CAMEL MODEL IN BANKING SECTOR

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Abstract

Banking sector is one of the fastest growing sectors in India. Today's banking sector becoming more complex. Evaluating Indian banking sector is not an easy task. There are so many factors, which need to be taken case while differentiating good banks from bad ones. To evaluate the performance of banking sector we have chosen the CAMEL model which measures the performance of bank from each of the important parameter like capital adequacy, asset quality, management efficiency, earning quality and liquidity. After deciding the model we have chosen nationalized banks. According to the importance of study each parameter is given equal weights.

Key words: Performance evaluation, CAMEL MODEL and ranking method.

Introduction

Private sector banks have been functioning in India since the very beginning of the banking system. Initially, during 1921, the private banks like bank of Bengal, bank of Bombay and bank of madras were in service, which all together formed Imperial Bank of India. Reserve Bank of India (RBI) came in picture in 1935 and became the Centre of every other bank taking away all the responsibilities and functions of Imperial bank. Between 1969 and 1980 there was rapid increase in the number of branches of the private banks. In April 1980, they accounted for nearly 17.5 percent of bank branches in India. In 1980, after 6 more banks were nationalized, about 10 percent of the bank branches were those of private sector banks. The share of the private bank branches stayed nearly same between 1980 and 2000. Then from early 1990's, RBI's liberalization policy came in picture and with this the government gave licenses to a few private banks, which came to be known as new private sector banks, There are two categories of the private sector banks- "old" and "new". The old private sector banks have been operating since a long time and may be referred to those banks, which are in operation from before 1991 and all those banks that have commenced there business after 1991 are called as new private sector banks.

Housing Development Finance Corporation Limited was the 1st private bank in India to receive license from RBI as a part of the RBI's liberalization policy of the banking sector, to setup a bank in the private sector banks in India.

Old private sector banks

The banks, which were not nationalized at the time of bank nationalization that took place during 1969 and 1980, are known to be the old private sector banks. These were not nationalized, because of their small size and regional focus. Most of the old private sector banks are closely held by certain communities their operations are mostly restricted to the areas in and around their place of origin. Their Board of directors mainly consists of locally prominent personalities from trade and business circles. One of the positive points of these banks is that, they lean heavily on service and technology and as such, they are likely to attract more business in days to come with the restructuring of the industry round the corner.

New private sector banks

The banks, which came in operation after 1991, with the introduction of economic reforms and financial sector reforms are called as new private sector banks. Banking regulation act was then amended in 1993, which permitted the entry of new private sector banks in the Indian banking sector. However, there were certain criteria set for the establishment of the new private sector banks. Some of those criteria being:

1. The bank should have a minimum net worth of Rs. 100 crores.
2. The promoters holding should be a minimum of 25% of the paid up capital.
3. Within 3 years of the starting of the operations, the bank should offer shares to public.

Private Banks in India have earned great response for its skin tight service and also known for bringing revolution for serving millions of customers. It offers best option for saving and also offers various schemes with maximum return. It offers its service 24 hours and made the job of fund transfer easier by offering new banking service. Besides, there are lots of ATM machines have been set up by such private banks and made the task of withdrawing liquid money easier. Currently there are 22 private sector banks in India with a total of 10387 branches all over India. There is a significant increase in brunches for last few years. From 2008-09 to 2009-2010 Indian private sector banks have grown with a 12.98% growth rate.HDFC Bank is the largest private sector bank with 1729 branches in India. ICICI Bank the second largest bank in India with 1717 branches, Axis Bank the third largest private bank in India that has 1019 branches ,ING Vysya Bank 493 branches, Kotak Mahindra bank 257 branches in India. The Study investigates the performance of selected private sector banks during 2007 and 2011 period. The focus is largely in the context of CAMEL, which is related to capital Adequacy, Assets Quality, Management efficiency, Earnings Quality and Liquidity considerations.

Statement of the Problem

In the recent years the financial system especially the banks have undergone numerous changes in the form of reforms, regulations & norms. Many studies have been done to analyze the performance of private banks on profitability determinants and the

financial indicators. However this study will use financial ratios to analyses the bank performance based on the camel model on 5 private sectors banks.

Scope of the Study

The present study covers only 5 private sector banks which operated during the period of 2007 to 2011. This study has used financial ratios to investigate the banking performance namely: capital adequacy ratios, asset quality ratios, management efficiency ratios, earnings quality ratios and liquidity ratios. All the required data have been collected through annual reports published by the selected banks and websites.

Objectives of the Study

- To analyze the capital adequacy of selected banks
- To assess the asset quality of selected banks
- To evaluated the management efficiency of selected banks
- To determination the earnings quality of selected banks
- To identify the liquidity position of selected banks

Research Methodology

Camel model is basically ratio based model for evaluating the performance of banks. It is a management tool that measures capital adequacy, assets quality, management efficiency, earnings quality and liquidity of financial institutions. The present study adopts analytical research design.

Sample Banks

A sample of five HDFC Bank, AXIS Bank, ICICI Bank, KOTAK MAHINDRA Bank and INGVYSYA Bank selected for the purpose of the study.

Tools used

Twenty variables related to CAMEL model are used in the study. While analyzing and interpreting the results the statistical tools used are ANOVA.

Review of Related Literature

Kapil1 (2005) examined the relationship between the CAMEL ratings and the bank stock performance. The viability of the banks was analyzed on the basis of the Offsite Supervisory Exam Model—CAMEL Model. The M for Management was not considered in this paper because all Public Sector Banks, (PSBs) were government regulated, and also because all other four components—C, A, E and L—reflect management quality. The remaining four components were analyzed and rated to judge the composite rating.

P JanakiRamudu and S Durga Rao[2] (2006) conducted a study on A Fundamental Analysis of Indian Banking Industry, by analyzing the performance of SBI, ICICI and HDFC.

Satish, JuturSharath and Surender[3]adopted CAMEL model to assess the performance of Indian banks. The authors analyzed the performance of 55 banks for the year 2004-05, using this model. They concluded that the Indian banking system looks sound and Information Technology will help the banking system grow in strength in future. Banks

'Initial Public Offer will be hitting the market to increase their capital and gearing up for the Basel II norms.

Prasuna analyzed[4] the performance of Indian banks by adopting the CAMEL Model. The performance of 65 banks was studied for the period 2003-04. The author concluded that the competition was tough and consumers benefited from better services quality, innovative products and better bargains. .

Derviz et al.[5] investigated the determinants of the movements in the long term Standard & Poor's and CAMEL bank ratings in the Czech Republic during the period when the three biggest banks, representing approximately 60% of the Czech banking sector's total assets, were privatized (i.e., the time span 1998-2001).

Camel Rating Factors and Parameters

Rating factors	Parameters
C - Capital adequacy	• CAR • Debt – equity ratio • Advances to total assets ratio
A – Asset quality	• Gross NPAs to gross advances ratio • Gross NPAs to net advances ratio • Net NPAs to net advances ratio • Gross NPAs to total assets ratio • Net NPAs to total assets ratio • Total investment to total assets ratio
M – Management efficiency	• Total advances to total deposits ratio • Business per employee • Profit per employee
E – Earnings quality	• Operating profit as percentage to total assets • Spread to total asset ratio • Net profit to average assets ratio • Interest income to total income ratio • Non – interest income to total income ratio
L – Liquidity position	• Liquidity assets to total assets ratio • Liquidity assets to total deposits ratio • Balance at bank and RBI to total assets

Capital Adequacy: Capital adequacy has emerged as one of the major indicators of the financial health of a banking entity. It is important for a bank to maintain depositors' confidence and preventing the bank from going bankrupt. Capital is seen as a cushion to protect depositors and promote the stability and efficiency of financial system around the

world. Capital Adequacy reflects the overall financial condition of the banks and also the ability of management to meet the need for additional capital. It also indicates whether the bank has enough capital to absorb unexpected losses. Capital Adequacy Ratio acts as an indicator of bank leverage. The following ratios measure Capital Adequacy:

1. *Capital adequacy ratio (CAR):* The banks are required to maintain the capital adequacy ratio (CAR) as specified by RBI from time to time. As per the latest RBI norms, the banks in India should have a CAR of 10%. It is arrived at by dividing the sum of Tier-I, Tier-II and Tier-III capital by aggregate of risk weighted assets (RWA). Symbolically,

$$CAR = \frac{(Tier\text{-}I + Tier\text{-}II + Tier\text{-}III)}{Risk\ weighted\ assets} \times 100$$

Tier I Capital: It consists of paid up capital, banks statutory reserves, free reserves and capital reserves arising out of sale proceeds of any assets. It will not include reserves arising out of revaluation of assets. However, accumulated losses, investments in banks subsidiaries and any intangible assets like good will are deducted from the above items to arrive at the minimum capital adequacy.

Tier II capital: It consists of paid – up value of perpetual preference shares, revaluation reserves; paid –up value of unsecured bonds issued as subordinated debt, general provision and losses reserves. Tier II capital cannot exceed 50 percent of Tier I capital for the purpose of arriving at the prescribed capital Adequacy ratio

Tier-III capital: A comprises of short-term subordinate debt. The higher the CAR, the stronger the bank.

2. *Debt-Equity Ratio: This* ratio indicates the degree of leverage of a bank. It indicates how much of the bank business is financed through debt and how much through equity. Debt-Equity Ratio is arrived at by dividing total borrowings and deposits by shareholders' net worth, which includes equity capital, and reserves and surpluses. Higher ratio indicates less protection for the creditors and depositors in the banking system.

$$Debt – Equity\ ratio = \frac{Borrowings}{Share\ capital + Reserves} \times 100$$

3. *Advances to total Assets: This* is a ratio of the Total Advances to Total Assets. This ratio indicates a bank's aggressiveness in lending which ultimately results in better profitability. Total advances also include receivables. The value of Total Assets excludes the revaluation of all the assets

Capital Adequacy ratio: The range of capital adequacy ratio in selected banks was between 12.05 to 18.08 percent. The overall average capital adequacy ratio of the study is 14.970 percent. While the average capital adequacy ratio of INGvysya (12.05 percent) and

Axis bank (13.48percent) were lower than the average of study. The standard deviation of HDFC indicates high, while standard deviation of Axis (1.57) indicates a low.

Table 1 ANOVA

Source of variation	Sum of square	DF	MS	F	Table value
Between Groups	79.71	4	19.9275	2.808866	2.87
Within Groups	141.89	20	7.0945		
Total	221.6	24			

The one way ANOVA was applied to test the hypotheses. The ANOVA results as given in Table 1 shows that the calculated F value for the hypothesis is 2.808 which is less than the table value of 2.87 at 5 percent level of significance since the calculated F value is less than the table value, it is inferred that there is no significant difference in the average CAR of banks under study. Hence the hypothesis "There is no significant difference between the banks in their average CAR" is accepted

Dept – equity ratio: The range of Debt- equity ratio in selected banks was between 43.56 to 181.46 percent. The overall average Debt- equity ratio of the study is 127.58 percent. While the average Debt- equity ratio of HDFC Bank (43.56 percent) and Axis bank (112.37 percent) were lower than the average of study. The standard deviation of Kotakmahindra (172.58) indicates high, while standard deviation of HDFC (16.59) indicates a low.

Table 2 ANOVA

Source of variation	Sum of square	DF	MS	F	Table value
Between Groups	974083.85	4	243520.96	-5.561359	2.87
Within Groups	-875760.58	20	-43788.03		
Total	98322.42	24			

The one way ANOVA was applied to test the hypotheses. The ANOVA results as given in Table 2 shows that the calculated F value for the hypothesis is -5.56 which is less than the table value of 2.87 at 5 percent level of significance since the calculated F value is less than the table value, it is inferred that there is no significant difference in the average Debt equity of banks under study. Hence the hypothesis "There is no significant difference between the banks in their average Debt equity" is accepted.

Advances to total assets ratio

The range of Advances to total assets ratio in selected banks was between 53.45 to 57.43 percent. The overall average Advances to total assets ratio of the study is 55.42 percent. While the average Advances to total assets of HDFC Bank (53.45 percent) and ICICI bank (54.78 percent) were lower than the average of study. The standard deviation of HDFC (4.06) indicates high, while standard deviation of Kotakmahindra (1.50) indicates a low.

Table 3 ANOVA

Source of variation	Sum of square	DF	MS	F	Table value
Between Groups	32.83	4	8.2075	0.00006108	2.87
Within Groups	2687252.04	20	134362.60		
Total	2687284.87	24			

The one way ANOVA was applied to test the hypotheses. The ANOVA results as given in Table 3 shows that the calculated F value for the hypothesis is 0.000061 which is less than the table value of 2.87 at 5 percent level of significance since the calculated F value is less than the table value, it is inferred that there is no significant difference in the average Advances to total assets of banks under study. Hence the hypothesis "There is no significant difference between the banks in their average Advances to total assets" is accepted.

Assets Quality: The quality of assets is an important parameter to gauge the degree of financial strength. The prime motto behind measuring the assets quality is to ascertain the component of Non-Performing Assets (NPAs) as a percentage of the total assets. This indicates what types of advances the bank has made to generate interest income. Thus, assets quality indicates the type of the debtors the bank is having. The following ratios are necessary to assess assets quality:

1. *Gross NPAs to Gross Advances ratio: Gross* NPAs are the sum total of all loan assets that are classified as NPAs as per RBI guidelines as on Balance sheet date. Gross NPA reflects the quality of the loans made by banks it consists of all the nonstandard assets like as sub-standard, doubtful, and loss assets. It can be calculated with the help of following ratio.

$$\text{Gross NPA Ratio} = \frac{\text{Gross NPAs}}{\text{Gross Advances}} \times 100$$

2. *Gross NPAs to Net Advance ratio: It* is a measure of the quality of assets in a situation, where the management has not provided for loss on NPAs. The Gross NPAs are measured as a percentage of Net Advances. The lower the ratio, the better is the quality of advances.

$$\text{Gross NPAs to Net Advances} = \frac{\text{Gross NPAs}}{\text{Gross Advances - Provisions}} \times 100$$

3. *Net NPAs to Net Advances: It* is a measure of the quality of assets in a situation where the management has not provided for loss on NPAs. Net NPAs are Gross NPAs net of provisions on NPAs and interest in suspense account. In this ratio, Net NPAs are measured as a percentage of net advances.

$$\text{Net NPAs to Net Advances ratio} = \frac{\text{Gross NPAs – provisions}}{\text{Gross Advances - provisions}} \times 100$$

4. Gross NPAs to total assets ratio: The level of existing bad loans of a bank can be assessed from the ratios of Gross non-performing assets to total assets. It can be calculated with the help of following ratio.

$$\frac{\text{Gross Non-Performing assets}}{\text{Total assets}} \times 100$$

The ratio of Net non-performing assets to total assets gives a picture of the level of NPAs that have not been provided for (since net NPAs are gross NPAs less closing provisions) and can be used along with gross NPAs to total assets ratio.

5. *Net NPAs to Total Assets:* *This* ratio discloses the efficiency of bank in assessing the credit risk and, to an extent, recovering the debts. It is arrived at by dividing the net non-performing assets by total assets.

$$\frac{\text{Gross NPAs – provisions}}{\text{Total assets}} \times 100$$

6. *Total Investments to Total Assets Ratio:* Total investments to total assets indicate 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, which, by conventional definition, does not form part of the core income of a bank. It is arrived at by dividing total investments by total assets. A higher ratio means that the bank has conservatively kept a high cushion of investments to guard against NPAs.

$$\frac{\text{Total investments}}{\text{Total assets}} \times 100$$

Gross NPAs to Gross advances ratio: The range of Gross NPAs to Gross Advances ratio in selected banks was between 1 to 4.408 percent. The overall average Gross NPAs to Gross Advances ratio of the study is 2.217 percent. While the average Gross NPAs to Gross Advances ratio of ING Vysya Bank (1 percent) and Axis bank (1.13 percent) were lower than the average of study. The standard deviation of ICICI (4.408) indicates high, while standard deviation of ING Vysya (1) indicates a low.

Table 4 ANOVA

Source of variation	Sum of square	DF	MS	F	Table value
Between Groups	4.88	4	1.22	0.43416	2.87
Within Groups	56.2	20	2.81		
Total	61.08	24			

The one way ANOVA was applied to test the hypotheses. The ANOVA results as given in Table 4 shows that the calculated F value for the hypothesis is 0.43416 which is less than the table value of 2.87 at 5 percent level of significance since the calculated F value is less than the table value, it is inferred that there is no significant difference in the average

Gross NPAs to Gross Advances of banks under study. Hence the hypothesis "There is no significant difference between the banks in their average Gross NPAs to Gross Advances" is accepted.

Management Efficiency: Management efficiency is another vital component of the CAMEL Model that ensures the survival and growth of a bank. The ratios in this segment involve subjective analysis and efficiency of management. The management of the bank takes crucial decisions depending on the risk perception. It sets vision and goals for the organization and sees that it achieves them. This parameter is used to evaluate management efficiency as to assign premium to better quality banks and discount poorly managed ones. The ratios used to evaluate management efficiency are described as under:

1. *Total advances to Total Deposits: The* ratio measures the efficiency of management in converting the deposits available with the bank (excluding other funds like equity capital, etc.) into high Earning advances. Total deposits include demand deposits, savings deposits; term Deposits and deposits of other banks. Total advances also include the receivables.

2. *Business per Employee: This* tool measures the efficiency of all the employees of a bank in generating Business for the bank. It is arrived at by dividing the total business by total number of employees. By business, we mean the sum of total deposits and total advances in a particular year.

$$\text{Business per Employee} = \frac{\text{Total income}}{\text{No. of employees}} \times 100$$

3. *Profit per Employee: This* ratio measures the efficiency of employees at the branch level. It also gives valuable inputs to assess the real strength of a bank's branch network. It is arrived at by dividing the Profit after Tax (PAT) earned by the bank by the total number of employees. The higher the ratio, higher is the efficiency of the management.

$$\text{Profit per employee} = \frac{\text{Net profit}}{\text{No. of employees}} \times 100$$

Total Advances to Total Deposits Ratio: The range of Total Advances to Total Deposits ratio in selected banks was between 69.876 to 97.49 percent. The overall average Total Advances to Total Deposits ratio of the study is 80.743 percent. While the average Total Advances to Total Deposits of Axis Bank (69.876 percent) and HDFC bank (70.55 percent) were lower than the average of study. The standard deviation of Kotakmahindra (7.18) indicates high, while standard deviation of ING Vysya (4.614) indicates a low.

Table 5 ANOVA

Source of variation	Sum of square	DF	MS	F	Table value
Between Groups	161152.74	4	40288.19	-5.131769	2.87
Within Groups	-157014.74	20	-7850.74		
Total	4138	24			

The one way ANOVA was applied to test the hypotheses. The ANOVA results as given in Table 5 shows that the calculated F value for the hypothesis is -5.1317 which is less than the table value of 2.87 at 5 percent level of significance since the calculated F value is less than the table value, it is inferred that there is no significant difference in the average Total Advances to Total Deposits of banks under study. Hence the hypothesis "There is no significant difference between the banks in their average Total Advances to Total Deposits" is accepted.

Earning Quality

Earning quality reflects quality of a bank's profitability and its ability to earn consistently. The quality of earning is a very important criterion that determines the ability of a bank to earn consistently, going into the future. It basically determines the profitability of the bank. It also explains the sustainability and growth in earnings in the future. This parameter gains importance in the light of the argument that much of bank's income is earned through non-core activities like investments, treasury operation, and corporate advisory service and so on. The following ratios try to assess the quality of income in terms of income generated by core activity-income from lending operation.

1. Operating profit to Total assets: The operating profit expressed as a percentage the total assets. Thus it measures the profitability of the bank from the viewpoint of managerial efficiency. This is arrived at by dividing the operating profit by total assets.

2. Spread or Net Interest Margin (NIM) to Total Assets: NIM, being the difference between the interest income and the interest expended as a percentage of total assets. It is an important measure of a bank's core income (income from lending operations). A higher spread indicates the better earnings given the total assets. Interest income includes dividend income and interest expended included interest paid on deposits, loan from the RBI, and other short-term and long term loans.

3. Net Profit to Average Assets / Return on Average Capital Employed: This ratio measures return on assets employed or the efficiency in utilization of assets. It is arrived at by dividing the net profit by average assets, which is the average of total assets in the current year and previous year. Thus, this ratio measures the return on assets employed. Higher ratio indicates better earning potential in the future.

4. Interest Income to Total Income: Interest income is a basic source of revenue for banks. The interest income to total income indicates the ability of the bank in generating income from its lending. This ratio measures the income from lending operations as a percentage of the total income generated by the bank in a year. Interest income includes income on advances, interest on deposits with the RBI, and dividend income.

$$\frac{\text{Interest eared}}{\text{Total income}} \times 100$$

5. Non- interest Income to Total Income: This measures the income from operations other than lending as a percentage of the total income. A fee-based income account for a

major portion of a bank's other incomes. The bank generates higher fee income through innovative products and adapting the technology for sustained service levels. Non-interest income is the income earned by the banks excluding income on advances and deposits with the RBI.

$$\frac{\text{Other income}}{\text{Total income}} \times 100$$

Operating profit as percentage to Total assets Ratio: The range of Operating profit as percentage to total assets ratio in selected banks was between 3.916 to4.56 percent. The overall average Operating profit as percentage to total assets ratio of the study is 4.190 percent. While the average Operating profit as percentage to total assets of ING Vysya Bank (3.92 percent) and HDFC bank (3.96 percent) were lower than the average of study. The standard deviation of Kotakmahindra (0.96) indicates high, while standard deviation of ING Vysya (0.32) indicates a low.

Table 6 ANOVA

Source of variation	Sum of square	DF	MS	F	Table value
Between Groups	4.31	4	1.0775	4.5273	2.87
Within Groups	4.76	20	0.238		
Total	9.07	24			

The one way ANOVA was applied to test the hypotheses. The ANOVA results as given in Table 6 shows that the calculated F value for the hypothesis is 4.4273 which is more than the table value of 2.87 at 5 percent level of significance since the calculated F value is more than the table value, it is inferred that there is a significant difference in the average Operating profit as percentage to total assets of banks under study. Hence the hypothesis "There is a significant difference between the banks in their average Operating profit as percentage to total assets" is rejected

Liquidity: Liquidity is very important for any organization dealing with money. For a bank, liquidity is a crucial aspect which represents its ability to meet its financial obligations. It is of utmost importance for a bank to maintain correct level of liquidity, which will otherwise lead to declined earnings. Banks have to take proper care in hedging liquidity risk, while at the same time ensuring that a good percentage of funds are invested in higher return generating investments, so that banks can generate profit while at the same time provide liquidity to the depositors. Among a bank's assets, cash investments are the most liquid. A high liquidity ratio indicates that the bank is more affluent. The ratios suggested to measure liquidity under CAMEL Model are as follows:

1. *Liquid Assets to Total Assets: Liquid* Assets include cash in hand, balance with the RBI, balance with other banks (both in India and abroad), and money at call and short notice. This ratio is arrived by dividing liquid assets by total assets. The proportion of liquid assets to total assets indicates the overall liquidity position of the bank.

2. *Liquid Assets to Total Deposits: This* ratio measures the liquidity available to the depositors of a bank. Liquid assets include cash in hand, balance with the RBI, balance with other banks (both in India and abroad), and money at call and short notice. Total deposits include demand deposits, savings deposits, term deposits and deposits of other financial institutions.

3. *Balance at banks and RBI to Total assets:* It measures the balance at banks and RBI. Balance at Bank includes cash in hand (including foreign currency notes) balance with RBI include current account, other account. The Total assets include the revaluation of all the assets.

Liquid assets to Total assets Ratio; The range of Liquid assets to total assets ratio in selected banks was between 5.81 to 10.96 percent. The overall average Liquid assets to total assets ratio of the study is 8.91 percent. While the average Liquid assets to total assets of Kotakmahindra Bank (5.81 percent) and ING Vysya bank (8.65 percent) were lower than the average of study. The standard deviation of ING Vysya (2.34) indicates high, while standard deviation of Axis (1.18) indicates a low.

Table 7 ANOVA

Source of variation	Sum of square	DF	MS	F	Table value
Between Groups	25.71	4	6.4275	1.29208	2.87
Within Groups	99.49	20	4.9745		
Total	125.2	24			

The one way ANOVA was applied to test the hypotheses. The ANOVA results as given in Table 7 shows that the calculated F value for the hypothesis is 0.2340 which is less than the table value of 2.87 at 5 percent level of significance since the calculated F value is less than the table value, it is inferred that there is no significant difference in the average Liquid assets to total assets of banks under study. Hence the hypothesis "There is no significant difference between the banks in their average Liquid assets to total assets" is accepted

Ranking of selected private sector banks on the basis of camel ratios

In order to ascertain the best bank based on the CAMEL model, the researcher has ranked selected banks under study. They are ranked on the basis of the average ratios of all elements of CAMEL. The bank with the highest average ratio is given the first rank in case of all ratios except Debt equity ratio, Gross NPAs to Gross advances, Gross NPAs to net advances, Net NPAs to Net advances, Gross NPAs to Total assets, and Net NPAs to total assets, where in the banks with the lowest ratios are given the first rank. Results of the ranking are given in table 5.21.

- In case of capital adequacy HDFC, Kotak Mahindra and ING Vysya have got the first rank in one ratio each.
- In case of assets quality ING Vysya has got the best ranking in three out of six ratios.
- In case of management efficiency axis has got the best ranking in two ratios

- In case of earing quality ICICI and Kotak Mahindra has got the first place in two ratios.
- In case of liquidity ratio HDFC Bank has got the best ranking in two ratios.

Findings and Suggestions

Capital Adequacy

- The total debt expressed as a percentage of equity of Axis Bank, ICICI Bank, Kotak Mahindra Bank are in Declining trend, but for the HDFC Bank and ING vysya banks are in increasing trend.
- The total advances expressed as a percentage of total assets of ICICI Bank, and ING Vysya Bank are in declining trend but for the HDFC Bank, Axis Bank and Kotak Mahindra Banks are in increasing trend.
- There is no significant difference in the average CAR of banks under study.

Asset Quality

- Gross NPAs expressed as a percentage of Gross advances of all the five banks are in declining trend except ICICI Bank.
- Gross NPAs expressed as a percentage of advances of all the five banks are in increasing trend except INGvysya bank.
- Net NPAs expressed as a percentage of Net advances of all the five banks are in declining trend.
- Gross NPAs expressed as a percentage of Total assets of Axis Bank , ICICI Banks are in increasing trend but for the HDFC Bank, Kotak Mahindra Bank, INGvysya Banks are in declining trend.
- Net NPAs expressed as a percentage of total assets of all the five banks are in declining trend except ICICI Bank.
- Total investment expressed as a total asset of ICICI and INGvysya banks are in increasing trend but for the HDFC Bank AXIS Bank and Kotak Mahindra bank are in declining trend.
- It is analyzing that there is no significant difference in the Asset quality of banks under study.

Management Efficiency

- The total advances expressed as a percentage of total deposits of all the five banks are in increasing trend except INGvysya bank.
- Businesses per employee of all the five banks are in increasing trend except ICICI Bank.
- Profits per employee of all the banks are in increasing trend.
- There is significant difference in the management efficiency of banks under study.

Earnings Quality

- Operating profits expressed as a percentage of total assets ratio of ICICI Bank and Kotak Mahindra Bank are in increasing trend but for the HDFC Bank, Axis Bank, and ING Vysya bank are in declining trend.
- The spread expressed as a percentage of total assets of Kotak Mahindra bank, ICICI bank are in increasing trend but for the HDFC bank Axis and ING Vysya bank are in declining trend.

- Net profit expressed as a percentage of average assets of all the five Banks are in declining trend except Kotak Mahindra Bank.
- Interest income expressed as a percentage of total income of ICICI Bank and Kotak Mahindra Bank in increasing trend but for the HDFC Bank, Axis Bank and INGvysya Bank are in declining trend.
- There is a significant difference in the earnings quality of banks under study.

Liquidity

- The liquid assets expressed as a percentage of total assets of all the five banks are in declining trend except HDFC.
- The liquid assets expressed a percentage of total deposits of all the five banks are in declining trend except HDFC Bank.
- Balance at bank and RBI expressed a percentage of total assets of HDFC Bank, Kotak Mahindra Bank, and ING Vysya Bank are in increasing trend but for the Axis and ICICI Bank are in declining trend.

Conclusion

The report makes an attempt to examine and compare the performance of the five different sector banks of India i.e. from private sector bank, HDFC bank, AXIS bank, ICICI bank, KOTAK MAHINDRA bank, ING VYSYA bank. The analysis is based on the CAMEL model. The study has brought many interesting results, some of which are mentioned as below.

All the five banks have succeeded in maintaining CRAR at a higher level than the prescribed level, 10%. But the Kotak Mahindra bank has maintained highest across the duration of last five years i.e. more than 18%. It is very good sign for the banks to survive and to expand in future.

Out of 20 ratios used in the CAMEL model the average figures of KotakMahindra Banks is the best for 6 ratios followed by HDFC Bank (5 ratios). Thus it is established that Kotak Mahindra Bank is the best bank in the selected private sector banks.

References

- Kothari, C.R.,(2010),"Research Methodology: Methods and Techniques", Wishawa Publication, Delhi.
- Srivastava, R.M., Nigam, Divya.,(2010),"Management of Indian Financial Institutions", Himalaya Publication House.
- Reed, Edward, W., (2009), "Commercial Bank Management", Harper and Row New York.
- Grosse, H.D., (2009), "Management Policies of Commercial Banks", Jadhav, Narendra., (2009), "Challenges to Indian Banking: Competition, Globalization and Financial Markets",
- Mc Millan India. Crosse, Howard.,(2009), "Management Policies for Commercial Banks", PHI.
- Reserve Bank of India, Various Reports, RBI Publication, Mumbai.
- JOURNALS REFERRED
- RBI Publication, (December 2009), "Supervision of the Indian Financial System", RBI.
- Economist Intelligent Unit, (June 2009), "Bank Compliance: Controlling Risk and Improving Effectiveness", the Economist.