiency with which assets are utilized and return derived on the assets.	Higher is better.
Interest Income to Total Income	Interest Income/Total Income	It appraises income generating ability of the bank from its core activities. It is reflected as a percentage of total income.	Higher is better.
Non-Interest Income to Total Income	Fee Based Income / Total Income	It is a fee-based income generated from non-core business activity through innovative product portfolio. It is expressed as a percentage of total income.	Higher is better.
Liquidity Ratio		Banks hedge the liquidity risk by investing in proper type of security, which ensures higher return on investments. Twin purpose of generating profit and providing liquidity to depositors is the main objective of this ratio.	
Liquid Assets to Total Assets (%)	Liquid Assets/Total Assets	It reflects the overall liquidity position of the banks. It includes cash in hand, balance with RBI, balance with other banks and call money and money at short notice.	Higher is better.
Government Securities to Total Assets (%)	Government Securities / Total Assets	It measures the risk inherent in the assets in which bank have invested the money.	Higher is better.
Liquid Assets to Demand Deposits (%)	Liquid Assets/Total Demand Deposits	Bank's ability to meet the urgent demand from depositors is measured through this ratio. Banks invest funds in highly liquid assets to meet anytime demand of depositors.	Higher is better.
Liquid Assets to Total Deposits (%)	Liquid Assets/Total Deposits	It calculates the liquidity available to the depositors of the bank.	Higher is better.
Approved Securities to Total Assets (%)	Approved Securities/Total Assets	An approved security represents investments in state-associated bodies like electricity boards, housing boards etc. It measures the proportion of investments in approved 'securities to total assets.	Higher is better.

(Source: Authors Compilation)

DATA ANALYSIS AND FINDINGS

Detailed numerical analysis of CAMEL components has been individually described in the forthcoming tables and the text description of the same is also mentioned.

CAPITAL ADEQUACY RATIO

Individual as well as group mean and rank of all the 14 banks are mentioned in Table III.

Table III. Camel Ratings on Capital Adequacy Ratio (2000-2013)

Bank	CAR (%)		D/E Ratio (Times)		Total Advances to Total Assets (%)		G-Sec to Total Investments (%)		Group	
	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg. Rank	Ranking of Ranks
Axis	12.50	11	15.21	10	49.28	13	2.83	11	11.25	14
BOB	13.19	7	14.74	9	53.66	9	3.29	8	8.25	8
BOI	11.86	14	18.95	13	58.43	2	3.04	9	9.50	10
Canara	12.61	10	18.00	12	54.91	6	2.74	13	10.25	12
Federal	14.36	4	14.35	7	56.29	4	2.63	14	7.25	7
HDFC	13.78	5	9.59	5	46.44	14	4.28	7	7.75	6
ICICI	14.76	3	6.68	2	50.34	12	4.85	2	4.75	4
IDBI	12.90	9	8.29	3	63.80	1	4.60	4	4.25	2
IndusInd	13.21	6	13.80	6	54.83	7	4.76	3	5.50	5
Kotak Mahindra	18.31	1	4.70	1	53.38	10	5.38	1	3.25	1
PNB	12.49	12	17.09	11	54.48	8	2.97	10	10.25	12
SBI	12.94	8	14.49	8	50.55	11	4.57	5	8.00	9
UBI	12.08	13	20.34	14	56.49	3	2.82	12	10.50	11
Yes Bank	16.93	2	9.05	4	55.77	5	4.29	6	4.25	2

(Source: Secondary Data Compiled Using MS-Excel)

It can be depicted that all the banks have maintained CAR level above the minimum required percentage, as stated by RBI. Kotak bank was a leading bank with the highest mean of CAR 18.31% . Lowest CAR percentage was found in the case of BOI at 11.86% with the last rank of 14. With respect to Debt-Equity ratio, Kotak bank is at 1st position, followed by ICICI and the last rank was obtained by UBI. In the case of total advances to total assets (%) IDBI scored 1st rank and the 14th rank was scored by HDFC. In the case of safe bet for investment in G-Sec, Kotak bank was the leader, whereas Federal bank was found to have least preference to invest in G-Sec. As a part of group ranking based on the four ratios, Kotak bank obtained 1st rank with a group average of 3.25, followed by Yes bank & IDBI bank (4.25). Axis bank obtained last rank in the overall rankings due to its poor performance in all the respective four parameters of CAR, D/E ratio, total advances to total assets and G-Sec to total investments.

Asset Quality Ratio

Individual as well as group mean and rank of all the 14 banks are stated in Table IV.

Table IV. Camel Ratings on Asset Quality Ratio (2000-2013)

	Net NPA to Net Advances (%)		Total Investments to Total Assets (%)		NET NPA to Total Assets (%)		% Change in Net NPA		Group	
	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg. Rank	Ranking of Ranks
Axis	1.47	4	35.35	13	0.67	6	14.28	6	7.25	7
BOB	2.26	8	28.96	4	4.16	14	15.66	7	8.25	9
BOI	3.08	14	27.00	2	1.69	13	20.38	8	9.25	12
Canara	2.07	7	30.48	6	0.82	7	10.13	4	6.00	2
Federal	2.99	12	32.46	9	1.67	12	3.30	3	9.00	10
HDFC	0.40	2	37.33	14	0.17	2	33.07	10	7.00	6
ICICI	2.03	6	32.29	7	0.49	4	0.65	1	4.50	1
IDBI	1.63	5	24.89	1	0.50	5	122.63	13	6.00	2
IndusInd	2.63	10	28.08	3	1.38	10	1.96	2	6.25	5
Kotak Mahindra	0.90	3	32.49	10	0.43	3	319.61	14	7.50	8
PNB	2.34	9	32.43	8	1.12	8	46.82	12	9.25	12
SBI	3.07	13	32.94	12	1.37	9	10.61	5	9.75	14
UBI	2.85	11	30.22	5	1.44	11	27.87	9	9.00	10
Yes Bank	0.06	1	32.57	11	0.03	1	35.50	11	6.00	2

(Source: Secondary Data Compiled Using MS-Excel)

Yes bank scored 1st rank with a mean score of 0.06%, whereas BOI scored 14th rank with a mean score of 3.08%, in the category of Net NPA to Net Advances ratio. In the case of total investments to total assets IDBI was at 1st rank, whereas HDFC was at last rank. With respect to Net NPA to Total Assets, Yes bank was at 1st position whereas as BOB was at 14th position. ICICI bank was at 1st position in percentage change in NPAs with an average of (0.65) and Kotak bank stood at the last rank i.e. 14th rank. Commenting based on the consolidated ranking, ICICI bank stood at 1st rank with group average of 4.50, followed by IDBI and Yes bank (6.00). SBI ranked the lowest as per the asset quality ratio.

Management Efficiency Ratio

Individual as well as group mean and rank of all the 14 banks are positioned in Table V.

Table V. Camel Ratings on Management Efficiency Ratio (2000-2013)

Bank	Total Advances to Total Deposits (%)		Business Per Employee (Crores)		Profit Per Employee (Crores)		Return on Net-Worth (%)		Group	
	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg. Rank	Ranking of Ranks
Axis	61.02	14	10.66	4	0.10	4	20.65	4	6.50	4
BOB	62.54	12	6.62	7	0.05	9	15.50	9	9.25	13
BOI	69.35	5	6.41	8	0.03	13	17.71	6	8.00	8
Canara	62.91	11	6.19	9	0.53	1	20.30	5	6.50	4
Federal	66.13	7	5.51	10	0.04	10	15.76	8	8.75	11
HDFC	62.52	13	7.05	6	0.08	6	20.84	2	6.75	6
ICICI	90.70	3	8.72	5	0.10	3	12.62	12	5.75	3
IDBI	489.41	1	15.78	1	0.09	5	9.55	14	5.25	2
IndusInd	68.80	6	11.14	3	0.08	8	12.75	11	7.00	7
Kotak Mahindra	140.91	2	4.27	13	0.08	7	11.71	13	8.75	11
PNB	64.42	10	5.10	12	0.04	11	21.05	1	8.50	9
SBI	65.65	9	4.16	14	0.03	14	16.03	7	11.00	14
UBI	65.78	8	5.17	11	0.04	12	20.74	3	8.50	9
Yes Bank	80.76	4	12.23	2	0.12	2	15.32	10	4.50	1

(Source: Secondary Data Compiled Using MS-Excel)

IDBI was at the top position with an average total advances to total deposits of 489.41% followed by Kotak bank 140.91% and the last position was of Axis bank at 61.02%. In terms of business per employee IDBI stood 1st, 2nd was Yes bank, 3rd was IndusInd bank and the last position was of SBI bank. At the face of profit per employee Canara bank was 1st, 2nd was Yes bank and SBI was at the 14th position. As per ranking, PNB stood at 1st position and IDBI at 14th rank with respect to Return on Net Worth (%). On the grounds of group ranking on management efficiency ratio, Yes bank was at 1st rank, followed by IDBI, ICICI and lastly SBI.

Earnings Quality Ratio

Individual as well as group mean and rank of all the sampled 14 banks are pointed out in Table VI.

Table VI. Camel Ratings on Earnings Quality Ratio (2000-2013)

Bank	Operating Profit to Avg. Working Funds (%)		Spread/ Net Interest Margin to Total Assets (%)		ROCE (%)		Interest Income to Total Income		Non-Interest Income to Total Income		Group	
	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg. Rank	Ranking of Ranks
Axis	2.75	4	0.42	4	1.30	5	9.88	4	0.22	10	5.40	4
BOB	2.11	11	0.06	10	1.02	9	8.47	13	0.32	7	10.00	12
BOI	1.98	13	0.04	13	0.84	13	8.72	12	0.33	5	11.20	13
Canara	2.17	10	0.06	11	1.03	8	9.19	9	0.41	4	8.40	7
Federal	2.88	3	0.45	3	326.71	1	10.28	3	0.43	3	2.60	2
HDFC	2.99	2	0.24	7	1.54	3	9.87	5	0.26	9	5.20	3
ICICI	2.37	6	0.12	8	1.21	6	9.01	11	0.27	8	7.80	6
IDBI	1.60	14	10.02	1	0.42	14	13.00	1	0.19	14	8.80	9
IndusInd	2.51	5	0.39	5	1.00	10	9.63	6	0.62	2	5.60	5
Kotak Mahindra	3.36	1	0.70	2	2.61	2	12.39	2	1.80	1	1.60	1
PNB	2.37	7	0.05	12	1.15	7	9.57	7	0.20	12	9.00	11
SBI	2.04	12	0.01	14	0.93	11	9.09	10	0.19	13	12.00	14
UBI	2.19	9	0.08	9	0.93	12	9.29	8	0.32	6	8.80	9
Yes Bank	2.29	8	0.32	6	1.30	4	4.29	14	0.20	11	8.60	8

(Source: Secondary Data Compiled Using MS-Excel)

Kotak bank was rated at top rank and IDBI at bottom rank in the case of operating profit to average working funds (%). Margin to total assets (%) was found highest for IDBI (10.02%), followed by Kotak bank (0.70%) and lastly SBI (0.01%) bank. ROCE was found highest in the case of Federal bank (326.71%) and lowest for IDBI bank (0.42%). With respect to interest income to total income IDBI was at 1st rank, followed by Kotak bank, Federal bank and lastly the Yes bank. In the case of non-interest income to total income Kotak bank stood first and IDBI stood last. Commenting on group ranking, based on the five sub-parameters of earning quality ratio, it was noticed that Kotak bank stood ahead with a group rank of 1.60 and SBI stood last with a group rank of 12.00.

Liquidity Ratio

Individual as well as group mean and rank of all the sampled 14 banks are revealed in Table VII.

Table VIL Camel Ratings on Liquidity Ratio (2000-2013)

Bank	Liquid Assets to Total Assets (%)		G-Sec to Total Assets (%)		Liquid Assets to Demand Deposits (%)		Liquid Assets to Total Deposits (%)		Approved Securities to Total Assets (%)		Group	
	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg. Rank	Ranking of Ranks
Axis	16.33	4	21.12	8	125.76	11	19.71	6	-	14	8.60	10
BOB	21.98	1	20.84	9	298.10	1	25.54	2	1.17	2	3.00	1
BOI	16.07	6	19.24	12	246.66	3	19.02	7	0.77	4	6.40	6
Canara	15.23	7	24.11	3	196.53	6	17.40	9	0.59	6	6.20	4
Federal	9.95	12	23.97	4	208.91	5	11.64	14	0.25	7	8.40	9
HDFC	15.13	8	0.00	13	83.32	14	20.39	4	0.02	10	9.80	11
ICICI	16.36	3	19.94	11	244.86	4	27.97	1	0.03	9	5.60	3
IDBI	10.02	11	0.00	14	111.99	13	18.92	8	0.01	11	11.40	14
IndusInd	16.17	5	22.49	6	190.44	7	20.13	5	0.14	8	6.20	4
Kotak Mahindra	7.09	14	21.23	7	165.62	8	17.35	10	0.00	12	10.20	13
PNB	10.90	10	25.49	2	121.84	12	12.84	13	1.53	1	7.60	7
SBI	17.25	2	26.56	1	146.03	9	22.37	3	0.76	5	4.00	2
UBI	12.54	9	22.56	5	129.47	10	14.45	11	0.97	3	7.60	7
Yes Bank	9.45	13	20.46	10	266.64	2	13.27	12	-	13	10.00	12

(Source: Secondary Data Compiled Using MS-Excel)

BOB (21.98%) stood at 1st rank and Kotak bank (7.09%) at 14th rank with respect to liquid assets to total assets percentage. In the case of G-Sec to total assets SBI (26.56%) was at first position and IDBI (0.00%) had secured last position. Liquid assets to demand deposits was found highest for BOB (298.10%), followed by Yes bank (266.64%), BOI (246.66%) and lowest for HDFC (83.32%). Liquid assets to total deposits (%) were highest for ICICI (27.97%) and lowest for Federal bank (11.64%). Investments in approved securities to total assets (%) was found highest for PNB (1.53%), followed by BOB (1.17%) and lastly it was Axis bank (0.00%). Overall group ranking revealed that BOB stood first with a group mean of 3.00 and IDBI stood last with a group mean of 11.40.

Composite Ranking

Group ranking obtained earlier based on individual sub-components of five major ratios is further synchronized using consolidated ranking of group ranks of all 14 banks in Table VIII.

Table VIII. Composite Ranking on Overall Performance of Banks (2000-2013)

Bank	Capital Adequacy Ratio (C)	Asset Quality Ratio (A)	Management Efficiency Ratio (M)	Earnings Quality Ratio (E)	Liquidity Ratio (L)	Average	Final Rank
ICICI	4.75	4.50	5.75	7.80	5.60	5.68	1
IndusInd	5.50	6.25	7.00	5.60	6.20	6.11	2
Kotak Mahindra	3.25	7.50	8.75	1.60	10.20	6.26	3
Yes Bank	4.25	6.00	4.50	8.60	10.00	6.67	4
IDBI	4.25	6.00	5.25	8.80	11.40	7.14	5
Federal	7.25	9.00	8.75	2.60	8.40	7.20	6
HDFC	7.75	7.00	6.75	5.20	9.80	7.30	7
Canara	10.25	6.00	6.50	8.40	6.20	7.47	8
BOB	8.25	8.25	9.25	10.00	3.00	7.75	9
Axis	11.25	7.25	6.50	5.40	8.60	7.80	10
BOI	9.50	9.25	8.00	11.20	6.40	8.87	11
UBI	10.50	9.00	8.50	8.80	7.60	8.88	12
PNB	10.25	9.25	8.50	9.00	7.60	8.92	13
SBI	8.00	9.75	11.00	12.00	4.00	8.95	14

(Source: Secondary Data Compiled Using MS-Excel)

It may be clearly inferred that ICICI bank was ranked at top position with a composite mean of 5.68, followed by IndusInd bank (6.11), Kotak bank (6.26), Yes bank (6.67) and IDBI (7.14). SBI was the lowest position with a composite group mean of (8.95).

Conclusion

It may be concluded that with respect to Capital Adequacy ratio Kotak Mahindra bank stood at first position. In terms of Asset Quality ratio ICICI was the leader. On the face of Management Efficiency ratio Yes bank was at the top of the list. In the context of Earnings Quality ratio Kotak Mahindra bank was ranked first. In the framework of Liquidity ratio Band of Baroda secured top most position. In the final score of composite ranking top five banks in the list comprised of ICICI bank, IndusInd bank, Kotak bank, Yes bank and IDBI bank. Bottom five banks based on CAMEL model's composite ranking were namely State bank of India, Punjab National bank, Union Bank of India, Bank of India and Axis bank.

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