# AN EMPIRICAL STUDY ON THE PERFORMANCE EVALUATION OF INDIAN COMMERCIAL BANKS WITH SPECIAL REFERENCE TO CAMELS MODEL

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## Abstract

The study aim is to assess the performance of the commercial banks in India. CAMELS model is used to measure and achieve the performance and assessment of the banks. CAMELS model includes Capital adequacy, Asset quality, Management capacity, Earnings ability, Liquidity and Sustainability. CAMELS models assist in finding out a bank's overall situation and to evaluate their performance. Commercial banks in India have undergone great changes in their work, to evaluate their financial ability and map their performance for sustainable economic growth.

Keywords: Commercial Banks, Performance evaluation, CAMELS model

## 1. INTRODUCTION

To organize and to ensure a strong, hard and secure banking sector, the banks have to be analyzed and evaluated in a way that will allow the soft improvement and elimination of the possible vulnerabilities. So that, one of the most accepted methods for the evaluation of the bank's reliability has been represented by the CAMELS model. The plan to study is to evaluate the monetary performance of commercial banks that operate in India. CAMEL model was developed in 1979 by the bank regulatory agencies, USA and later it is recognized as a useful tool for the supervisory review authorities to assess the accuracy of financial institutions. The study is limited to major 34 commercial banks, which will be for 5 years from 2010-2014.

### CAMELS Rating System

The acronym CAMEL has been deriving from the core banking operations: Capital adequacy to map the sustainability, Asset quality to map the balance between solvency and liquidity, Management quality to ensure right supervision, Earnings ability to map the soundness of business portfolio and Liquidity to map the short-term repayment obligations. In 1996, risk was given due recognition in the model, the sixth component "S" was added leading to a wider dimension i.e., enhancement to CAMELS approach, where 'S' refers to the Sensitivity to market risk. The CAMELS defined indicators are right fit for assessing the financial soundness of a bank, recommended and acknowledged by global financial institutions like IMF and the World Bank (2005). The banking financial indicators are rated on a scale of one to five, and any score higher than three is less-than-satisfactory

## 2. COMMERCIAL BANKS IN INDIA

Commercial banks are an important division of the monetary organization structure in India, for profit seeking, allow deposits from different individuals and groups of people and also allow advance money to the business people.

### Its classification

1. Scheduled banks: - are those banks, which are included in RBI Act of 1934 for Second Schedule. These are:
   - Public Sector Banks: - Banks where stake was held by the government like Punjab bank, Union Bank of India etc.
   - Private Sector Banks: - Banks where stake was held by private individuals like ICICI Bank, AXIS Bank etc.
   - Foreign Banks: - Banks whose head offices are located outside the country. Example Standard Chartered Bank, Bank of Tokyo Ltd. etc.
2. Nonscheduled commercial banks: - Banks are those banks, which are not included in the second schedule of RBI Act of 1934.

## 3. NEED OF THE STUDY

Today many banks have introduced so they have competed with each other in order to increase their customers, performance, profit, and to maintain their customers in their bank. So many people are more confused with these banks, which is a better bank than others. Banks are also confused about other competitors in their institution. Therefore, our study can be used for commercial banks as it suggests that in order to maintain

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and increase their performance, they need to use CAMEL models that help the management on how to reduce risk and increase their profit. In addition, banks with huge people need to focus on investing rather than competitors in order to increase their customer's bank deposit interest. This will increase their customers because most people before opening the account in any bank; firstly, they prefer to check the difference in the highest banking interest.

## 4. SCOPE OF THE STUDY

In recent decades, the banking sector has become one of the fastest growing sectors, which takes the risk of whole industries of a particular nation due to which it has become very complex. The performance evaluation for the banking sector has not been an easy task now. To evaluate banks and separate good banks from all of them needs to evaluate various factors out of which we have chosen the CAMEL model to study. The purpose of the study is:

- To revise the past performance of Indian commercial banks and analyze the trends of CAMEL model in Indian at the commercial Banks
- To be aware of the concept of CAMEL model in the perspective of Indian at commercial Banking industry and
- The study is limited to major 34 commercial banks, which will be for 5 years from 2010-2014.

In earlier research papers the factors such as credit deposit ratio, Cash deposit ratio, Gross npa, Net npa, Capital adequacy ratio, Profit per employee, Business per employee, Interest income, Operational profit, return on equity, return on assets, Debt equity ratio, Earnings per share were used. The research can also include some other factors like Investment deposit ratio, Treasury income and Margin or Spread In this research; we include these factors to explore the scope of the study.

Table 1 Research gap

| S. N. | | C | A | M | E | L | S |
|---|---|---|---|---|---|---|---|
| 1 | CREDIT DEPOSIT RATIO | | Y | | Y | | |
| 2 | INVESTMENT DEPOSIT RATIO | | | | | | |
| 3 | CASH DEPOSIT RATIO | | | | | | Y |
| 4 | GROSS NPA | Y | Y | | Y | Y | |
| 5 | NET NPA | Y | Y | | Y | Y | |
| 6 | CAPITAL ADEQUACY RATIO | Y | | | | | |
| 7 | PROFIT PER EMPLOYEE | | Y | | Y | | |
| 8 | BUSINESS PER EMPLOYEE | | | | | Y | |
| 9 | TREASURY INCOME | | | | | | |
| 10 | INTEREST INCOME | | Y | | Y | | |
| 11 | MARGIN OR SPREAD | | | | | | |
| 12 | OPERATIONAL PROFIT | | | | Y | | |
| 13 | RETURN ON EQUITY | | | Y | Y | | |
| 14 | RETURN ON ASSETS | | Y | | Y | | |
| 15 | DEBT EQUITY RATIO | | | Y | | | Y |
| 16 | EARNINGS PER SHARE | | | | Y | | |

## 5. REVIEW OF LITERATURE

The banking sector stakeholders including from depositors to borrower, shareholder to employees everyone would like to ensure a sound financial system.

Banks are the backbone of the economy. First from this gratitude, the national and international regulatory and supervision authorities through academic researchers have deepened their interest in the accuracy of evaluation and analysis of the financial performances of the banking sector.

Romana, A. [18] (2013) stated that in order to ensure a healthy, and stable banking sector, the banks must be analyzed and evaluated in a way allowing rectification and elimination of the potential vulnerabilities. In this way, the analysis and evaluation method of bank reliability has been represented by the CAMELS framework. Author has used the data pertaining to fifteen banking institutions that operated in Romania, using six indicators of the CAMELS framework.

Khatik, S.K. [8] (1991). Author has examined the financial soundness of nationalized banks by using the CAMEL Model in the period of economic liberalization leading to increase competition due to the entry of many new players in the market The research figured out Bank of Baroda, Union Bank of India and Dena Bank has ranked at the top position and ranked all banks based on their performance.

Gupta, R. [5] (2014). Stated that in order for the US bank to have a good performance it first introduced CAMEL rating system in the 1980s. The tools the author used is descriptive research. Various studies have been conducted in India as well on various banks using CAMEL framework. Therefore, in this the banks with least ranking need to improve their performance to come up to the desired standards.

Trivedi, K. R. [22] (2013) established the relation between the growth of the economy and financial soundness of the banking sector. The study found that the capital to risk adjusted ratio of banks was as per the requirements and satisfaction in terms of capital adequacy ratio and debt equity ratio. The asset quality indicates the active performance of recovery departments of SPCB. Moreover, the bank provisioned heavily for guarding against loan loss.

Mishra, S. K. [14] (2011). Stated that the economics of the developing countries, banks is so important in this because it is an indicator to check the soundness of economic activities of an economy. The author has used the following variables: financial performance, Camel Model, and three banks for the analysis. The tools used by the author for the analysis is ANOVA. The author has found out that banks need to improve their efficiency.

Babar, H. Z. [1] (2011). Stated that in order to credit rating institutions in general and their role in subprime financial crises, afterwards he has briefly introduced the banking sector of Pakistan in general. The tools used by the author for the analysis are descriptive research, explanatory research and Predictive research. The study was based on a sample of seventeen banks selected from the banking industry of Pakistan where large banks dominate the upper portion of the ranking table and small banks are at the bottom of the ranking table.

Kumar, M. A. [10] (2012). Stated that the banking sector needs to increase profit and soundness of their bank they need to make sure that they follow all their strategies.

Government interventions are needed to reorient the top management for improving the profitability aspect covering both asset quality and productivity of both branch and employee.

Shar, A. H. [19] (2011). Stated that improvement in Pakistan and remedial actions include the governments to recover the performance and reliability of banks. The author has found out that the study will be useful in future planning and decision-making, and will help effectively control the whole system of the Pakistani banking industry.

Ogege, S. [15] (2012) Stated that the economy in 2005 in Nigeria was increased. The tools used by the author for the analysis are secondary data. The author has found out political strength may reduce financial pain and insolvency.

Hui, J.S. [6] (2012) stated that in Nepal the financial sector is the backbone of the economy of a country. It works as a facilitator for achieving a bank that is the backbone of the economy. The tools used by the author for the analysis are two regression models. The author has found out community sector banks are less efficient than their counterparts are; but home private banks are equally efficient to foreign-owned (joint venture) banks.

Kumar, S. [11] (2014) studied the global financial crisis during 2007-2009 which has led to the failures of banking and financial institutions and freezing up of capital markets. Author has used the variables of CAMEL Approach, and Econometric for the analysis.

Matkar, A. [13] (2013) stated that the Co-operative Banking provides the financial services to agricultural and allied activities CAMEL model. The author has used the following variables financial performance for the analysis. The tools used by the author for the analysis are secondary data. The author has found out the key driver of the bank in India is retail banking.

Biswas, M. [3] (2014) Stated that in India, which has witnessed a constant restructuring since 1991and the CAMEL framework, is one of the most effective measures to map the financial soundness of lending institutions. The author has used the following variables Capital Adequacy Ratio, Liquidity, Management Efficiency for the analysis. The tools used by the author for the analysis is descriptive research.

Lohia, S. [12] (2011). Stated that author used CAMEL rating for the ten years to get the performance of Indian banks. Author has used the following Indian banking sector and CAMEL model for the analysis. The tools used by the author for the analysis is regression. The author has found out that in general private banks achieve better than public banks.

Stella, M. I. [21] (2010). Stated that the economists summarize the inputs and outputs in a production function. Author has used the following impact, information technology, banking, productivity and CAMEL model for the analysis. The author has found out loans and other assets have increased.

Prasad, K.V.N. [16] (2012) Stated that Indian private sector banks assess the performance of Indian Private Sector Banks based on Camel Model and give rating to top five and bottom five banks. The author has used the following variables Nationalized Banks, Performance evaluation, CAMEL Model and ranking method for the analysis. The tools used by the author for the analysis are secondary data. The author has found out the best to the worst bank to the rank one to ten.

Srinivas, K. [20] (2013). Has studied to evaluate and judge against the Financial Performance of the Bank and present suggestions to improve the efficiency in selected banks. The tools used by the author for the analysis are secondary data. The author has found out there is no significant difference between two banks.

Baral, K. J [2] (2005). Stated that, to examine the financial health of a sample of banks we can use their annual reports. The author has used the following CAMEL framework for the analysis. The tools used by the author for the analysis are secondary data. The author has found out the health of combined banks is better than the other commercial banks.

Kabir, M. A. [7] (2012) investigated the financial soundness of two leading private sector banking companies through CAMEL ratings. The author has used the CAMEL Rating System for performance measurement for the analysis.

Chandani, A [4] (2014). Author finds out the difference between the CEO men and women in the banking sector. The tools used by the author for the analysis are secondary data. The author has found out the number of women CEOs and chairpersons increased.

Reddy, K. S. [17] (2012). Stated that in order to evaluate, the author has used the following variables CAMEL, bank performance, and progress ratio for the analysis. The tools used by the author for the analysis are secondary data. The author has found out that public sector banks have significantly improved indicating positive impact of the reforms in liberalizing interest rates, rationalizing directed credit and Investments and increasing competition.

## 6. OBJECTIVE OF THE STUDY

- To measure their performance of commercial banks for a period of 5 years based on CAMELS Model

- To assign performance-based ranking to various Commercial banks under study for Investors' decision-making.

## 7. RESEARCH METHODOLOGY

The design of this study is Descriptive research. Secondary data has been used for the study. Secondary data has been collected from different sources like Indian Banking Association, Reserve Bank of India and bank annual reports, internet journals, and books. All six indicators were used for the study.

Sampling design: A total of 35 banks were used for the study. Data is collected for five financial years. Sample comprises SBI Group, eighteen public banks, seven new generation and nine old generation private sector banks. Analysis was done using the Ratio Analysis and the coefficient of variation.

## 8. RESULTS AND DISCUSSION

In this we must understand that customers are the people who help the banking sectors to perform well, achieve their target, and also increase their customer as well as profit. Therefore, in this we try to find out the different factors, which can affect the performance of the commercial banks in India with the help of CAMEL model.

Therefore, our study includes the demographic region, in which the banks are located like Phagwara and Jalandhar in Punjab in order to collect the financial data.

CAMELS evaluating involves the appraisal of a bank's performance based on a set of financial ratios.

### Capital Adequacy

This indicator ensures that the bank has to enable investors' confidence and prevent bankruptcy. This indicator reflects the relationship between capital held as a buffer and the risky asset portfolio identifying the need of additional capital.

$$\text{Capital Adequacy Ratio (Car)} = \frac{(\text{Tier I} + \text{Tier II}) \text{ Capital}}{\text{Risk Weighted Assets}}$$

CAR ratio of banks if more indicates strength of the bank to deal with complex and challenging market conditions. It indicates the level of protection available to banks against possible future risk scenarios. The banks are required to maintain a min of 9% of CAR as per latest RBI norms.

Table 2 Capital Adequacy Ratio

|  | 2010 | 2011 | 2012 | 2013 | 2014 | SD | MEAN | CV | RANK |
|---|---|---|---|---|---|---|---|---|---|
| SBI Group | 12.00 | 10.69 | 13.86 | 12.92 | 12.96 | 1.20 | 12.49 | 9.61 | 4 |
| Public Banks | 13.14 | 13.32 | 12.95 | 12.12 | 11.80 | 0.67 | 12.67 | 5.26 | 3 |
| PSB new generation | 17.41 | 16.24 | 16.00 | 16.50 | 16.61 | 0.53 | 16.55 | 3.23 | 1 |
| PSB old generation | 14.75 | 13.62 | 13.53 | 13.34 | 12.92 | 0.68 | 13.63 | 4.98 | 2 |

*Source: Compiled from the annual reports of the respective banks. (From 2010-2014) and Indian banking system*

*Interpretation*

The table-2 for the CAR shows that for the year 2010-14, the highest level of CAR is maintained by PSB new generation, whose average CAR is 16.55% and has minimum standard deviation of 0.53%. The second highest CAR is maintained by PSB old generation and then followed by public banks and SBI Group.

NOTE: PSB new generation (Public Sector Banks new generation)

PSB old generation (Public Sector Banks for old generation)

### Assets Quality

Indicator examines the quality of the bank's portfolio. It includes the return and quality dimension of asset class. The foremost objective to measure the assets quality is to ascertain the composition of non-performing assets (NPAs) as a percentage of the total assets.

= Net NPAs to Net Advances

Net NPAs = Gross NPAs - Net of provisions on NPAs - interest in suspense account.

It is the most standard measure to judge the the quality of collaterals available in the loans generated by bank. Net NPA denotes the actual amount of loss estimated to be originating through the credit creation process. Lowering the value is good.

Table 3 Assets Quality

|  | 2010 | 2011 | 2012 | 2013 | 2014 | SD | MEAN | CV | RANK |
|---|---|---|---|---|---|---|---|---|---|
| SBI Group | 1.72 | 1.63 | 1.82 | 2.10 | 2.57 | 0.38 | 1.97 | 19.31 | 1 |
| Public Banks | 0.99 | 0.92 | 1.30 | 1.88 | 2.70 | 0.74 | 1.56 | 47.54 | 2 |
| PSB new generation | 0.90 | 0.43 | 0.33 | 0.33 | 0.49 | 0.24 | 0.50 | 47.87 | 4 |
| PSB old generation | 1.26 | 0.61 | 0.76 | 1.22 | 1.25 | 0.31 | 1.02 | 30.62 | 3 |

*Source: Compiled from the annual reports of the respective banks. (From 2010-2014) and Indian banking system*

*Interpretation*

The table-3 for the Asset quality shows that for the year 2010-14, the highest level of asset quality is maintained by SBI group which average asset quality is 1.97% and has low standard deviation of 0.37% the second highest asset quality is maintained by public banks and then followed by PSB old generation and PSB new generation.

### Management Efficiency

Management efficiency means adherence with set norms, ability to plan and respond to changing environment, leadership and administrative capability of the bank. Banks performance depends on the vision set by the top management. The earning and financial performance in core and third-party products dimension is all mapped to the mindset at the top of the structure. It enables institutions to excel and survive in the complex financial environment.

$$\text{Profit per Employee} = \frac{\text{Total Profit or PAT}}{Total\ Number\ of\ Employee} \times 100$$

This shows the surplus earned per employee. The higher the ratio, the higher is the efficiency of the management and vice versa.

Table 4 Management Efficiency

|  | 2010 | 2011 | 2012 | 2013 | 2014 | SD | MEAN | CV | RANK |
|---|---|---|---|---|---|---|---|---|---|
| SBI Group | 4.46 | 3.84 | 5.31 | 6.45 | 4.85 | 0.98 | 4.98 | 19.71 | 4 |
| Public Banks | 5.95 | 7.35 | 7.40 | 6.92 | 4.98 | 1.04 | 6.52 | 15.95 | 2 |
| PSB new generation | 8.73 | 10.43 | 10.79 | 12.21 | 12.43 | 1.50 | 10.92 | 13.74 | 1 |
| PSB old generation | 3.52 | 5.18 | 5.33 | 7.57 | 4.81 | 1.46 | 5.28 | 27.66 | 3 |

*Source: Compiled from the annual reports of the respective banks. (From 2010-2014) and Indian banking system*

*Interpretation*

The table-4 for the management efficiency shows that for the year 2010-14, the highest level of management efficiency is maintained by PSB new generation with an average management efficiency is 10.92%. The second highest management efficiency is maintained by public

banks and then followed by PSB old generation and SBI Group.

### Earning Quality

Quality of a bank's asset will determine the returns and ensure continued profitability. Banks capability to maintain quality and earn consistently is key to compete in tough times. It primarily determines the profitability of a bank and growth of future earnings from core and non-core business segments.

$$\text{RETURN ON ASSET} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

This ratio reflects the efficiency in utilization of assets. Higher the ratio reflects better earning potential of a bank in the future.

Table 5 Earning Quality

|  | 2010 | 2011 | 2012 | 2013 | 2014 | SD | MEAN | CV | RANK |
|---|---|---|---|---|---|---|---|---|---|
| SBI Group | 0.88 | 0.71 | 0.88 | 0.97 | 0.65 | 0.13 | 0.82 | 16.25 | 3 |
| Public Banks | 0.96 | 0.98 | 0.88 | 0.74 | 0.40 | 0.24 | 0.79 | 29.97 | 4 |
| PSB new generation | 1.00 | 1.28 | 1.58 | 1.64 | 1.71 | 0.30 | 1.44 | 20.73 | 1 |
| PSB old generation | 0.75 | 1.02 | 1.14 | 1.07 | 0.75 | 0.18 | 0.94 | 19.50 | 2 |

*Source: Compiled from the annual reports of the respective banks. (From 2010-2014) and Indian banking system*

*Interpretation*

The table-5 for the earning quality shows that for the year 2010-14, the highest level of earning quality is maintained by PSB new generation with an average earning quality is 1.44%. The second highest earning quality is maintained by PSB old generation and then followed by SBI Group and public banks.

### Liquidity

Liquidity is a key aspect that reflects a bank's ability to meet its short-term repayment obligations. Repayment can be triggered due to unexpected withdrawals. Premature closure of loans can also trigger an asset liability mismatch affecting financial performance of a bank. The Treasury department is accountable for the stated corrections. An adequate liquidity position means a situation, where banks can access markets for cheap and sufficient liquid funds.

$$\text{Liquid Assets to Total Assets} = \frac{\text{Liquid Assets}}{\text{Total Assets}}$$

The liquid assets include cash in hand, money at call and short notice, balance with Reserve bank of India and balance with banks (India and Abroad).

Table 6 Liquidity

|  | 2010 | 2011 | 2012 | 2013 | 2014 | SD | MEAN | CV | RANK |
|---|---|---|---|---|---|---|---|---|---|
| SBI Group | 0.04 | 0.04 | 0.05 | 0.04 | 0.03 | 0.01 | 0.04 | 17.68 | 2 |
| Public Banks | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.00 | 0.02 | 6.15 | 4 |
| PSB new generation | 0.05 | 0.05 | 0.06 | 0.05 | 0.05 | 0.01 | 0.05 | 12.34 | 1 |
| PSB old generation | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.00 | 0.03 | 9.12 | 3 |

*Source: Compiled from the annual reports of the respective banks. (From 2010-2014) and Indian banking system*

*Interpretation*

The table-6 for the liquidity shows that for the year 2010-14, the highest level of liquidity is maintained by PSB new generation which average liquidity is 0.05%. The second highest liquidity is maintained by SBI Group and then followed by PSB old generation and public banks.

### Sensitivity To Market Risk

It addresses the degree to which changes in interest rates, foreign exchange rates, commodity prices or equity prices can adversely affect a financial institution's earnings or capital.

$$\text{Spread Ratio} = \frac{\text{Spread}}{\text{Working Fund}} \times 100$$

Spread is the difference between interest earned and interest paid. Spread is also known as margin and gap. Banks who are having a comfortable margin can sustain tough times whereas banks working with a thin margin can run into existential crises. Therefore, commercial banks need resources to manage their administrative operations and other expenses. The ratio is calculated by taking the difference between the ratios of interest earned as percentage of working fund and interest paid as percentage of working fund.

Table 7 Sensitivity to Market Risk

|  | 2010 | 2011 | 2012 | 2013 | 2014 | SD | MEAN | CV | RANK |
|---|---|---|---|---|---|---|---|---|---|
| SBI Group | 2.15 | 2.63 | 3.24 | 2.83 | 2.75 | 0.39 | 2.72 | 14.45 | 2 |
| Public Banks | 2.33 | 2.73 | 2.42 | 2.24 | 2.09 | 0.24 | 2.36 | 10.20 | 4 |
| PSB new generation | 2.98 | 2.94 | 2.89 | 3.04 | 3.23 | 0.13 | 3.02 | 4.35 | 1 |
| PSB old generation | 2.28 | 2.62 | 2.51 | 2.52 | 2.65 | 0.15 | 2.52 | 5.78 | 3 |

*Compiled from the annual reports of the respective banks. (From 2010-2014) and Indian banking system*

*Interpretation*

The table-7 for the sensitivity to market risk shows that for the year 2010-14, the highest level of sensitivity is maintained by PSB new generation, whose average sensitivity to market risk is 3.02%. The second highest sensitivity is maintained by SBI Group and then followed by PSB old generation and public banks.

## 9. CONCLUSION

Table no. 8, depicts overall ranking based on the CAMELS model to rate the group of banks according to their performances. It is clear from the above table that PSB new generation have been ranked at the top position with composite average of one but in asset quality has ranked 4.

The SBI and the PSB old generation have secured the 2nd position with almost 2 each. The last position was public banks which secured the 4th rank with a composite average of 3.17.

In Public Sector Banks: First bank for the best using of CAMELS Models is Bank of Maharashtra for average of 4.29 and last bank is bank of India for average of 3.80.

In PSB NEW GENERATION: First bank is Kotak Mahindra with average of 7.21 and last bank is ING Vysya bank with average of 5.48.

In PSB OLD GENERATION: First bank for the best use of CAMELS Models is Federal Bank for average of 6.29 and last bank is Dhan Laximi bank for average of 4.21 but it's better to compare with the State Bank of India which has average of 3.84.

So, in this performance PSB NEW GENERATION banks have a better performance than all other groups. In this I will suggest that all banks follow the CAMELS Model in order to achieve well in their banks.

Table 8 Composite Ranking: Overall Performance

| | C | A | M | E | L | S | MEAN | RANK |
|---|---|---|---|---|---|---|---|---|
| SBI Group | 4 | 1 | 4 | 3 | 2 | 2 | 2.67 | 2 |
| Public Banks | 3 | 2 | 2 | 4 | 4 | 4 | 3.17 | 4 |
| PSB new generation | 1 | 4 | 1 | 1 | 1 | 1 | 1.50 | 1 |
| PSB old generation | 2 | 3 | 3 | 2 | 3 | 3 | 2.67 | 2 |

*Source: Compiled from the annual reports of the respective banks. (From 2010-2014) and Indian banking system*

| | PERFORMANCE FOR CAMELS IN EACH CLASSIFICATION | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SN | 1: SBI GROUP | C | A | M | E | L | S | MEAN | RANK |
| 1 | STATE BANK OF INDIA | 12.49 | 1.97 | 4.98 | 0.82 | 0.04 | 2.72 | 3.84 | 1 |
| S/NO | 2: PUBLIC BANKS | C | A | M | E | L | S | MEAN | RANK |
| 1 | ALLAHABAD BANK | 12.14 | 1.95 | 7.05 | 0.90 | 0.01 | 2.49 | 4.09 | 11 |
| 2 | BANK OF BARODA | 13.34 | 0.81 | 7.07 | 1.09 | 0.02 | 2.43 | 4.13 | 9 |
| 3 | BANK OF INDIA | 11.77 | 1.55 | 6.66 | 0.68 | 0.03 | 2.13 | 3.80 | 18 |
| 4 | BANK OF MAHARASHTRA | 12.65 | 1.19 | 6.92 | 0.56 | 0.02 | 4.40 | 4.29 | 1 |
| 5 | CANARA BANK | 13.22 | 1.52 | 7.37 | 1.00 | 0.02 | 2.04 | 4.20 | 5 |
| 6 | PUNJAB NATIONAL BANK | 12.84 | 1.62 | 7.23 | 1.12 | 0.02 | 2.32 | 4.19 | 6 |
| 7 | UNION BANK OF INDIA | 12.13 | 1.53 | 6.83 | 0.88 | 0.02 | 2.39 | 3.96 | 15 |
| 8 | IDBI BANK | 12.86 | 1.55 | 7.21 | 0.63 | 0.03 | 1.89 | 4.03 | 13 |
| 9 | ORIENTAL B OF COMMERCE | 12.67 | 1.82 | 7.25 | 0.78 | 0.02 | 2.36 | 4.15 | 8 |
| 10 | INDIAN BANK | 13.18 | 1.32 | 7.25 | 1.00 | 0.02 | 2.61 | 4.23 | 2 |
| 11 | INDIAN OVERSEAS BANK | 13.03 | 2.08 | 7.55 | 0.45 | 0.03 | 2.04 | 4.20 | 4 |
| 12 | CORPORATION BANK | 13.40 | 1.03 | 7.22 | 0.94 | 0.02 | 2.03 | 4.11 | 10 |
| 13 | SYNDICATE BANK | 12.52 | 1.06 | 6.79 | 0.81 | 0.02 | 2.58 | 3.96 | 14 |
| 14 | ANDHRA BANK | 12.89 | 1.58 | 7.24 | 1.04 | 0.03 | 2.44 | 4.20 | 3 |
| 15 | DENA BANK | 12.12 | 1.44 | 6.78 | 0.89 | 0.02 | 2.19 | 3.91 | 16 |
| 16 | VIJAYA BANK OF INDIA | 12.35 | 1.50 | 6.92 | 0.62 | 0.03 | 1.92 | 3.89 | 17 |
| 17 | UNITED BANK OF INDIA | 12.00 | 2.98 | 7.49 | 0.24 | 0.03 | 2.17 | 4.15 | 7 |
| 18 | PUNJAB AND SIND BANK | 12.86 | 1.52 | 7.19 | 0.68 | 0.02 | 2.04 | 4.05 | 12 |
| SN | 3: PSB NEW GENERATION | C | A | M | E | L | S | MEAN | RANK |
| 1 | HDFC BANK | 16.61 | 0.23 | 16.61 | 1.76 | 0.06 | 3.78 | 6.51 | 3 |
| 2 | ICICI BANK | 19.06 | 1.14 | 19.06 | 1.49 | 0.10 | 2.41 | 7.21 | 2 |
| 3 | AXIS BANK | 15.22 | 0.35 | 15.22 | 0.87 | 0.03 | 2.85 | 5.75 | 6 |
| 4 | KOTAK MAHINDRA BANK | 18.17 | 0.96 | 18.17 | 1.79 | 0.04 | 4.15 | 7.21 | 1 |
| 5 | INDUSIND BANK | 14.88 | 0.34 | 14.88 | 1.52 | 0.04 | 2.97 | 5.77 | 5 |
| 6 | YES BANK | 17.54 | 0.04 | 17.54 | 1.61 | 0.06 | 2.24 | 6.51 | 4 |
| 7 | ING VYSYA BANK | 14.37 | 0.42 | 14.37 | 1.05 | 0.04 | 2.66 | 5.48 | 7 |
| SN | 4: PSB OLD GENERATION | C | A | M | E | L | S | MEAN | RANK |
| 1 | FEDERAL BANK | 16.33 | 0.67 | 16.33 | 1.29 | 0.03 | 3.12 | 6.29 | 1 |
| 2 | KARUR VYSYA BANK | 13.78 | 0.28 | 13.78 | 1.45 | 0.03 | 2.54 | 5.31 | 6 |
| 3 | J&K BANK | 13.70 | 0.20 | 13.70 | 1.48 | 0.01 | 3.08 | 5.36 | 4 |
| 4 | SOUTH INDIAN BANK | 13.97 | 0.50 | 13.97 | 1.08 | 0.02 | 2.46 | 5.33 | 5 |
| 5 | KARNATAKA BANK | 13.01 | 1.69 | 13.01 | 0.74 | 0.02 | 1.88 | 5.06 | 8 |
| 6 | CITY UNION BANK | 13.57 | 0.68 | 13.57 | 1.58 | 0.03 | 2.75 | 5.37 | 3 |
| 7 | DEVELOP CREDIT BANK | 14.19 | 1.26 | 14.19 | 0.41 | 0.03 | 2.57 | 5.44 | 2 |
| 8 | DHAN LAXMI BANK | 11.07 | 1.35 | 11.07 | -0.11 | 0.04 | 1.84 | 4.21 | 9 |
| 9 | LAXMI VILAS BANK | 13.05 | 2.52 | 13.05 | 0.57 | 0.06 | 2.40 | 5.27 | 7 |

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