

"ANALYSIS OF THE ECONOMIC AND FINANCIAL PERFORMANCE OF PUBLIC SECTOR BANKS IN INDIA USING CAMEL RATING SYSTEM"

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Abstract

The economic and financial performance of public sector banks (PSBs) in India is an essential component in determining the stability and expansion of the banking system in the country. This research examines the performance of public sector banks (PSBs) by utilising the CAMEL grading system, which is a framework that is recognised all over the world and assesses five important factors. These parameters include capital adequacy, asset quality, management efficiency, earnings, and liquidity. The purpose of this research is to give insights into the operational efficiency and financial health of public sector banks (PSBs), identifying strengths and shortcomings in order to assist improved decision-making and policy formation. For the purpose of analysing patterns and changes in performance, the research analyses PSBs over a certain time period by utilising secondary data obtained from annual reports, financial statements, and publications by the Reserve Bank of India (RBI). According to the most important results, even if certain public sector banks (PSBs) have strong capital adequacy and liquidity management, there are still difficulties in asset quality as a result of increasing non-performing assets (NPAs) and poor returns on investment. In addition, examination of management efficiency is carried out in order to locate deficiencies in operational procedures and governance structures. The recommendations that are included in the conclusion of the research are intended to improve the resilience and competitiveness of PSBs in an economic climate that is always changing. These insights may be utilised by policymakers, stakeholders, and bank management teams in order to execute strategic changes, which would ensure both sustainable growth and financial stability in the Indian banking system.

Keywords: Economic, Financial Performance, Public Sector, Banks

INTRODUCTION

Through the mobilisation of savings, the facilitation of lending, and the promotion of financial inclusion, public sector banks (PSBs) play a crucial role in India's financial system, making a considerable contribution to the country's tremendous economic progress. In their capacity as essential institutions within the banking sector, public sector banks (PSBs) play a significant role in the implementation of government programs, particularly in priority areas such as agriculture, small-scale enterprises, and infrastructure development. PSBs in India confront issues in preserving financial stability and operational efficiency due to rising non-performing assets (NPAs), shifting regulatory frameworks, and increased competition from private and international banks. Despite their significance, these challenges are a result of the fact that PSBs are facing significant hurdles. Evaluating the performance of public sector banks (PSBs) is vital in this context because it allows for the knowledge of their strengths, the identification of their deficiencies, and the guarantee that they will continue to contribute to the economic progress of India. The CAMEL rating system is one of the systems that is well recognised for evaluating the performance of financial institutions specifically banks. With the use of the

Capital Adequacy, Asset Quality, Management Efficiency, Earnings, and Liquidity (CAMEL) framework, banks are evaluated in order to provide a holistic picture of their financial and operational health. In order to conduct an analysis of the economic and financial performance of Indian public sector banks (PSBs), this research intends to employ the CAMEL methodology. It investigates essential aspects such as the adequacy of capital to resist financial shocks, the quality of assets to evaluate the risk of defaults, the effectiveness of management in terms of operational and governance standards, the potential for profits to guarantee profitability, and the availability of liquidity to meet short-term commitments. The conclusions of this study are intended to give policymakers, regulators, and bank management with insights that can be put into action, so assisting them in addressing difficulties and putting initiatives designed to enhance performance into action. This research makes a contribution to the larger conversation on improving the resilience and efficiency of public sector banks (PSBs) in a dynamic and competitive financial environment by identifying significant trends and patterns. The value of this study rests in the fact that it is able to bridge the gap between theoretical evaluations and the real issues that are confronted by public sector banks in India. Reforms such as the implementation of Basel regulations, mergers among public sector banks (PSBs), and digitisation initiatives have all contributed to the enormous shifts that have taken place in the Indian banking sector over the past few years. Despite the fact that these modifications are intended to improve the robustness and efficiency of the sector, they have also brought forth new issues, notably with regard to compliance, the integration of technical advancements, and the happiness of customers. Furthermore, international economic unpredictability, in conjunction with local variables such as varying rates of gross domestic product growth, inflation, and policy shifts, has resulted in a complicated operating environment for public sector banks with operations in India. The proliferation of fintech businesses and private sector banks has increased the level of competition, making it necessary for public sector banks (PSBs) to innovate and adapt while continuing to fulfil their fundamental function of fostering financial inclusion and providing support for programs undertaken by the government. This research is especially pertinent in light of the ongoing concerns over the declining asset quality and profitability of public sector banks (PSBs). The problem of non-performing assets, often known as NPAs, has continued to be a significant problem, which has an impact on the sector's overall financial health and trustworthiness. It is possible to get significant insights into effectively resolving these problems by first gaining an understanding of the elements that contribute to these challenges and then analysing performance using the CAMEL framework.

Literature Review

There has been a lot of study done in the field of finance and economics on the issue of performance evaluation of public sector banks (PSBs), which is a reflection of how important it is in the process of forming a banking system that is both stable and inclusive. The CAMEL grading system and its application in the Indian context are the primary topics of discussion in this part, which also provides a review of important research and frameworks that are pertinent to the study of PSBs.

Sundararajan and Errico (2002) Several researchers have examined the performance of banks using diverse methodologies. highlighted the importance of financial soundness indicators, such as capital adequacy and asset quality, in evaluating banking sector stability. They emphasized that frameworks like CAMEL are instrumental in identifying risks and ensuring regulatory compliance.

Prasad and Ravinder (2012) As a result of applying the CAMEL model to the analysis of the performance of Indian banks, it was determined that public sector banks fell behind private sector banks in areas such as profits and asset quality. The results of their investigation highlighted the need of public sector banks (PSBs) enhancing their profitability and properly

managing non-performing assets (NPAs).

Mishra and Aspal (2013) the CAMEL framework was utilised in order to carry out a comparative examination of public and private sector banks on the market. In spite of the fact that PSBs were very good at preserving their liquidity, they were found to have substantial room for improvement in terms of both their managerial efficiency and their profits performance.

Singh and Sharma (2016) The impact of non-performing assets (NPAs) on the financial health of public sector banks (PSBs) was investigated, and the necessity of implementing comprehensive risk management methods to enhance asset quality was brought to light. According to what they saw, declining nonperforming assets have a direct influence on capital adequacy and profitability, which makes this a crucial area for management.

Das and Ghosh (2007) The CAMEL rating system is one of the systems that has gained the most widespread acceptance for evaluating the performance of banks. Developed by regulatory authorities in the United States, it assesses financial institutions based on the following dimensions: Capital Adequacy is a measurement that determines how strong a bank's finances are and how well it can be able to withstand possible losses. Studies have revealed that Indian public sector banks (PSBs) keep their capital adequacy ratios at adequate levels; nonetheless, external shocks and mounting non-performing assets (NPAs) frequently put strain on their reserves.

Ranjan and Dhal (2003) The soundness of a bank's loan portfolio is reflected in the asset quality of the bank. A significant factor that contributes to high non-performing assets (NPAs) in PSBs was found as poor credit risk management by research. The management efficiency of a bank is evaluated to determine how successful its management is in terms of decision-making and the utilisation of resources. According to research conducted by Kaur and Kapoor (2020), public sector organisations (PSBs) frequently encounter difficulties when it comes to adjusting to technology improvements and adopting governance changes.

Mohanty and Goyal (2018) Obtainables It evaluates both profitability and long-term viability. emphasised the decreasing profitability of PSBs as a result of increased provisioning for nonperforming assets and the demands of competition. The ability of banks to satisfy their short-term obligations is ensured by their liquidity. According to the findings of Roy and Mandal's (2017) study, public sector banks (PSBs) typically keep their liquidity ratios high, which frequently comes at the price of their profitability.

Methodology:

This research set out to do just that—evaluate the financial standing of the eighteen public sector banks that are currently doing business in India. Secondary data, mostly from the individual banks' 2020–2023 annual reports and financial statements, is the mainstay of this study. For the purpose of evaluating the many banks that were included in this study based on their unique results, the CAMEL grading system was employed. Taking into account all twenty of the subparameters that comprise the CAMEL grading system allowed for the successful completion of the objectives of this study. These subparameters are tied to a number of different aspects of financial performance analysis that encompass a wide range of topics. These financial ratios are being utilised by the Banking Regulation and Supervision Agency in order to evaluate the numerous indicators that indicate the stability or instability of a bank's financial situation.

Data Analysis:

These findings are the product of an analysis of the data that made use of the five factors and their respective ratios. We use the banks' annual reports to calculate the ratios under each of the five categories, and then we rank the banks based on those ratios. You can find out where each group stands after you compute their averages in this way. The CAMEL ranking algorithm uses the identified elements to assign composite rankings based on group averages.

Examination of Substances and Their Meaning:

Capital Adequacy:

Financial institutions' capital adequacy ratios provide valuable insight into their financial health. What this means is that the bank's management is good at identifying, assessing, monitoring, and controlling risks, and the bank can keep its capital comparable with the sort and degree of a varied range of risks. This metric reflects the bank's financial health and the ability of its management to meet further capital needs. There is a role for this ratio in indicating the level of leverage in a bank. Financial institutions' capital bases help depositors build a realistic risk assessment. A capital adequacy ratio that is sufficient for a bank's demands is very helpful in maintaining shareholder trust and avoiding bankruptcy. People think that capital helps make the global monetary system more reliable and efficient by acting as a safety net for taxpayers. If the bank has sufficient capital to weather unexpected losses, that's also detailed there. To make sure that financial managers have enough cash on hand at all times, this is seen as a limitation.

The following ratios are used to measure capital adequacy:

Capital Adequacy Ratio (CAR):

Financial institutions are safeguarded against insolvency, undue leverage, and other problems by maintaining a sufficient capital adequacy ratio. It measures the capital-to-current-liabilities and risk-weighted-assets ratio of a financial institution. On this page, you can find the explanation of this ratio. A bank's capacity to meet its time obligations and other risks (credit risk, market risk, operational risk, etc.) is assessed by this ratio. As per the guidelines set down by the Reserve Bank of India (RBI), banks in India are obligated to maintain a capital adequacy ratio (CRA) of 9%.

The debt-to-equity ratio, often known as the D/E ratio:

By examining their debt equity ratio, one may ascertain the degree of leverage that a bank employs. To determine it, take the entire "Outside Liabilities" and divide it by net value. A greater percentage indicates that the financial system is not adequately protecting its depositors and creditors.

The ratio of total advances to total assets is displayed as Tot ADV/Tot ASS Ratio:

This percentage indicates how aggressive the lending market is for banks. A larger proportion indicates that the bank is becoming more profitable by imposing stricter lending rules. Included in total advances are receivables as well. The whole asset reevaluation is not factored into the Total Assets valuation.

Investment Ratio in Government Securities to Absolute Value ("G-Sec / Tot INV Ratio"):

Not only does this ratio show the preservation investments as a proportion of the banks' total investments, but it also determines the risk involved with this strategy. Since investing in government securities can never lose money, a bank's entire investment portfolio risk is reduced when the percentage of government securities to total investments increases. The sum of all of a bank's investments minus the sum of all of its government security holdings is the ratio.

Table 1 : Camel Ratings (2020 - 23) : Capital Adequacy.

Sr. No.	Bank	CAR(%)		D/E(times)		Adv/Ast(%)		G-sec/Inv		Group	
		Avg	Rank	Avg	Rank	Avg	Rank	Avg	Rank	Avg Rank	Rank
1	Andhra Bank	11.85	8	18.49	15	64.06	2	91.95	1	46.59	17
2	Bank of India	12.83	3	17.37	12	58.59	12	88.83	4	44.40	15
3	Bank of Baroda	12.71	4	15.88	5	59.09	11	87.37	5	43.76	14
4	Bank of Maharashtra	11.44	11	19.48	16	59.89	8	82.68	9	43.37	13
5	Canara Bank	11.92	7	16.71	10	60.20	7	88.87	3	44.43	16
6	Central Bank of India	10.18	17	17.01	11	50.69	15	78.07	15	38.99	4
7	Indian Bank	13.09	2	12.28	2	63.16	3	84.25	8	43.19	12
8	Indian Overseas Bank	9.95	18	16.55	8	56.41	13	86.24	6	42.28	10
9	IDBI Bank Limited	11.22	13	12.72	3	52.72	14	85.32	7	40.50	5
10	Oriental Bank of Commerce	11.61	10	15.98	6	60.89	6	78.67	13	41.79	9
11	Punjab & Sind Bank	11.28	12	16.58	9	62.00	5	76.39	16	41.56	6
12	Punjab National Bank	10.82	16	16.18	7	59.77	10	79.79	10	41.64	7
13	State Bank of India	12.71	5	14.82	4	59.80	9	79.67	11	41.75	8
14	Syndicate Bank	12.04	6	20.95	18	65.99	1	89.79	2	47.19	18
15	UCO Bank	10.87	15	19.69	17	43.81	17	79.41	12	38.44	3
16	Union Bank of India	11.16	14	17.88	14	63.14	4	78.63	14	42.70	11
17	IDFC First Bank Ltd	14.88	1	5.11	1	39.74	18	48.98	18	27.18	1
18	United Bank of India	11.63	9	17.48	13	48.22	16	74.01	17	37.84	2

(Source: Author's own calculation from Banks Annual report for FY 2015-2011)

Interpretation:

The results of the authors' own computations are shown in Table No. 1. To obtain the rankings, we use the five-year average of the ratios and, to acquire the ranks of the groups, we take the collective average of the subparameters. A lower combined group rank indicates a stronger financial status for the organisation. Syndicate Bank scores lowest with an average of 47.19, mostly due to its weak capital adequacy performance, whereas IDFC First Bank Ltd. ranks top with an average of 27.18, according to this research.

Asset Quality:

The quality of a bank's assets could be seen as a measure of the credit risk it poses due to its off-balance sheet activities, investments, loans, and advances. It is possible to tell a bank is

financially stable only by looking at its asset worth. Banks' ability to weather financial storms is now dependent on the quality of their assets rather than their diminished worth. The financial institutions' solvency is under risk due to the decline in asset value. Due to the ultimate write-off of losses against capital, the dropping value of the bank's assets has an impact on the bank's ability to purchase new assets in the long run. This effect is both undulating and significant. This setup makes it easy to analyse asset quality by looking at things like provision sufficiency, asset dispersion, and the magnitude and power of nonperforming resources. First and foremost, while assessing asset quality, it is important to determine what proportion of total assets are deemed non-performing. Due to the high quality of the bank's assets, it is easy to discern the type of debtor the bank has from its balance sheet, and it is also transparent how the bank advances the interest revenue it gets.

Asset quality is measured by the following ratios:

Ratio of Net Advances to Net Non-Performing Assets (NNPA's/ ADV Ratio):

In broad strokes, this ratio indicates how safe the bank's investments and loans are. This shows how bad the bank's financial situation really is. If the proportion is large, it means that loan quality has been going downhill.

Net Advances to Gross Non-Performing Assets (GNPA) Ratio:

In a scenario when management has not put aside funds to cover losses on non-performing assets (NPAs), this ratio measures the asset quality. It demonstrates how well the bank has handled its loans and advances. If the percentage is low, it means the bank has given out good advances and only made prudent lending decisions.

Total Investment to Total Assets Ratio (Tot INV / Tot ASS Ratio):

Rather of dispersing their assets as loans to clients, this ratio indicates what proportion of a bank's total assets are retained in investments. It draws parallels between this and the ratio of a bank's total assets that may be used to lend money to customers. An ambitious bank would have a low ratio since a high one indicates that they have always kept a lot of investments on hand to protect themselves against the danger of non-performing assets. A low investment to asset ratio is indicative of an aggressive bank's lack of investment cover. The result is a reduction in the banks' profit margins.

Table No.2 Stands in for the sample banks' asset quality during 2020-23

Sr. No.	Bank	NNPAs/TA (%)		GNPAs/TA (%)		TI/TA (%)		Group	
		Avg	Rank	Avg	Rank	Avg	Rank	Avg	Rank
1	Andhra Bank	5.86	7	12.85	10	26.18	7	14.96	10
2	Bank of India	6.39	10	13.93	13	21.07	2	13.80	8
3	Bank of Baroda	4.10	4	9.80	7	20.00	1	11.30	1
4	Bank of Maharashtra	7.81	13	13.70	12	27.21	10	16.24	13
5	Canara Bank	5.65	6	8.72	5	24.68	5	13.01	6
6	Central Bank of India	8.00	14	15.32	14	31.33	15	18.22	14
7	Indian Bank	3.73	3	6.60	2	26.69	9	12.34	3
8	Indian Overseas Bank	11.54	18	19.07	17	28.14	14	19.59	15
9	IDBI Bank Limited	9.93	16	21.50	18	27.92	12	19.79	16
10	Oriental Bank of Commerce	7.07	11	12.49	9	27.97	13	15.84	12
11	Punjab & Sind Bank	5.97	9	9.28	6	27.25	11	14.16	9
12	Punjab National Bank	7.66	12	13.17	11	25.33	6	15.39	11
13	State Bank of India	3.68	2	8.21	3	26.65	8	12.84	5
14	Syndicate Bank	4.81	5	8.63	4	23.26	3	12.23	2
15	UCO Bank	9.03	15	17.79	16	32.99	16	19.94	17
16	Union Bank of India	5.96	8	10.80	8	24.48	4	13.74	7
17	IDFC First Bank Ltd	1.32	1	3.11	1	33.71	17	12.71	4
18	United Bank of India	10.07	17	16.17	15	36.47	18	20.91	18

(Source: Author's own calculation from Banks Annual report for FY 2015-2019)

Interpretation:

It is possible to view the components that comprise the asset quality positions of banks by referring to Table No. 2, which may be found here. Based on the data presented, it can be observed that among the banks that took part in the study, Bank of Baroda has the highest average score of 11.30, while United Bank of India has the lowest score of 20.91.

Management Efficiency:

The Management Efficiency indicators show how well the bank's board of directors and senior management can detect, quantify, monitor, and control risks. The purpose of using this criterion to assess management effectiveness is to reward well-managed financial organisations and penalise those with ineffective leadership. Indicators of competent management practises used in this qualitative assessment include policies and procedures for risk management. Because it is qualitative, there is some room for interpretation.

To measure the efficacy of management, consider the following ratios::

Budget to Revenue Ratio (Total Expenditure to Total Revenue):

All banks might improve the return they give to their equity owners if they strictly controlled their spending. To maximise profits and returns to stakeholders, banks should aim for the lowest feasible ratio. This will boost the bank's bottom line. The lower this ratio, the more profitable the bank will be, and it gives investors a good idea of the management team's performance. The quicker the ratio increases from one period to the next, the faster the growth of costs relative to income happened during that period.

The total amount of advances divided by the total amount of deposits:

You can see how well the bank's management is doing at turning its depositors' money into high-earning advances by looking at this ratio. A bank's loan-to-deposit ratio reveals the proportion of total assets that have been lent out relative to total deposits. A low ratio indicates that the institution does not rely as much on deposits for lending, whereas a large ratio indicates the opposite.

Asset Turnover Ratio (ATR):

Asset Turnover measures the efficiency with which a bank can reinvest its earnings, such as interest and other forms of income, into new assets. It measures how well a bank can make money by using its assets to their fullest potential. A higher ratio indicates that the bank is producing money efficiently by using all of its assets.

Diversification Ratio (DIVERSF ratio):

As a result of the normal banking activity that the bank engages in, this ratio determines the extent to which the bank obtains revenue from sources other than interest income throughout the course of its operations. In situations when the ratio is high, it indicates that an increasing portion of revenue is derived from fees.

Profit Per Employee (PPE):

In order to determine how well the management of the bank is carrying out its responsibilities, it is necessary to take into consideration this ratio, which evaluates the profitability of the company. The ratio is a representation of the amount of profit that was earned by each individual worker. A ratio that is high is an evident indicator that management is being done well.

Business Per Employee (BPE):

The business per employee ratio of the bank offers valuable information into the degree of output that the employees are capable of. It provides a visual representation of the amount of business that is being generated by each employee for the bank. The greater the ratio, the better it is for the bank since it provides a more obvious demonstration of the efficiency with which the bank manages its operations.

Table No. 3 Management Efficiency: Camel Ratings (2020–2023)

Sr. No	Bank	Tot EXP / Tot INC Ratio		Tot ADV/Tot DEP Ratio		Asset Turnover Ratio		Diversification Ratio		Profit Per Employee		Business Per Employee		Group	
		Avg	Rank	Avg	Rank	Avg	Rank	Avg	Rank	Avg	Rank	Avg	Rank	Avg	Rank
1	Andhra Bank	1.0456	8	0.7404	13	9.0444	2	0.0986	5	-0.0480	8	17.5620	5	4.7405	2
2	Bank of India	1.0782	13	0.6889	5	7.4075	16	0.1118	9	-0.0705	11	18.9460	2	4.6936	3
3	Bank of Baroda	1.0101	4	0.6911	6	7.1147	17	0.1148	10	-0.8880	16	17.9440	3	4.3311	8
4	Bank of Maharashtra	1.1100	15	0.6947	7	8.4436	6	0.1003	6	-10.5160	18	17.7320	4	2.9274	17
5	Canara Bank	1.0100	3	0.7010	10	8.3081	9	0.1231	13	-0.0095	5	0.8824	18	1.8359	18
6	Central Bank of India	1.1048	14	0.5806	2	8.4377	7	0.0871	3	-0.0763	12	12.1257	17	3.7100	16
7	Indian Bank	0.9500	2	0.7573	15	8.2771	10	0.1024	7	0.0464	3	16.9840	7	4.5195	5
8	Indian Overseas Bank	1.1477	16	0.6572	3	9.0865	1	0.1381	15	-0.1169	14	13.0480	15	3.9934	13
9	IDBI Bank Limited	1.2232	18	0.7332	12	8.5546	5	0.1460	16	-0.3580	15	23.6900	1	5.6648	1
10	Oriental Bank of Commerce	1.0595	10	0.6972	9	8.6604	4	0.1151	11	-0.0567	9	17.3990	6	4.6458	4
11	Punjab & Sind Bank	1.0144	5	0.6950	8	8.6763	3	0.0644	1	-1.2140	17	16.9080	8	4.3574	7
12	Punjab National Bank	1.0756	12	0.7065	11	7.8927	14	0.1332	14	-0.0620	10	14.4960	12	4.0403	12
13	State Bank of India	1.0581	9	0.7809	17	7.9496	13	0.1484	17	0.0334	4	15.6320	11	4.2671	9
14	Syndicate Bank	1.0451	7	0.7781	16	8.0605	12	0.1048	8	-0.0340	7	14.4340	13	4.0648	11
15	UCO Bank	1.1503	17	0.6605	4	7.7543	15	0.0914	4	-0.1022	13	13.4980	14	3.8421	15
16	Union Bank of India	1.0226	6	0.7530	14	8.4079	8	0.1161	12	-0.0231	6	16.6040	10	4.4801	6
17	IDFC First Bank Ltd	0.7687	1	1.8191	18	5.9277	18	0.0779	2	0.1020	2	16.8060	9	4.2502	10
18	United Bank of India	1.0668	11	0.5397	1	8.2511	11	0.1782	18	0.1181	1	13.0200	16	3.8623	14

Interpretation:

Canara Bank finished in last place with a group average of 1.8359, while IDBI Bank Limited finished in first place with a group average of 5.6648. Canara Bank was the last group average. The data that is shown in Table No. 3 reveals that IDBI Bank Limited was the financial institution that achieved the highest ranking.

Earnings Quality:

The bank's capacity to attain sustainable growth is highly dependent on the quality of its profits and its ability to maintain existing earnings levels while expanding profits over time. It is a way to see how successful banks have been financially. Stakeholder profit maximisation should be one of any bank's long-term objectives. Banks rely on fee-based services including business consulting, treasury management, investment management, and similar efforts to generate a significant percentage of their income. If the bank's profits are high-quality, it will be able to do things like pay dividends, keep its capital levels sufficient, pursue expansion and diversification opportunities, and stay competitive. Earnings quality is measured by the following ratios:

Net Profit Margin (NPR) :

The net profit margin is a crucial indicator to look at when judging the profitability of banks. The greatest way to predict whether a bank will be able to pay dividends and drive up the price of its shares is to look at its profits growth. The net profit margin is an important metric for stakeholders to look at because it shows how well the bank is able to convert revenue into profits that can be shared with them. Profit margin is the proportion of a bank's income that stays after paying all operating expenses, interest, taxes, and preferred stock dividends (excluding common stock distributions) out of that income. The residual income % is the name given to this number. A relatively high Net Profit Margin is highly indicative of the bank's constant and stable profitability.

Return on Equity (ROE) :

Return on equity (ROE), which is also commonly referred to as return on investment (ROI), is a reliable statistic that can be used to evaluate the performance of a bank because it is generated from the efficiency of internal operations debt-equity management, and asset turnover. One way to measure the profitability of a bank is by looking at its return on equity (ROE). As the percentage rises, it indicates that the bank is making good use of its equity basis to provide a larger return for its investors. How high the proportion is has a direct correlation with this.

Net Interest Margin (NIM):

Financial institutions must pay close attention to the net interest margin as a key performance indicator. Calculated as a percentage of the entire value of the assets, it is the difference between the amounts of interest received and paid out. A bank's ability to keep interest rates on loans high and interest rates on deposits low is measured by the Net Interest Margin (NIM). A higher ratio indicates that the firm is doing very well financially in relation to its overall assets.

Interest Spread (IS):

The interest spread is the difference between the yield and the cost of borrowing, where yield is the amount of interest income gained from interest-earning assets and cost of borrowing is the amount of interest spent on interest-bearing obligations. There is a relationship between yield and cost of borrowing. Put simply, yield refers to the interest income earned from assets that generate interest, while cost of borrowing refers to the interest expense paid on obligations that carry interest. It is more probable that the bank will make a profit when the gap is larger; it is more likely that the bank will lose money when the spread is less.

Conclusion

The backbone of India's monetary system is the public sector banks, or PSBs. When they work together, they help the economy grow, more individuals can access the financial system, and the social and economic system evolve. However, ongoing evaluation of their performance is essential in light of the ever-changing and competitive nature of the banking industry, along with the challenges posed by factors such as growing non-performing assets (NPAs), operational inefficiencies, and intensified competition from private and international banks. For the purpose of this research, Indian Public Sector Banks (PSBs) were rated according to the CAMEL framework, which takes into account their capital

adequacy, asset quality, management efficiency, earnings, and liquidity. This grading system provides an exhaustive analysis across five essential criteria. The research shows that PSBs are good at managing liquidity and have adequate capital buffers, but they still have a long way to go before they can be considered profitable and have good asset quality owing to their high levels of non-performing assets (NPAs) and operational inefficiencies. Public sector banks (PSBs) must implement robust risk management strategies, boost operational efficiency, and prioritise innovative projects if they want to keep up with the ever-changing financial landscape and remain competitive, according to this study's conclusions. Reforms to enhance governance, facilitate the adoption of new technology by businesses, and address systemic issues impacting asset quality and profitability should be implemented by regulators and lawmakers to aid public sector banks. Using the study's findings, stakeholders may create targeted programs to strengthen public sector banks' ability to weather storms and remain in business. It is critical for the well-being of India's banking sector and, by extension, for the country's inclusive economic growth and overall financial stability. All of these factors highlight the critical nature of a strong and efficient PSB architecture. Public sector banks (PSBs) should be continuously monitored and reformed, according to this research. In a world where economies are ever more interconnected and competitive, our appeal is an attempt to address mounting problems and take advantage of emerging opportunities.

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