Camel Model As An Effective Measure of Financial Performance of Nationalised Banks

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Abstract

Banks play a very vital role in the running of the economy in any country worldwide, emphasis is laid on the continuous development and assessment of the banks. An evaluation of the profitability and financial performance of the banks is essential to fight through the difficulties and inefficiencies faced by the banking sector. There are various financial tools and techniques to measure the performance of the banks, one of the most important one being the CAMEL model which lays emphasis on all the aspects of the performance measurement. The present study analyses the performance of selected nationalized banks in India. With the study period of 2006-2012 to 2015-2016 the performance of five nationalized banks Bank Of Baroda, Punjab National Bank, Bank Of India, Central Bank Of India, Bank Of Maharashtra are analyzed based on capital adequacy, assets quality, management efficiency, earning capacity and liquidity management of banks using weight age techniques.

Keywords: Nationalization, profitability, performance, nationalized banks, capital adequacy, non performing assets, employee ratios, liquidity.
1. Introduction

The late 1990’s was an era of globalization, privatization and liberalization of the Indian economy. This revolution led to the need for developments, innovations and growth of the financial institutions. Many committees were formed and assigned with various responsibilities for improving the efficiency of banking sector in India.

Development of any bank is initiated by continuous monitoring of the operations of the banks and taking corrective measures. To get a clear understanding the financial statements of the banks are prepared to compare with competitors and develop practices and policies that can improve the effectiveness of the banks.

These financial statements need to be analyzed using various financial techniques, or through statistical analysis or any comparison studies. In this article CAMEL Model of financial statement analysis is used. CAMEL Model was designed in the year 1995.

A review committee was formed for supervision of banking system and they recommended this system to have a common platform of comparison of the Indian Banks with Foreign banks. It consists of six parameters which enable financial management and system for control of the financial positions of the banks.

2. Literature Review

Aswini Kumar Mishra and et.al (2013) worked on the financial performance of banks for 12 years period, CAMEL model was used for the analysis and the study revealed that the private sector banks were performing better than the public sector banks in all parameters.

Anita Makkar (2013) analysed the financial performance of 37 banks- divided into public sector banks and private sector banks. The CAMEL model was used to do such a comparison.

Subroto Chowdhury (2012) stated that the Indian banking system has been evolving and today it has reached a global level, the reforms made in the banking system from time to time have made a great difference to the growth. The deregulation of the Indian Banking system has led to the innovation of the banking products and services. And this growth can be studied with the help of the CAMEL model.

Statement of the Problem

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.

3. Objectives of the Study

The objectives of the study are as under:
- To measure the financial performance of banks through CAMEL model.
- To evaluate each dimension of the CAMEL model and its impact on the profitability.

4. Research Methodology

Population of the Study

In this study, the census is covered for 5 nationalized Indian banking sector. 
*Bank Of Baroda, Punjab National Bank, Bank Of India, Central Bank Of India, Bank Of Maharashtra*

Scope of the Study

This study is based on data of nationalized banks in India for the period of ten years from 2007 to 2016.

It measures financial performance through analysis of capital adequacy, assets quality, management efficiency, earning capacity and liquidity management aspects.

Data Collection

This study is based on secondary data. For this purpose, the data published in money control other related websites.

Data Analysis

The data collected is analyzed through CAMEL Model.

5. Camel Model

It is a tool of performance evaluation of banks over years. The financial performance of banks are measured on basis of 5 important performance rating attributes such as capital adequacy, assets quality, management, earnings and liquidity. Each parameter has number of other parameters which are given a weight age to the total performance of the banks.

The basis weight age is according to the interest stakeholders’ interest, the weight ages are assigned on basis of the interest of its owners, employees and its credit unions.

The banks are rated on the weight age criteria and given ranks.
Table: Showing the CAMEL Model of 5 nationalized banks for 10 years

<table>
<thead>
<tr>
<th>NAME OF BANK / YEAR</th>
<th>CAPITAL</th>
<th>ASSETS QUALITY</th>
<th>MANAGEMENT EFFICIENCY</th>
<th>EARNINGS</th>
<th>LIQUIDITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank of Baroda</td>
<td>18.35</td>
<td>6.32</td>
<td>2.85</td>
<td>6.97</td>
<td>16.53</td>
</tr>
<tr>
<td>Punjab National Bank</td>
<td>26.59</td>
<td>9.07</td>
<td>2.51</td>
<td>8.04</td>
<td>9.10</td>
</tr>
<tr>
<td>Bank of India</td>
<td>22.47</td>
<td>7.69</td>
<td>2.68</td>
<td>7.51</td>
<td>12.81</td>
</tr>
<tr>
<td>Central Bank of India</td>
<td>28.70</td>
<td>9.91</td>
<td>2.75</td>
<td>1.90</td>
<td>6.12</td>
</tr>
<tr>
<td>Bank of Maharashtra</td>
<td>23.70</td>
<td>8.31</td>
<td>6.89</td>
<td>6.13</td>
<td>6.22</td>
</tr>
</tbody>
</table>

WEIGHTAGE: 0.20

<table>
<thead>
<tr>
<th>NAME OF BANK / YEAR</th>
<th>CAPITAL</th>
<th>ASSETS QUALITY</th>
<th>MANAGEMENT EFFICIENCY</th>
<th>EARNINGS</th>
<th>LIQUIDITY</th>
<th>TOTAL</th>
<th>RANK</th>
</tr>
</thead>
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<td>Bank of Baroda</td>
<td>3.67</td>
<td>1.26</td>
<td>0.57</td>
<td>1.39</td>
<td>3.31</td>
<td>10.2</td>
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<tr>
<td>Punjab National Bank</td>
<td>5.32</td>
<td>1.81</td>
<td>0.50</td>
<td>1.61</td>
<td>1.82</td>
<td>11.06</td>
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<td>Bank of India</td>
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<td>1.54</td>
<td>0.54</td>
<td>1.50</td>
<td>2.56</td>
<td>10.63</td>
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</tr>
<tr>
<td>Central Bank of India</td>
<td>5.74</td>
<td>1.98</td>
<td>1.55</td>
<td>0.38</td>
<td>1.22</td>
<td>9.87</td>
<td>1.00</td>
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<td>Bank of Maharashtra</td>
<td>4.78</td>
<td>1.66</td>
<td>1.38</td>
<td>1.23</td>
<td>1.24</td>
<td>10.29</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Graph: Showing the CAMEL Model of 5 Nationalized Banks for 10 Years

Analysis and Interpretations:

**Capital adequacy** is that measure which equalizes the risk and does not affect the earnings of the banks. The above framework has three important components of capital adequacy:

2. Debt Equity Ratio.
3. Total Advances to Total Assets Ratio.

central bank of India has the highest capital ratios of 5.32 maintained where in the CRAR maintained is also high as coppered to the other banks also the net advances to total assets is the highest in this bank and the lowest is maintained by the Bank of Baroda at 3.67

**Asset quality** can be measured by the total non-performing assets in the institutions and their ratios to net assets.
1. Net NPA to Net Advances.
3. Total investment to Total assets.

Central Bank Of India has the highest net performing assets at 1.98 is to one ratio, indicating that the bank has locked its capital in idol manner, but still the bank manages to get a good rank because of balance in other ratios.

There are no confined parameters to measure the **management efficiency** but the camel framework suggests a few ratios which can probably show the management efficiency of the banks.
1. Business per employee.
2. Profit per Employee.

Once again the highest management ratios are maintained by the Central Bank of India at 1.98 is to 1 which is the mix of employee efficiency ratios and net interest income ratios. The other banks also have maintained a slightly higher management ratio, Punjab national bank being the bank with the lowest efficiency ratios.

**ROA** is the most important ratio that measures the **earning capacity** of any financial institutions. But to enhance the study few more ratios are added and weight age is added to them.
1. Interest spread Ratio.
2. Net profit Margin.
3. Return on Net Worth.

Among the earning capacity ratios Punjab National bank has got the highest earnings capacity, followed by bank of India at 1.51 ratio.

**Liquidity management** is managing the rate sensitive assets and rate sensitive liabilities is the most important aspect of assets and liability management.
1. Current ratio/ Quick ratio.
2. Liquid assets to Total Assets.

Bank of Baroda has maintained the highest liquidity position which might not
be good for the long run financials of the banks. The ratio is maintained at 3.31 ratios and the bank which has a moderate and best suitable ratio is the Punjab national bank.

CAMEL model takes into consideration all the components which play role in the performance of the banks. Central bank of India has secured the first rank as it has a considerably moderate of mix of all the components of the model. Bank of Baroda ranks the second because it has maintained its capital and liquidity position and also the other components are healthy for its existence. Bank of Maharashtra also has a healthy mix of all the components.

6. 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 managed 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.

7. Conclusions

The banking system is the most important aids to trade in today's economic world, there is no business without the intervention of banking system. it is become essential for the banks to measure their performance and efficiency in comparison to the other banks in order to bring changes in the current system. The banking sector in India has improved to leaps and bounds but still there is scope for betterment. 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.

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