©KY PUBLICATIONS
RESEARCH ARTICLE
Vol.2.Issue.2.2015

IJBMAS
E ISSN 2349-4638

http://www.ijbmas.in
INTERNATIONAL JOURNAL OF BUSINESS, MANAGEMENT AND ALLIED SCIENCES (IJBMAS)
A Peer Reviewed International Research Journal

# FINANCIAL PERFORMANCE ANALYSIS OF SELECTED PUBLIC SECTOR BANKS USING CAMEL APPROACH

**Dr.B.RAGHUNATHA REDDY**
Lecturer-in-Charge (HOD), Department of Commerce
SRR & CVR Degree College, Machavaram, Vijayawada -2


Article Info:
Article Received on:11/05/2015
Article Revised on:19/05/2015
Article Accepted on:24/06/2015

**ABSTRACT**

The banking sector is the backbone of the economy of a country and occupies the core position. In growing economy banks have promised major share of source of money for meeting the numerous obligations of their regulars, patrons and various organizations in day to day marketable environment, though the banks will produce revenue from the business transaction under the kindliness of fluctuations in their operations. Financial performance of a bank indicates the strength and weakness of that particular bank by properly establishing the association between the items of the balance sheet and profit and loss account. The objective of the present paper is to analyse the financial performance of PNB (Punjab national Bank) and State Bank of India (SBI) over a period of three years (2010-2012) using CAMEL approach. For this purpose, financial ratio analysis has been used. The study focused on every aspects of financial performance measurement and the period covered under the study was three years. The public sector banks will be selected on the basis of market capitalization BSE (available on money control). This model measures the performance of financial institution especially banks, from all the important parameter like Capital Adequacy, Assets Quality, Management Efficiency, Earning Quality and Liquidity etc., Statistical tools like average, standard deviation, coefficient of variation and correlation is also calculated. It is found out that overall state of capital adequacy of nationalized bank SBI is satisfactory over PNB. As far as portfolio is concern, the overall state of assets quality was good. The management efficiency was also satisfactory.

Key words: Financial Performance, commercial banks, SBI, PNB, CAMEL approach



## Introduction

Bank is back bone of an economy's financial system. Banks accepts deposits from public and provides credit facility to productive firms and business entity in form of loans. The Indian banking system is featured by a large network of bank branches and its ATMs, serving many types of financial needs of community. A strong banking system helps in rapid growth of economy through credit facility and mobilizes of saving to fund seeking entity. In recent years, Government of India and Reserve Bank of India, has given more focus on financial inclusion through strong financial institution like Banks. Today, in India every corner of country has accessible to banking facilities.

In the 1980s, CAMEL rating system was first introduced by U.S. supervisory authorities as a system of rating for on-site examinations of banking institutions. Under this system, each banking institution subject to onsite examination is evaluated on the basis of five (now six) critical dimensions relating to its operations and performance, which are referred to as the component factors. These are Capital, Asset Quality, Management, Earnings and Liquidity used to reflect the financial performance, financial condition, operating soundness and regulatory compliance of the banking institution. A sixth component relating to Sensitivity to market risk has been added to the CAMEL rating to make the rating system more risk-focused. Each of the component factors is rated on a scale of 1 (best) to 5 (worst). A composite rating is assigned as an abridgement of the component ratings and is taken as the prime indicator of a bank‟s current financial condition. The composite rating ranges between 1 (best) and 5 (worst), and also involves a certain amount of subjectivity based on the examiners‟ overall assessment of the institution in view of the individual component assessments.

**Company Profile**

**State Bank of India (SBI):** This is a largest Public sector company. State bank of India industry type is banking and financial services. It was founded on 2 June 1806, Bank of Calcutta, 27 January 1921, Imperial Bank of India and 1 July 1955, State Bank of India. State Bank of India Headquarters is Mumbai, Maharashtra. State bank of India chairperson is Smt. Arundhati Bhattacharya and product is Consumer banking, corporate banking, finance and insurance, investment banking, mortgage loans, private banking, private equity, savings, securities, asset management, wealth management, credit cards. Government of India is owner and Members around 286 Million users with 450 Million Accounts (2016). State Bank of India of 2014-15, it has assets of INR 20, 48,080 crores and 16,333 branches, including 191 foreign offices spread across 36 countries, slogan is "The Banker to Every Indian". Website: www.sbi.co.in 1.1.2 Punjab National Bank

**Punjab National Bank (PNB) Profile:** Punjab National Bank, India's first Swadeshi Bank, commenced its operations on April 12, 1895 from Lahore, with an authorized capital of Rs. 2 lakh and working capital of Rs20, 000. The farsighted visionaries and patriots like Lala Lajpat Rai, Mr. E C Jessawala, Babu Kali Prasono Roy, Lala Harkishan Lal and Sardar Dyal Singh Majithia displayed courage in giving expression to the spirit of nationalism by establishing the first bank purely managed by the Indians with Indian Capital. PNB established a representative office in Oslo, Norway and hopes to upgrade this to a branch in due course. In January 2010, PNB established a subsidiary in Bhutan. It owns 51 per cent of Druk PNB Bank, which has branches in Thimpu, Phuentsholing and Wangdue and rest 49 per cent shares are owned by local investors (official website of Punjab National Bank, www.pnbindia.in).

**Financial Performance Evaluation**

The words of Nassim Nicholas Taleb, 'Banking is a very treacherous business because you don't realize it is risky until it is too late. It is like calm waters that deliver huge storms'; emphasise the importance of financial analysis of banks. Financial performance evaluation is a process of synthesis and summarization of financial and operative data to get an insight into the operative activities of a business concern. It consists of comparisons for the same entity over periods of time or comparisons of different entities either of same sector or different sectors. It may be done for a variety of purposes, which may range from a simple analysis of the short term liquidity position to a comprehensive assessment of the strengths and weaknesses in various areas. It is helpful in assessing corporate excellence, operating efficiency, judging credit worthiness, forecasting bond ratings, predicting bankruptcy and market risk. There are numbers of tools and techniques available for the performance evaluation of a bank like Data Envelopment Analysis, CAMEL model and ratio analysis, etc. Financial analysis of a bank is mainly done with the help of different ratios which enables the management of banks to identify the causes or reasons for the changes in their advances, income, deposits, expenditure and profitability over the period of time and thus help in pinpointing the necessary direction of action required for increased deposits, income, advances and reducing the expenditure and for altering the profitability prospects of the banks in future.

**Review of Literature**

In order to evaluate the financial performance of banking and financial sector the researchers, academicians and policy makers have investigated several studies in different perspectives and in different time periods. Bodla and Verma (2006)[i] recommended that such types of rating would help the Reserve Bank of India to identify the banks whose performance needs special supervisory attention. The main attempt of CAMEL system is to find out problems which are faced by the banks themselves and catch up the comparative analysis of the performance of various banks. Barr et al. (2002)[ii] viewed that "CAMEL rating criteria has become a concise and indispensable tool for examiners and regulators". This rating criterion ensures a bank's healthy conditions by reviewing different aspects of a bank based on variety of information sources such as financial statement, funding sources, macroeconomic data, budget and cash flow. Kwan and Eisenbeis (1997)[iii] observed that Asset Quality is commonly used as a risk indicator for financial institutions, which also determines the reliability of capital ratios.Their study indicated that capitalization affects the operation of financial capitalization affects the operation of financial institution. More the capital, higher is the efficiency

**OBJECTIVES OF THE STUDY**

The study under consideration proposes to achieve the following objectives:

- To study the financial performance of selected public sector banks.
- To compare the financial performance of selected public sector banks.

**Research Methodology**

To look at the financial soundness and infer about convergence of the commercial banks operating in India we use a very simplified approach using internationally accepted CAMEL rating parameters. CAMELS is an acronym for six measures (capital adequacy, assets quality, management soundness, earnings, liquidity, and sensitivity to market risk). In this analysis the six indicators which reflect the soundness of the institution framework are considered. CAMEL is a ratio-based model used to evaluate the performance of banks with the help of different criteria, viz. Capital Adequacy, Asset Quality, Management Quality, Earnings and Liquidity. The present study is a descriptive research study based on analytical research design.

**RESEARCH HYPOTHESIS**

H0 = There is no significant difference in performance of Public Sector Banks in Indiaas assessed by CAMEL model

H1 = There is a significant difference in performance of Public Sector Banks in India assessed by CAMEL model.

**LIMITATIONS OF STUDY**

Present study is likely to suffer from some limitation as time and resources. Some limitations are explained here so that study can be understood in same stance. Following are limitations:

- The sample size analyzed was limited over three financial years, which may not be fully represented of the universe. A large sample size could not be taken due to limitation of time.
- Due to confidential nature of some documents the same were not available for the study.
- The source of data collection is secondary so the information available is not sufficient.

**Statement of the Problem**

The confidence of the public and private investors in financial institutions has been shaken by recent failures in the banking sector in India. Profitability of banks and their performance in comparison to the competitors has become an important topic of research, many banks do not find the right measure to evaluate the performance, since there are many variables that decide the efficiency and effectiveness of banks, there arises a question of what are the criteria's to be measured. Therefore CAMEL model is the mostly widely used tool to measure the performance of the banks.

**Need for Performance Measurement of Banks**

Due to its very nature of operation and the important role it plays in the overall growth of economy, the banking institutions should be more closely monitored in order to protect the entire financial system. The present supervisory system in banking sector is a substantially improved one in comparison to the earlier system in terms of frequency, coverage, focus and more importantly the tools employed. Nearly one-half of the Basel core principles have already been adhered to for effective banking supervision and the remaining is in the process of implementation. Two Supervisory Rating Models, based on CAMEL and CACS (capital, asset quality, compliance and systems & control) models for rating of the Indian Commercial Banks and Foreign Banks operating in India respectively, have been worked out on the lines recommended by the Padmanabhan Working Group[iv]. These ratings would enable RBI to identify the banks whose condition warrants special supervisory attention

**ANALYSIS**

Before understanding the meaning of analysis of financial statements, it is necessary to understand the meaning of "analysis" and "financial statements". Analysis means establishing a meaningful relationship between various items of the two financial statements with each other in such a way that a conclusion is drawn. By financial statements, we mean two statements- (1) profit & loss a/c (2) balance sheet. These are prepared at the end of a given period of time. They are indicators of profitability and financial soundness of the business concern. Thus, analysis of financial statements means establishing meaningful relationship between various items of the two financial statements, i.e., income statement and position statement Parties interested in analysis of financial statements

**STATE BANK OF INDIA (**AS ON 31-MARCH-2012)

| **Balance sheet - State Bank of India** | | **in crore** | |
|---|---|---|---|
| **Particulars** | **Mar'12** | **Mar'11** | **Mar'10** |
| **Liabilities** | **12 Months** | **12 Months** | **12 Months** |
| Share Capital | 671.04 | 635 | 634.88 |
| Reserves & Surplus | 83,280.16 | 64,351.04 | 65,314.32 |
| **Net Worth** | **83,951.21** | **64,986.04** | **65,949.20** |
| Secured Loans | 127,005.57 | 119,568.96 | 103,011.60 |
| Unsecured Loans | 1,043,647.36 | 933,932.81 | 804,116.23 |
| **TOTAL LIABILITIES** | **1,254,604.14** | **1,118,487.81** | **973,077.03** |
| | **Assets** | | |
| Gross Block | 14,792.33 | 13,189.28 | 11,831.63 |
| (-) Acc. Depreciation | 9,658.46 | 8,757.33 | 7,713.90 |
| **Net Block** | **5,133.87** | **4,431.96** | **4,117.72** |
| Capital Work in Progress. | 332.68 | 332.23 | 295.18 |
| Investments. | 312,197.61 | 295,600.57 | 285,790.07 |
| Inventories | 0 | 0 | 0 |
| Sundry Debtors | 0 | 0 | 0 |
| Cash And Bank | 97,163.16 | 122,874.15 | 96,183.84 |
| Loans And Advances | 920,691.91 | 800,497.29 | 667,026.91 |
| **Total Current Assets** | **1,017,855.07** | **923,371.44** | **763,210.75** |
| Current Liabilities | 80,915.09 | 105,248.39 | 80,336.70 |
| Provisions | 0 | 0 | 0 |
| **Total Current Liabilities** | **80,915.09** | **105,248.39** | **80,336.70** |
| **NET CURRENT ASSETS** | **936,939.98** | **818,123.05** | **682,874.05** |
| Misc. Expenses | 0 | 0 | 0 |
| **TOTAL ASSETS** | **1,254,604.14** | **1,118,487.81** | **973,077.03** |

PUNJAB NATIONAL BANK
AS ON 31-MARCH-2012

| **Balance sheet - Punjab National Bank** | | | **In Crore** |
|---|---|---|---|
| **Particulars** | **Mar'12** | **Mar'11** | **Mar'10** |
| **Liabilities** | **12 Months** | **12 Months** | **12 Months** |
| Share Capital | 339.18 | 316.81 | 315.3 |
| Reserves & Surplus | 26,028.37 | 19,720.99 | 15,915.63 |
| **Net Worth** | **27,817.07** | **21,508.56** | **17,722.92** |
| Secured Loans | 37,264.27 | 31,589.69 | 19,262.37 |
| Unsecured Loans | 379,588.48 | 312,898.73 | 249,329.80 |
| **TOTAL LIABILITIES** | **444,669.82** | **365,996.97** | **286,315.09** |
| **Assets** | | | |
| Gross Block | 5,265.08 | 4,981.60 | 4,215.21 |
| (-) Acc. Depreciation | 2,096.22 | 1,876.01 | 1,701.74 |
| **Net Block** | **1,719.34** | **1,634.84** | **1,021.48** |
| Capital Work in Progress. | 0 | 0 | 0 |
| Investments. | 122,629.47 | 95,162.35 | 77,724.47 |
| Inventories | 0 | 0 | 0 |
| Sundry Debtors | 0 | 0 | 0 |
| Cash And Bank | 28,828.03 | 29,691.21 | 23,473.56 |
| Loans And Advances | 303,567.64 | 250,366.08 | 192,921.28 |
| **Total Current Assets** | **332,395.67** | **280,057.30** | **216,394.84** |
| Current Liabilities | 13,524.18 | 12,328.27 | 10,317.69 |
| Provisions | 0 | 0 | 0 |
| **Total Current Liabilities** | **13,524.18** | **12,328.27** | **10,317.69** |
| **NET CURRENT ASSETS** | **318,871.49** | **267,729.03** | **206,077.15** |

**INTERPRETATION**

It shows that operating efficiency of SBI is better than PNB . While operating efficiency of PNB is lower than SBI. So rank of operating efficiency of banks can be given as SBI>PNB

**CAMELS Model** is used for measuring the financial performance of the public sector banks. CAMEL is a basically, a ratio based model to evaluate the performance of bank under various criteria. Soundness of a bank measured on a scale of 1(strongest) to 5(weakest).The CAMELS ratings is a supervisory rating system originally developed in the U.S. to classify a bank's overall condition. It's applied to every bank and credit union in the U.S. supervisory regulators. Bank examiners (trained and employed by the country's central bank) award these ratings. The CAMEL stands for various criteria through which bank performance is measured. The components of the CAMELS rating system comprise of both objective and subjective parameters. The details are based on publicly available information published at Reserve Bank of India, Indian Banks Association, referred papers and a book

**Tools of Analysis**: Capital Adequacy ratio, Debt Equity Ratio, Total advances to Total Assets Ratio etc.

**Analysis and Interpretations**

Table 1: Capital Adequacy Individual Ratios Average (FY 2010–2012)

| | Punjab National Bank | State Bank of India |
|---|---|---|
| Capital Adequacy Ratio | 20.0064 | 13.134 |
| Equity Capital to Total Assets | 0.144 | 0.0588 |
| Advances to Total Assets | 0.6792 | 0.6924 |

| | | |
|---|---|---|
| G. Sec. to Total Investments | 0.726 | 1.0176 |

Table 2: **A**sset Quality Individual Ratios Average (FY 2010–2012)

| | Punjab National Bank | State Bank of India |
|---|---|---|
| Net NPA to Net Advances | 2.7372 | 4.554 |
| Net NPA to Total Assets | 0.0168 | 0.0264 |
| Total Invest to Total Assets | 0.3012 | 0.3084 |

Table 3: **M**anagement Quality Individual Ratios Average (FY 2010–2012)

| | Punjab National Bank | State Bank of India |
|---|---|---|
| Business per employee (Rs. in Cr.) | 9.8844 | 14.6124 |
| Profit per employee (Rs. in Cr.) | 0.1632 | 0.0624 |
| Total Advances to Total Deposits (CDR) | 117.8976 | 97.206 |
| Return on Net Worth % | 14.8896 | 11.7216 |

Table 4: **E**arnings Quality Individual Ratios Average (FY 2010–2012)

| | Punjab National Bank | State Bank of India |
|---|---|---|
| Return on Assets (ROA) | 1.8348 | 0.408 |
| Net Interest Margin (NIM) | 3.5616 | 3.1524 |
| Interest Income to Total Income | 0.9192 | 1.0308 |
| Cost to Income Ratio | 43.35 | 51.3492 |

Table 5: **L**iquidity Individual Ratios Average (FY 2010–2012)

| | Punjab National Bank | State Bank of India |
|---|---|---|
| Liquid Assets to Demand Deposits | 4.2036 | 3.3168 |
| Liquid Assets to Total Deposits | 0.5724 | 0.5376 |
| Liquid Assets to Total Assets | 0.33 | 0.3684 |

Using Table 1 to Table 5, individual ranking for each ratio of all five parameters of CAMEL is given. This ranking is from 1 to 11, where rank 1 defines the best value of a particular ratio among all eleven banks while rank 11 defines the worst value of a particular ratio. This ranking is shown in Table 6. These ranks are further averaged to reach the group ranking of each parameter of CAMEL. All the calculations are based on MS Excel. The overall ranking of all two banks considering all sub-criteria rankings under CAMEL analysis is shown in Table 6. The group rankings obtained in Table 6 is further averaged to reach the overall ranking for each parameter of acronym CAMEL for two banks for the period of FY 2010–2012.

Table 6: Overall CAMEL Ranking (FY 2010–2012)

| | Punjab National Bank | State Bank of India |
|---|---|---|
| **C**- Capital Adequacy | 10.8 | 12.6 |
| **A**- Asset Quality | 12 | 9.6 |
| **M**-Management Quality | 10.2 | 7.8 |
| **E**- Earnings Quality | 10.8 | 13.2 |
| **L**- Liquidity Average of Group Rankings | 1.2 | 2.4 |
| Overall Ranking | 9 | 9.12 |

The results obtained from CAMEL approach indicate, State Bank of India as the most efficient and sound bank in financial analysis for the period of FY 2010 to 2012. Even though Punjab National Bank is at second position in overall ranking, the position is sounder in case of Earning quality and Management quality parameter than any other bank out of the selected five. By increasing liquid assets, the position of SBI will be better than Punjab National Bank. Punjab National Bank and SBI are at the same position. The scale of the bank seems to be the reason for such a low efficiency among other peer banks. Non-performing assets proportion has scaled up in most of the banks. Impact of this is clearly seen on returns on assets as well as returns on net worth of these banks over a span of three years. Decreasing level of interest income as compared to total income, clearly indicate the growth in other income avenues of all selected public sector banks.

**Suggestions**

- The higher the CRAR the better the capacity of the banks to pay of its obligations and safety against bankruptcy.
- The higher the DEBT EQUITY RATIO lower the cover of risk for its stakeholders, the banks should emphasis on maintaining these ratios high.
- Nonperforming assets have to manage efficiently; the higher ratio means the bank is unable to manage its loans and advances effectively.
- Net interest income is the most important ratio that measures the financial performance of the financial institutions. The profit earning capacity of the firm shows how well the banks are managing its earning assets to earn profitable revenues. Therefore it has to be given highest priority.
- The banks need to lay focus on the management efficiencies as management is the only criteria which can manage all the other elements of the performance.

**Conclusion**

The first task of financial analyst is to select the information relevant to the decision under consideration from the total information contained in the financial statements. The second step is to arrange the information in a way to highlight significant relationships. The final step is interpretation and drawing of inferences and conclusions. In brief, financial analysis is the process of selection, relation and evaluation. Ratio analysis in view of its several limitations should be considered only as a tool for analysis rather than as an end in itself. The reliability and significance attached to ratios will largely hinge upon the quality of data on which they are based. They are as good or as bad as the data itself. Nevertheless, they are an important tool of financial analysis. The selected banks have shown growth in terms of deposits, number of branches, employees, credit deployment and borrowings. But the growth of SBI bank is higher as compared to PNB bank. For the past three decades India's banking system has several outstanding achievements to its credit. The most striking is its extensive reach. It is no longer confined to only metropolitans or cosmopolitans in India. In fact, Indian banking system has reached even to the remote corners of the country. This is one of the main reasons of India's growth process. So a public sector bank plays a crucial role in the economy. Financial performance analysis of an individual entity is easier as compared to the industry; specifically for banking, the traditional approach of ratio analysis under the CAMEL approach is preferred. The sample of banks in this article represents the top eleven banks in a country with respect to market capitalization. This study can be further extended for all public sector, private sector and foreign banks for better analysis of the banking industry. CAMEL Model is one of the financial tools that analyses the performance of the banks in respect to the five elements. The above study shows that the performance of the banks is different from each other and as one bank focuses on one criteria and the other bank thinks the latter criteria's are important. Also the study gives a picture of the shortcomings of the banks and where they need to be improved.

REFERENCES


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

[2]. Barr, Richard S. et al. 2002, 'Evaluating the Productive Efficiency and Performance of U.S. Commercial Banks', Engineering Management, Vol. 28, No.8, pp. 19

[3]. Kwan, S and Eisenbeis, RA (1997), "Bank risk, capitalization, and operating efficiency". Journal of Financial Services Research vol. 12(2/3): pg. 117-31

[4]. Padmanabhan Working Group (1995), —On-site Supervision of Banks, RBI Report

[5]. Dr.Bhayani, S. J. (2006), "Performance of the New Indian Private Sector Banks: A Comparative Study", ICFAIAN

[6]. Journal of Management Research, Vol. 5, No. 11, pp. 53-70, November 2006.

[7]. Suresh.V. (2008), "A Study on Financial Performance of Public Sector Banks in India."

[8]. V. Murugan (2010), "A Comparative Study on the Financial Performance of Nationalised Banks in India."

[9]. Mishra, Krishna Murari (2011), "Financial Performance of Indian Banks in Post Liberalization Era: A Study of Public and Private Banks.", International journal of commerce & management vol.43.

**WEBSITES**

[1] http://www.moneycontrol.com/

[2] http://www.bankingawareness.com/bankinggk/bankinghistory-in-india-post independence banking-history/

[3] http://www.researchandmarkets.com/reports/402/indian_bank ing_industry

[4] http://www.sbi.in

[5] http://www.sbi.com

[6]www.pnbindia.in