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Capital Productivity of State Bank of India: A Post Merger Analysis

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ABSTRACT: ***The banking sector plays a significant role ensuring efficient utilization of financial resources, particularly in the post-merger period where effective capital management becomes essential for operational stability and growth. The present study focused on the analysis of capital productivity of State Bank of India during post-merger period from 2017-18 to 2024-25. It is based on secondary data and the analysis carried out using various capital productivity ratios as well as descriptive statistics & Compound Annual Growth Rate. The overall results suggest that SBI maintained balanced utilization of capital resources and stable capital productivity performance during post-merger period.***
Keywords: Indian Banking, Public Sector Banks, State Bank of India, Productivity, Capital Productivity, Post-Merger

I. INTRODUCTION

The banking sector plays a crucial role in the economic development of a country by mobilizing savings, facilitating investments, and ensuring efficient allocation of financial resources. Banks act as financial intermediaries that support economic growth through credit creation and financial services. In the changing banking environment, operational efficiency and effective utilization of resources have become essential for maintaining financial stability, competitiveness, and long-term growth.

Capital is one of the most important resources in the banking operations, as it forms the foundation for business expansion, risk absorption, and financial sustainability. Efficient utilization of capital enables banks to improve profitability, strengthen operational performance, and enhance financial stability. In this context, capital productivity assumes considerable importance, as it reflects the efficiency with which banks utilize their capital resources to generate deposit, advances, investments, business and returns. Higher capital productivity indicates better utilization of resources and improved operational efficiency, while lower productivity implies ineffective deployment of capital resources.

In recent years, the Indian banking sector has undergone significant structural transformations due to banking reforms, technological advancement, increased competition and consolidation activities.Among these developments, bank mergers have emerged as an important strategy for improving operational efficiency, strengthening financial position, expanding market reach, and enhancing economies of scale. Mergers are expected to improve resource utilization and create better opportunities for growth and productivity improvement through integration of operations and consolidation of financial resources.

The merger of State Bank of India with its associate banks and Bharatiya Mahila Bank came into effect on 1 April 2017 and marked one of the largest consolidation exercises in the history of Indian banking sector. The merger resulted in SBI becoming one of the top 50 banks in the world in terms of assets, with a combined asset base of nearly Rs37-40 lakh crore. The consolidation significantly expanded the operational scale of the banks, increasing its branch network to more than 22,000 branches and strengthening its customer base across the country. The merger was primarily aimed at improving operational efficiency, strengthening capital base, achieving economies of scale, and enhancing resource utilization in the Indian banking system. Such large-scale consolidation increased the importance of efficient capital management and productivity in banking operations, particularly in the post-merger period.

II. REVIEW OF LITERATURE

Ch.Bhargavi&Dr.G.Shashidhar Rao (2021), published a paper entitled “A Study on Productivity Analysis of Select Banks in India”. The present study examines the efficiency and output of the Indian banking sector by comparing the State Bank of India and ICICI Bank during the period 2009-10 to 2019-20. The authors evaluated performance through specific lenses, including labour, branch and capital productivity through select indicators. While the SBI demonstrated superior results in workforce productivity, the private sector ICICI excelled in branch and capital metrics. Despite these individual strengths, hypothesis testing conducted by the researchers suggests that, there is no statistically significant difference in overall average performance of these two banks.

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The study ultimately recommends that public sector banks focus on lowering operating costs and enhancing per branch to remain globally competitive.

Sravanthi.M&Dr.P.Indrasena Reddy (2021), evaluated the operational efficiency in terms of productivity of select public sector banks in India, i.e., Punjab National Bank and Bank of Baroda, during the study period from 2010-11 to 2019-20. The study employed Employee Productivity, Branch Productivity and Financial Productivity of banks through select indicators by applying mean, CV and CAGR analysis. The findings revealed that, branch and employee efficiency in BoB showed much better that PNB. All of the variables like deposits, advances, business, income, expenditure and net profit of employee and branch productivity of BoB are impressive than PNB. Financial efficiency is found to be better for PNB, except the variable cost deposit ratio, all other financial variables are more than the BoB. The chosen public sector banks are strong competitors in banking industry in India. Further it is stated that, PNB has to enhance its employee level as well as branch level productivity in order to be competitive.

III. STATEMENT OF THE PROBLEM

Efficient utilization of financial resources has become a significant challenge for banking institutions in the changing financial environment. Expansion in banking operations, increasing competition and technological advancement may influence the efficiency of capital utilization. Bank mergers further increase the necessity of effective capital management because consolidation results in an enlarged capital base, expansion of branch network and increase in business operations. Although mergers are expected to improve operational efficiency and resource utilization through economies of scale, the integration process may create difficulties in effective deployment of capital resources and return generation. Changes in deposits, advances, investments and business operations during the post phase of merger may affect the overall productivity of capital resources. Therefore, analysing the capital productivity of banks becomes important for understanding how efficiently banks utilize their capital for improving operational performance and maintaining financial stability.

IV. OBJECTIVE

To analyze the capital productivity performance of State Bank of India during Post-merger.

V. METHODOLOGY

Source of Data& Study Period:

The study has used data from secondary sources, which are collected mainly from the Annual Reports of the select bank (State Bank of India) and further required data are collected through various journals, magazines, newspapers and websites. The Study period consists of post-merger period i.e. eight years from 2017-18 to 2024-25.

Sampling Design:

The study adopted a purposive sampling technique, wherein State Bank of India is intentionally selected due to its significance in the Indian banking sector.

Tools for Analysis:

The study employedfollowingtools to analyze the capital productivity of SBI:

- Ratio Analysis
- Descriptive Statistics
- CAGR

VI. ANALYSIS AND INTERPRETATION

Summary of Capital Productivity Ratios of State Bank of India

(In Percentage)

Year / Ratio	Deposit Per Unit of Capital Ratio	Advances Per Unit of Capital Ratio	Business Per Unit of Capital Ratio	Investments Per Unit of Capital Ratio	Return on Capital Employed Ratio	Interest Income to Capital Ratio	Interest Expenses to Capital Ratio
2017-18	12.35	8.83	21.18	4.84	10.24	1.01	0.66
2018-19	13.18	9.89	23.07	4.38	8.88	1.10	0.70

2019-20	13.97	10.02	23.99	4.51	12.46	1.11	0.69
2020-21	14.50	9.65	24.15	5.32	10.66	1.04	0.61
2021-22	14.47	9.76	24.23	5.29	9.61	0.98	0.55
2022-23	13.50	9.77	23.27	4.79	10.20	1.01	0.57
2023-24	13.03	9.82	22.85	4.43	8.89	1.10	0.68
2024-25	12.20	9.44	21.64	3.83	11.01	1.048	0.67
Mean	13.40	9.65	23.05	4.68	10.24	1.05	0.64
SD	0.88	0.37	1.14	0.50	1.18	0.05	0.06
CV	6.56%	3.86%	4.94%	10.62%	11.52%	4.57%	8.71%
CAGR	-0.17%	0.95%	0.31%	-3.29%	1.04%	0.59%	0.11%

**Complied and Computed from Annual Report of SBI*

The Deposit Per Unit of Capital Ratio of SBI exhibited an improving trend during the initial years of post-merger period. The ratio increased from 12.35% in 2017-18 to 14.50% in 2020-21, indicating enhanced mobilization of deposits per unit of capital. The ratio remained relatively stable during 2021-22 and thereafter showed a gradual decline, reaching 12.20% in 2024-25. Despite the decline in last years, the ratio maintained a comparatively stable movement throughout the study period. The CAGR of -0.17% indicates a slight decline in deposit productivity over the overall post-merger period.

The Advances Per Unit of Capital Ratio showed a gradual increase from 8.83% in 2017-18 to 10.02% in 2019-20, reflecting improvement in the bank's lending activities in relation to capital employed. In the subsequent years, the ratio fluctuated within a narrow range and remained relatively stable before slightly declining to 9.44% in 2024-25. The overall movement indicates consistent utilization of capital for credit deployment during the post-merger phase. The CAGR of 0.95% further confirms the gradual improvement in advances productivity over the study period.

The Business Per Unit of Capital Ratio exhibited a steady improvement during the initial years, increasing from 21.18% in 2017-18 to 24.23% in 2021-22. This reflects growth in the combined business operations of the bank during the post-merger period. Thereafter, the ratio showed a moderate decline in the later years but remained above the initial level throughout the study period. The CAGR of 0.31% indicates a moderate improvement in overall business productivity per unit of capital.

The Investments Per Unit of Capital Ratio displayed fluctuating movement during the study period. The ratio initially declined in 2018-19, followed by an increase to 5.32% in 2020-21, indicating higher investment utilization during the year. However, the ratio subsequently declined continuously and reached 3.83% in 2024-25. The CAGR of -3.29% indicates a gradual decline in investment productivity during the post-merger period.

The Return on Capital Employed Ratio showed moderate fluctuations throughout the study period. The ratio increased significantly to 12.46% in 2019-20, indicating improved returns generated from capital employed. Although fluctuations are observed in the subsequent years, the ratio improved again to 11.01% in 2024-25. The CAGR of 1.04% indicates an overall improvement in return generated from capital during the post-merger phase.

The interest Income to Capital Ratio remained relatively stable throughout the study period fluctuating within a narrow range between 0.98% and 1.11%. The ratio showed improvement during certain years, indicating consistent generation of interest income from capital employed. The CAGR of 0.59% reflects marginal improvement in interest income productivity over the study period.

The Interest Expenses to Capital Ratio exhibited moderate fluctuations during the post-merger period. The ratio increased in the initial years, declined during the middle phase, and slightly increased again in the later years. However, the overall variation remained comparatively moderate throughout the study period. The CAGR of 0.11% indicates relative stability in interest expenses in relation to capital employed.

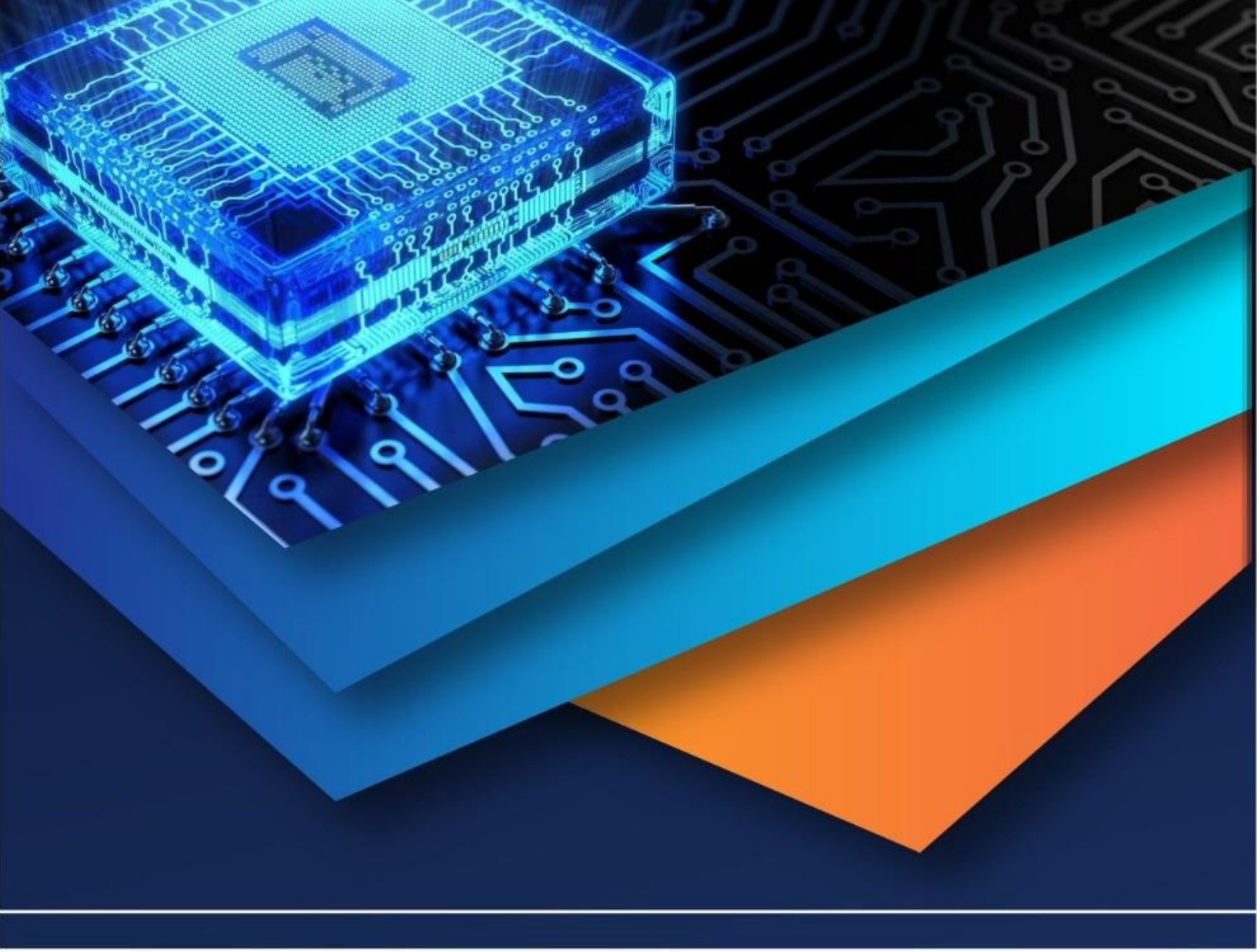
VII. CONCLUSION

The study on capital productivity of SBI during the post-merger period indicates a generally stable and balanced the utilization of capital resources. The Deposit, Advances and Business Per Unit of Capital Ratios exhibited improvement during initial years, followed by moderate fluctuations in the later period. The Return on Capital Employed Ratio also showed overall improvement, indicating better return generation from capital employed. In contrast, the Investments Per Unit of Capital Ratio recorded a declining trend over the study period. The Interest Income and Interest Expenses to Capital Ratios remained relatively stable, reflecting consistency in income generation and cost management. Overall, the findings suggest that, SBI maintained moderate improvement in capital productivity and operational efficiency during the post-merger period through effective utilization of capital resources.

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