

Comprehensive Analysis of the Financial Performance of Indian Public Sector Banks

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Abstract: Recently, the government consolidated numerous public sector banks. The basis for conducting this study is this. This article's goal is to pinpoint the variables that influence public sector bank performance in India as well as the connections between those variables and the performance of particular banks operated by the government. In this article, we will examine the financial information from all public sector commercial banks over an 11-year period (from 2009 to 2019). Both the system generalised method of moments (GMM) analysis and the canonical correlation analysis (CCA) have been used to analyse the effects of determinants on public sector bank performance assessment.. CAMEL, which stands for Capital Adequacy, Assets Quality, Management Efficiency, Earning, and Liquidity, has been used to assess performance. Several public sector banks have lately been consolidated by the government. The basis for conducting this study is this. This article's goal is to identify the variables that determine Indian public sector banks' performance as well as the connections between those variables and performance. In this study, we will examine the financial data from all public sector commercial banks over an 11-year period (from 2009 to 2019). Both the system generalised method of moments (GMM) analysis and canonical correlation analysis (CCA) have been employed to assess the influence of determinants on the performance measurement of public sector banks Performance has been assessed using the CAMEL framework, which stands for Capital Adequacy, Assets Quality, Management Efficiency, Earnings, and Liquidity. This framework is widely used to evaluate the financial system in India. For a number of reasons, the financial health of public sector banks (PSBs) is crucial.First and foremost, PSBs are essential in delivering financial services to the general population, particularly in rural and semi-urban areas where private banks might not be present. Therefore, the availability of financial services to a wide portion of the public has a direct impact on their financial health.Second, PSBs frequently serve as the primary lenders to important economic sectors like infrastructure, SMEs, and agriculture. As a result, their financial performance may have a big impact on how these industries grow and develop. Thirdly, PSBs frequently have government ownership and are subject to public scrutiny. As a result, one key indicator of their efficiency is their financial performance. Alternate Parameters taken as SBI, BOB, PNB, BOI, CANARA. Evaluation Parameter taken as The following financial performance indicators have been considered: net profit margin%, return on assets%, return on net worth%, interest income to total assets%, interest expenses to total assets%, and operating expenses to total. In August 2015, a target was set for PSBs to raise \$110,000 crore from the markets by the years 2018-19. However, compared to this target, only Rs. 7,726 crore was raised between January 2015 and March 2017. Given the CCEA's assurance to prevent an excessive influx of banking equity issues in the market simultaneously, it appears impossible to achieve this goal by March 2019.DFS decided that additional capital injections will only be granted if specific PSBs met the performance standards stated in the MoUs with those PSBs (signed in February/March 2012). However, in practice, this was not done. According to Audit Report No. 28 of 2017 55, the MoU targets for some metrics decreased year over year while no specific targets were specified for others. Keywords: Public sector, Financial services, capital market, RB

1. INTRODUCTION

According to various studies (Gupta, 2014; Jain & Gupta, 2004; Koundal, 2012), it is widely recognized that a functioning financial system is essential for any economy. Additionally, Bansal and Mohanty (2013) highlight that economists hold diverse perspectives on the role of banking systems in promoting or facilitating economic development. Compared to a number of non-economic institutions, the banks are more immediately and favorably correlated with the health of the economy. In the globe, banks are regarded as the pinnacle. They are the hub of the economy and the window into a country's financial system. It serves as a gauge of a country's economic outlook. The expansion of commercial banking's scope with nationalization in India (Koundal, 2012) and the execution of banking sector reforms in It serves as a gauge of a country's economic outlook. The

execution of the banking sector reforms between the years of 1922 and 1993 considerably broadened the scope of commercial banking in India, which had already been expanded by nationalization (Koundal, 2012). To study the strengths and inefficiencies of the banking industry, a financial performance assessment of banks is required. Commercial banks are the main financial resource mobilizes and disbursers in the Indian financial system. Banks play a crucial role in the development of a developing nation like India. After the nationalization of 14 major commercial banks in July 1969 and an additional six banks in April 1980, there has been an increasing recognition of the contribution of banks in driving economic development in India. The idea of banking has changed significantly since nationalization. Another step in the right direction that changed the outdated banking system was globalization. until the early 1990s, the regulation of commercial banks in India by the RBI primarily focused on aspects such as licensing, minimum capital requirements, service pricing, credit administration, deposit interest rates, reserve requirements, and maintenance of liquid assets. In 1995, the Supervision Working Group recommended the adoption of orientation supervision for the purpose of executing corrective measures in cases of bank deviations. It was determined that the frequent, thorough statutory examinations should concentrate on the main evaluation areas. The global acceptance of CAMEL in 2012. which stands for Capital adequacy, Assets quality, Management efficiency, Earnings, and Liquidity, is due to the recognition that the financial sector plays a crucial role in economic growth. It facilitates capital flow, provides skilled labor, and promotes industrialization, making it an essential component for overall economic development. The financial system, treating investors with consideration, and making optimal use of resources (Raza, 2011). In these circumstances, the banking sector of every economy is essential. The financial sector is essential for facilitating, financing for industry and encouraging the expansion of the financial and economic systems. Major economic financial crises can be handled India's public sector banks (PSBs) compare positively to their domestic and international private sector competitors. A large part of the justification for the privatization of PSBs comes from comparisons made during the initial phase of India's financial sector reforms (but not over a longer time), which are based mostly on financial indicators of performance. In this study, we attempt a comparison between PSBs and their private sector counterparts using an efficiency metric that takes into account actual output and input quantities, since the beginning of financial liberalization in 1992–1993, has the performance of India's PSBs increased? The query is significant for a number of reasons. First and first, it's critical to assess if the primary goal of financial deregulation - increased efficiency - has been achieved. Additionally, it is crucial since, in some cases, increased effectiveness is a co-terminus. One of the most crucial and strategic choices in the improvement of logistical systems is typically where to locate a warehouse. It is a long-term choice, and both quantitative and qualitative factors play a role. However, some factors are so crucial that they often take centre stage in the choice. Costs, labour qualities, infrastructure, and market are some of the factors considered in this study. The traditional methods for solving the warehouse location selection problem have a tendency to be less successful in dealing with the language assessment's imprecise or ambiguous nature. The values of the qualitative criterion are frequently not consistent in numerous instances. For decisionmakers, it is vaguely defined. We provide a multi-criteria decision-making strategy to warehouse location selection under unclear (fuzzy) conditions in this study.

2. MATERIALS & METHODS

In order to conduct a comprehensive analysis of the financial performance of PSBs in India, various financial and non-financial variables can be considered. Financial indicators such as net interest margin, return on equity, return on assets, asset quality, capital adequacy, and efficiency ratios are examples of metrics that can be utilized to assess their performance. These metrics offer information on the profitability; asset quality, capitalization, and operational effectiveness of PSBs. Customer happiness, market share, worker productivity, and innovation are examples of non-financial metrics. These metrics shed light on the PSBs' capacity to satisfy customer demands, outperform the competition, control labour costs, and adjust to shifting market conditions. There are several techniques that can be employed to analyze the financial performance of public sector banks (PSBs) in India. These techniques include ratio analysis, trend analysis, and comparison analysis. Ratio analysis involves computing and assessing a large number of financial ratios, including liquidity ratios, profitability ratios, and solvency ratios, in order to assess the financial health of PSBs. Trend analysis involves comparing the financial performance of PSBs over time to identify any upward or downward trends. Comparative analysis compares the PSBs' financial performance to that of their rivals or industry standards in order to identify their respective strengths and weaknesses. The information required for these investigations can be gathered using the annual reports, financial statements, and other relevant sources.

In order to evaluate public sector banks' (PSBs') financial performance, a variety of financial measures and indicators are examined. Key ratios and indicators used for this include some of the following:

1. Asset Quality: This ratio, which determines the quality of a bank's assets by dividing all of its non-performing assets (NPAs) by all of its loans, is calculated. Higher ratios are an indicator of greater NPA levels, which may signal poor financial health.

2. Capital Adequacy: This ratio, which is derived by dividing the bank's capital by its risk-weighted assets, assesses the bank's capacity to withstand losses. A higher ratio denotes more capital adequacy and decreased insolvency risk.

4. Liquidity: This ratio is derived by dividing the bank's liquid assets by its short-term liabilities, and it indicates the bank's capacity to fulfil its short-term obligations. A higher ratio denotes greater liquidity and an improved capacity to fulfil obligations.

5. Efficiency: This ratio, which is determined by dividing net interest income by total assets, assesses the bank's capacity to create income from its assets. A higher ratio denotes greater efficiency in generating income from the company's assets. Frequently, these measures are used to evaluate the financial health and performance of PSBs and to compare them with industry benchmarks and other banks.

3. RESULT AND DISCUSSION

| Banks | Net profit margin % | Return on net worth % | Interest income to total assets % | Interest expenses to total assets % |
|--------|------------------------|-----------------------|-----------------------------------|-------------------------------------|
| SBI | 7.66 | 0.59 | 9.61 | 7.88 |
| BOB | 12.18 | 0.73 | 13.21 | 5.98 |
| PNB | 7.86 | 0.62 | 9.39 | 7.82 |
| BOI | 7.16 | 0.51 | 9.7 | 6.59 |
| CANARA | 6.54 | 0.52 | 10.65 | 7.89 |

Table 1. The financial performance of public sector banks in India is assessed.

Table 1 presents the financial performance of public sector banks in India. Canara Bank exhibits a higher value of interest expenses to total assets %, which is 7.82, indicating relatively higher interest expenses compared to its total assets. On the other hand, BOB Bank demonstrates a lower value of 5.98 for interest expenses to total assets %, implying comparatively lower interest expenses in relation to its total assets.

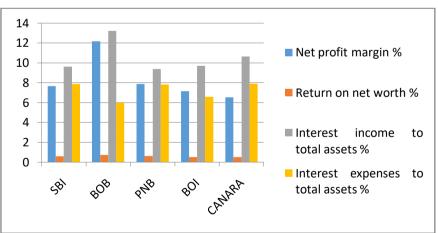


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| | | | Interest | Interest |
|--------|---------------------|---------|----------|----------|
| | | Return | income | expenses |
| | | on net | to total | to total |
| Banks | Net profit margin % | worth % | assets % | assets % |
| CDI | | | | |
| SBI | 0.4021 | 0.4403 | 0.4052 | 0.4844 |
| BOB | 0.6394 | 0.5447 | 0.5570 | 0.3676 |
| PNB | 0.4126 | 0.4626 | 0.3959 | 0.4807 |
| BOI | 0.3759 | 0.3806 | 0.4090 | 0.4051 |
| CANARA | 0.3433 | 0.3880 | 0.4490 | 0.4850 |

Table 2. Net profit margin %

In this table shows a public sector bank's financial performance is shown in terms of net profit, return on net worth, interest revenue relative to total assets, and interest expenses relative to total assets. The data in this table reveals that BOB bank has the highest interest rate and the lowest net worth in BOB bank.

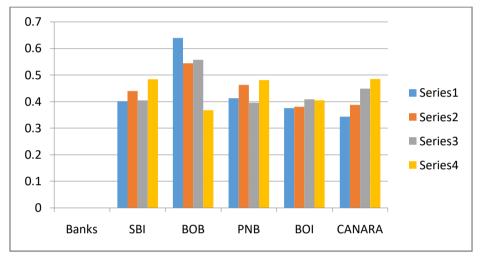


Figure 2. Net profit margin %

The figure displays the financial performance of a public sector bank, showcasing metrics such as net profit, return on net worth, interest revenue relative to total assets, and interest expenses relative to total assets. The data in the table indicates that BOB bank has the highest interest rate and the lowest net worth among the listed banks.

Table 3. Weight

| Banks | Weight | | | |
|--------|--------|------|------|------|
| SBI | 0.25 | 0.25 | 0.25 | 0.25 |
| BOB | 0.25 | 0.25 | 0.25 | 0.25 |
| PNB | 0.25 | 0.25 | 0.25 | 0.25 |
| BOI | 0.25 | 0.25 | 0.25 | 0.25 |
| CANARA | 0.25 | 0.25 | 0.25 | 0.25 |

In this table 3 shows the weight of A public sector bank's financial performance

| Table 4. | Positive | Matrix |
|----------|----------|--------|
|----------|----------|--------|

| Banks | Positive Mat | rix | | |
|--------|--------------|--------|--------|--------|
| SBI | 0.1599 | 0.1362 | 0.0990 | 0.0919 |
| BOB | 0.1599 | 0.1362 | 0.0990 | 0.0919 |
| PNB | 0.1599 | 0.1362 | 0.0990 | 0.0919 |
| BOI | 0.1599 | 0.1362 | 0.0990 | 0.0919 |
| CANARA | 0.1599 | 0.1362 | 0.0990 | 0.0919 |

In this table 4 shows the positive matrix of a public sector bank's financial performance

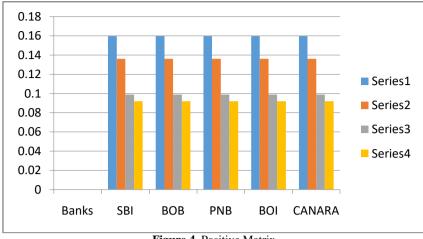


Figure 4. Positive Matrix

In this figure 4 shows the positive matrix of a public sector bank's financial performance

| Table 5. Negative matrix | | | | |
|--------------------------|-------------|-----------------|--------|--------|
| Banks | Negative ma | Negative matrix | | |
| SBI | 0.0858 | 0.0951 | 0.1392 | 0.1212 |
| BOB | 0.0858 | 0.0951 | 0.1392 | 0.1212 |
| PNB | 0.0858 | 0.0951 | 0.1392 | 0.1212 |
| BOI | 0.0858 | 0.0951 | 0.1392 | 0.1212 |
| CANARA | 0.0858 | 0.0951 | 0.1392 | 0.1212 |

In this table shows the negative matrix of a public sector bank's financial performance

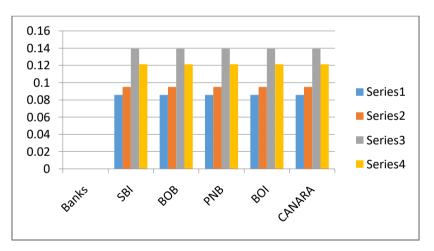
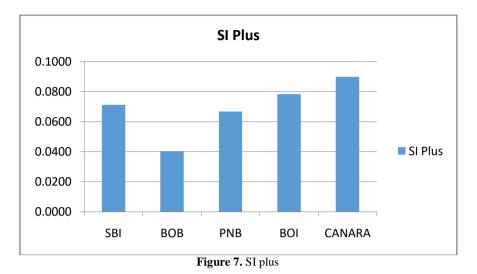


Figure 5. Negative matrix

In this figure shows the negative matrix of public sector bank's financial performance **Table 7.** SI plus

| Banks | SI Plus |
|--------|---------|
| SBI | 0.0711 |
| BOB | 0.0403 |
| PNB | 0.0666 |
| BOI | 0.0783 |
| CANARA | 0.0897 |

In this table shows SI plus public sector bank's financial performance



In this figure shows SI plus public sector bank's financial performance

| | Table 8. Rank | |
|--------|---------------|------|
| Banks | Ci | Rank |
| SBI | 0.3786 | 3 |
| BOB | 0.6899 | 1 |
| PNB | 0.4209 | 2 |
| BOI | 0.3537 | 4 |
| CANARA | 0.2316 | 5 |

In this table shows the Rank of the banks . The data in this table reveals that canara bank has the first rank and the last rank in BOB bank.

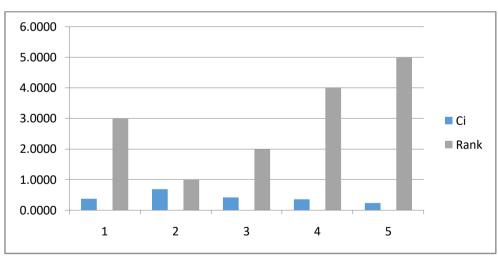


Figure 8. Rank

In this figure shows the Rank of the banks. The data in this table reveals that canara bank has the first rank and the last rank in BOB bank.

4. CONCLUSION

Since the government owns public sector banks, it frequently provides them with fresh money, enabling them to expand. To use these banks for loans or to put their money in the lockers, people go from all over the nation. In addition to offering a wide range of assistance programmes, public sector banks also often charge cheaper fees than private sector banks. The basis for long-term economic growth is a robust and stable banking sector. In India, Public Sector Banks (PSBs) dominate the banking industry and are responsible for more than 70% of all

lending. Regulation demands that PSBs control their risks to avert losses in the future and maintain sufficient capital to pay for those losses. The audit also revealed that at times, the justification for allocating Government of India (GOI) capital to different PSBs was undocumented. A bank obtained more capital than was required, while other banks were unable to raise the funds required to meet their capital adequacy requirements. Even though they didn't meet the set criteria, some banks acquired funding. It was decided that performance in the fiscal years 2015–16 and 2016–17 would determine how much of the capital injection would be subject to performance. Though, the Throughout March DFS agreed in March 2017 that success against quarterly standards will serve as the benchmark for fund infusion going forward..

REFERENCES

- [1]. Mohammady, Esmatullah. "A Study on Financial Performance of Private and Public Banks in Afghanistan (2014–2017)." *Asian Journal of Research in Banking and Finance* 9, no. 4 (2019): 8-30.
- [2]. Lad, Ramdas, and Nitin Ghorpade. "An Analysis of Financial Performance of Public Sector Banks in India Using Camel Rating System." *International research journal of humanities and interdisciplinary studies* 3, no. 6 (2022).
- [3]. Santhoshi Kumari, G., and M. S. V. Prasad. "A Comparative Study of the Financial Performances of Selected Public and Private Sector Banks." *IUP Journal of Bank Management* 14, no. 4 (2015).
- [4]. Varshney, Nidhi, and Chanchal Chawla. A study on the comparison of financial performance of public sector Banks with special reference to State bank of India and Punjab National bank. No. 2016-12-06. 2016.
- [5]. Goel, Cheenu, and Chitwan Bhutani Rekhi. "A comparative study on the performance of selected public sector and private sector banks in India." *Journal of business management & Social sciences research* 2, no. 7 (2013): 46-56.
- [6]. Shukla, Shalini. "Performance of the Indian banking industry: A comparison of public and private sector banks." *Indian Journal of finance* 10, no. 1 (2016): 41-55.
- [7]. Goyal, A. M. "Impact of capital structure on performance of listed public sector banks in India." *International journal of business and management invention* 2, no. 10 (2013): 35-43.
- [8]. Aspal, Parvesh Kumar, and Sanjeev Dhawan. "Financial performance assessment of banking sector in India: A case study of old private sector banks." *The Business & Management Review* 5, no. 3 (2014): 196.
- [9]. Singh, Sonia, and Subhankar Das. "Impact of post-merger and acquisition activities on the financial performance of banks: A study of Indian private sector and public sector banks." *Revista Espacios Magazine* 39, no. 26 (2018): 25.
- [10]. Balasubramanian, Sathish Kumar. "Financial Performance of Private Sector Banks in India-An Evaluation." *Available at SSRN 1044621* (2007).
- [11]. Budhedeo, Shradha H., and Neha P. Pandya. "Financial performance of public sector banks in India: A post reform analysis." *Indian Journal of Finance* 12, no. 10 (2018): 7-20.
- [12].Palamalai, Srinivasan, and John Britto. "Analysis of financial performance of selected commercial banks in India." Srinivasan, Palamalai and Britto, John (2017), "Analysis of Financial Performance of Selected Commercial Banks in India", Theoretical Economics Letters 7, no. 7 (2017): 2134-2151.
- [13]. Nataraja, N. S., Nagaraja Rao Chilale, and L. Ganesh. "Financial performance of private commercial banks in India: multiple regression analysis." *Academy of Accounting and Financial Studies Journal* 22, no. 2 (2018): 1-12.
- [14].Prasad, K. V. N., and A. A. Chari. "Financial performance of public and private sector banks: an application of post-hoc Tukey HSD test." *Indian Journal of Commerce and Management Studies* 2, no. 5 (2011): 79-92.
- [15].Nagarkar, Jeevan Jayant. "Analysis of financial performance of banks in India." Annual Research Journal of Symbiosis Centre for Management Studies 3 (2015): 26-37.
- [16].Chandani, Arti, Mita Mehta, and B. Neeraja. "Women CEOs and financial performance of banks: An empirical research of Indian private sector banks." *Management: journal of contemporary management issues* 19, no. 1 (2014): 231-246.
- [17]. Gupta, Piyush, and Krishna Kumar Jaiswal. "Analysis of financial performance of selected public and private sector banks." *Indian Journal of Finance* 14, no. 1 (2020): 45-57.
- [18]. Joshi, Manoj Kumar. "Financial performance analysis of select Indian Public Sector Banks using Altman's Z-Score model." SMART Journal of Business Management Studies 16, no. 2 (2020): 74-87.
- [19].Prasad, K. V. N., and A. A. Chari. "Relative Financial Performance of Public Sector Banks." Indian Journal of Finance 5, no. 11 (2011): 11-22.