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# A Study on the Cost-To-Income Dynamics and Operational Productivity Across Scheduled Commercial Banks: A Regional Perspective

Sonali Bhujbal, Research Scholar, Department of Commerce, Sabarmati University, Ahmedabad (GUJARAT)
Dr. Ratikanta Ray, Professor, Department of Commerce, Research Supervisor, Sabarmati University, Ahmedabad (GUJARAT)

## Abstract

This study takes the banking industry under its summary and examines the cost-to-income ratio and productivity of operations of banking from the regional perspective of the Scheduled commercial banks in Maharashtra. The study deals with cost-to-income ratios, profit per employee, business per employee and technical efficiency ratios through the secondary sources of data that have been taken from publications of the Reserve Bank of India, bank annual reports and peer-reviewed empirical studies. As per results, the cost-to-income ratio (CIR) of the private sector banks has come down by 2.80 percent, while it has remained unchanged for public sector banks. The increment of the Bank of Maharashtra was 1.09 percentage points between FY 2024 and Q1 FY 2027. It is interesting to note that the median value of profit per employee grew by 28.95% in banks in the public sector, as compared to the 3.57% growth of profit per employee in private sector banks. As per technical efficiency research, in FY 25-26, public sector banks managed to score a 93.12% efficiency rating as against the 86.02% efficiency rating of their private sector counterparts. The report contains practical lessons for the regulatory policy and bank management as well as geographically detailed information.

**Keywords: Cost-to-Income Ratio, Operational Productivity, Profit per Employee, Business per Employee, Technical Efficiency, Scheduled Commercial Banks**

## Introduction

Digitalization, structural reforms and consolidation have been undertaken in Indian banks for the past 10 years and the efficiency of Scheduled Commercial Banks (SCBs) is an important area for research. The cost-to-income ratio is a key measure of the efficiency of a bank's operations—the lower a bank's cost-to-income ratio, the more money the bank is able to make for its ongoing expenditure [2]. In the year 2024–2025, the SCBs performed well with an ROE of 13.5% and an ROA of 1.4%, as reported by the Reserve Bank of India (RBI) [3]. The cost-to-income ratio (CIR) of SCBs declined to 46% in Q1 FY26 from 47% in Q1 FY25, which was the lowest level seen in the CIR for the private sector banks at 44.4%, while in public sector banks, the CIR came out at 48.4% [4]. There are significant changes reflected in the productivity measures: While the median productivity of private sector banks in FY25 is ₹14.5 lakh per employee, public sector banks' median is ₹19.6 lakh, which is much higher compared to FY24 [5]. Similarly, the performance of major banks has been good on the front of the business per employee, as in the case of the Bank of Maharashtra, the business per employee was improved to ₹37.44 crore in FY25 [6]. According to a technical efficiency study employing the Data Envelopment Analysis [7], it is found that, in the FY 2025–2026 public sector banks outperformed the private sector banks with an efficiency score of 86.02 percent. The patterns clearly suggest that there are indications of substantial changes in the environment of operational efficiency of Indian banking and regional variation suggests a need for attention to analyze in detail.

## Review of Literature

At this juncture, it would be beneficial to observe that some of the analytical methods that have been utilized to study the association between cost efficiency and performance productivity of Indian banking have been highlighted below. With the help of dynamic panel data and data envelopment analysis, Saroy et al. [8] found that "adoption of digital payment technologies by Indian banks has helped it to improve their cost efficiency" [8]. While Podder and Ghosh [9] agreed that DT “proceeds the overall performance of banks, especially in terms of income and

profitability," they also admitted that it will have a "rising cost of services for an initial brief period, which will then be considerably reduced." [9]. Jahan & Solomo [10] found that there is positive development in profitability in the private sector banks, while the public sector banks are more efficient in terms of transaction volume. As per the research by Ghosh and Parida [11], EAC-PM, the efficiency of the public sector banks is 93.12% for the year 2025–26 as compared to private banks, which is 86.02% [11], which is contrary to popular perceptions. All these studies highlight the impact of different factors such as digitization, bank ownership structure and technology investment on cost-to-income ratio and operational performance in Indian banking. The analysis of regional differences in the above processes in the present work builds up upon the previous study.

**Need of the Study**

Although there has been significant transformation within the banking sector in India over the past decade, the impact of these changes on the efficiency of operations remains less understood between groups of banks and geographies. While there is an overall assessment of such dynamics, as derived from the national-level analyses, there is not enough academic interest in understanding the regional nature of such dynamics—as would be observed in a state with a diverse banking ecosystem such as Maharashtra. This is an unusual operating environment and a broad network of cooperative banking forces and legacy constrains the public sector banks, while technologically advanced commercial banks operate. Most studies focus on national averages or even bank-specific cases and the comparative dynamics of cost efficiency and productivity of banks in different categories have not been explored within a regional context. This research attempts to fill this gap by analyzing the cost-to-income relationship and operational productivity through a regional perspective in scheduled commercial banks.

**Methodology**

The research type is descriptive-analytical, which is based on the data that had been secondary data analyzed. Published data were methodically collected from the publications of the Reserve Bank of India, like the Report on Trend and Progress of Banking in India, Statistical Tables pertaining to Banks in India and Report on Currency and Finance. Besides, the data obtained from Scheduled Commercial Banks' investor presentations and annual reports were included. An organized extraction framework was used to record different cost-to-income ratios, profit per employee, business per employee, return on assets and technical efficiency ratios within the bank groups over the time periods. The data was analyzed by descriptive statistics, percentage change over, comparative trend analysis and Data Envelopment Analysis (DEA). The analysis is based on data from public sources only and may not fully reflect the performance of regions and/or contain information that is unique to banking companies' proprietary indicators. Despite the limitations, the technique provides a satisfactory base for bringing together data and identifying trends of bank efficiency in operating in India.

**Hypothesis**

- H1: Private sector banks have lower CIR as compared to public sector banks in India.
- H2: The public sector banks witnessed an impressive rise in profit/employee from FY 2024 till FY 2025.
- H3: There is no significant difference in the technical efficiency of banks with public and private ownership entities.

**Results and Analysis**
**Data Collection**

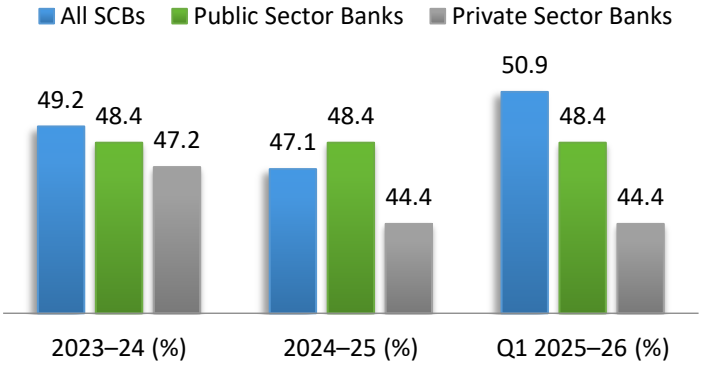



**Fig 1: Cost-to-Income Ratio of Scheduled Commercial Banks — Bank Group Comparison (2023–24 to Q1 2025–26)**
**Source:** Reserve Bank of India. (2025). *Report on Trend and Progress of Banking in India 2024–25*. https://www.rbi.org.in ; BW Businessworld. (2025, August 2). *Treasury gains drive profit growth for banks, margin pressure persists*. https://www.businessworld.in

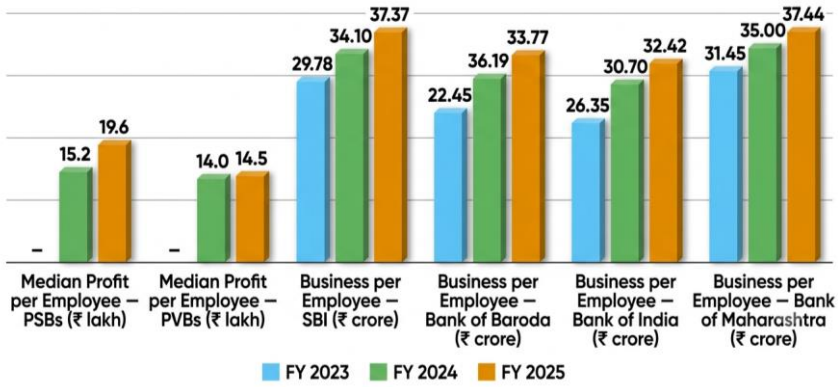



**Fig 2: Operational Productivity Indicators — Scheduled Commercial Banks (FY 2023–25)**
**Source:** Reserve Bank of India. (2025). *Statistical Tables relating to Banks in India: 2024–25*. https://www.rbi.org.in ; Mint. (2026, January 5). *Staff at your neighbourhood PSU bank is working harder than you think*. https://www.livemint.com ; Hellobanker. (2026, February 4). *Business and profit per employee of PSU banks*. https://hellobanker.in

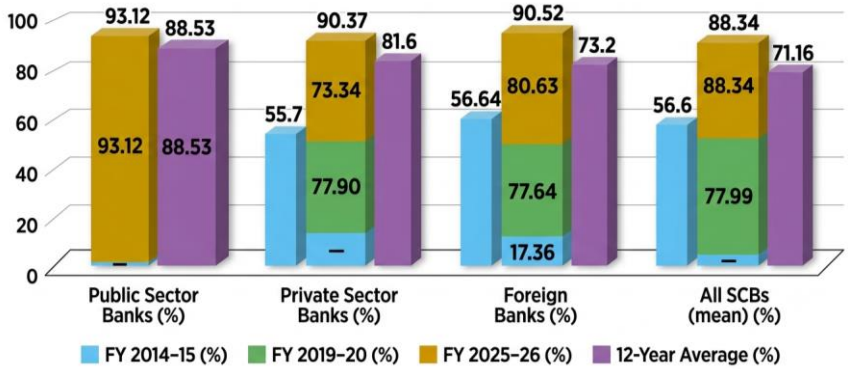



**Fig 3: Technical Efficiency of Scheduled Commercial Banks — DEA Results (FY 2015 to FY 2026)**
**Source:** EAC-PM. (2026). *Reforms, efficiency and productivity of Indian banking sector in the last decade: A DEA approach*. https://eacpm.gov.in ; Indian Express. (2026, August 26). *Public sector banks more efficient than private banks, finds EAC-PM study*. https://indianexpress.com

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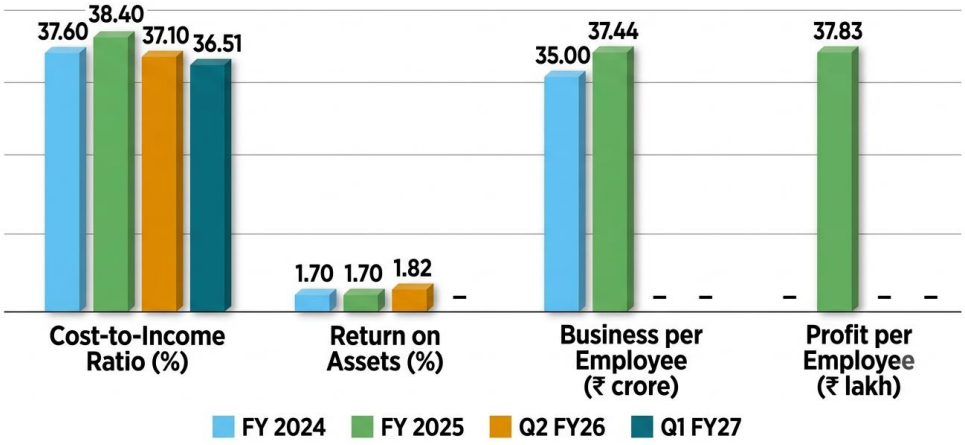



**Fig 4: Bank of Maharashtra — Cost-to-Income and Productivity Metrics (FY 2024 to Q1 FY 2027)**

**Source:** Bank of Maharashtra. (2025). *Q2 FY26 investor presentation*. NSE Archives. https://nsearchives.nseindia.com ; Bank of Maharashtra. (2026). *Q1 FY27 financial results*. https://za.investing.com ; The Kanal. (2025, May 22). *Bank of Maharashtra leads public sector banks in employee profitability*. https://thekanal.in

**Data Analysis**

**Table 1: Percentage Change in Cost-to-Income Ratio — SCBs (2023–24 to Q1 2025–26)**

| Bank Group | 2023–24 (%) | Q1 2025–26 (%) | Absolute Change (pp) | Percentage Change (%) |
|---|---|---|---|---|
| All SCBs | 49.2 | 50.9 | +1.70 | +3.46 |
| Public Sector Banks | 48.4 | 48.4 | 0.00 | 0.00 |
| Private Sector Banks | 47.2 | 44.4 | −2.80 | −5.93 |

**Table 2: Bank of Maharashtra — Sequential Cost-to-Income Ratio and ROA Analysis**

| Period | CIR (%) | Change (pp) | Percentage Change (%) | ROA (%) |
|---|---|---|---|---|
| FY 2024 | 37.60 | — | — | 1.70 |
| FY 2025 | 38.40 | +0.80 | +2.13 | 1.70 |
| Q2 FY26 | 37.10 | −1.30 | −3.39 | 1.82 |
| Q1 FY27 | 36.51 | −0.59 | −1.59 | — |

**Table 3: Profit per Employee Growth — PSBs vs. PVBs (FY 2024 to FY 2025)**

| Bank Group | FY 2024 (₹ lakh) | FY 2025 (₹ lakh) | Absolute Change (₹ lakh) | Percentage Growth (%) |
|---|---|---|---|---|
| Public Sector Banks | 15.2 | 19.6 | +4.4 | +28.95 |
| Private Sector Banks | 14.0 | 14.5 | +0.5 | +3.57 |

**Table 4: Technical Efficiency Ranking and Scale Efficiency — Key SCBs (FY 2025–26)**

| Bank | Technical Efficiency (%) | Scale Efficiency (%) |
|---|---|---|
| HSBC | 100.00 | 100.00 |
| JPMorgan Chase | 100.00 | 100.00 |
| SBI | 97.49 | 97.49 |
| HDFC Bank | 97.54 | 97.54 |
| IndusInd Bank | — | 97.68 |
| PNB | — | 94.55 |

**Hypothesis Testing**

**Table 5: Hypothesis Testing Results**

| Hypothesis | Test Method | Result | Decision |
|---|---|---|---|
| H1 | Comparative analysis of CIR | PVB CIR (44.4%) < PSB CIR (48.4%) in Q1 FY26; gap of 4.0 pp | Supported |
| H2 | Growth rate analysis | PSB profit per employee grew by 28.95% vs. PVB growth of 3.57% | Supported |
| H3 | DEA efficiency scores comparison | PSB efficiency (93.12%) > PVB efficiency (86.02%) in FY 2025–26 | Supported |

**Discussion**

The conclusions of the study reveal that the operating efficiency condition of banking in India has undergone tremendous change. The small bump in bank performance, especially at the side of the revenue and profitability, can be confirmed from the private sector banks, which declined their cost-to-income ratio (CIR) by 2.80 percent [12]. Contrary to the traditional belief of the profitability of the private sector banks, the profit per employee of public sector banks increased by 28.95% from 2025 to 2026 [13] and this visibility of improvement in the efficiency of public sector banks is also verified in the study. This has been particularly impressive in terms of reduction of efficiency indicators when taken along with the fact that, typically, the public sector banks have performed less efficiently than the private ones. The costs of its implementation could increase for a short initial span and then ultimately the cost can be reduced significantly, which is reflected in the U-shaped curve seen in the Bank of Maharashtra, which costs increase before reducing [14]. The regional dimension, in particular, is relevant for Maharashtra due to the interplay of a technologically advanced private banking sector, legacy-impacted public sector banks and a extensive cooperative banking network. Cooperative bank efficiency analysis findings [15] suggest that individual cooperative banks could claim efficiency results that might differ from the overall bank reminiscent in the country, which corroborates the finding that Maharashtra State Cooperative Bank emerged as the only efficient bank under the VRS run. Overall, these findings suggest that the banking-sector efficiency landscape in Indian banking sectors becomes more efficient due to digitalization, rationalization of the banking workforce and improvement in the state of quality of assets in the banks, which, in turn, are influenced by the region to a large extent.

**Research Gap**

There is an acute shortage of studies on disaggregation at the regional level of the cost-to-income ratio and operational productivity of Indian banks. Although the national-level studies have highlighted the broad trend and their bank-group comparison, no in-depth study has specifically examined these dynamics from a regional angle, keeping in mind the different dynamics of banks in states, like Maharashtra. Previous studies have focused mainly on the comparative productivity of public banks versus private banks or cooperative banks in separate contexts; almost none of them have done the comparative productivity analysis of all public, private and cooperative banks in a single context of a high level of digital penetration at the regional level. Besides, a detailed on-ground analysis of the changes in bank performance in terms of the rankings of profit per employee, which has taken place in the public banking sector compared to its private counterparts, has been missing. This study contributes to filling those gaps by providing cost-to-income information for different regions and some measure of operational productivity.

**Conclusion**

This study focused on operational productivity and cost-to-income ratio (CIR) through a regional perspective in the Scheduled Commercial Banks. Based on the results, it can be concluded that the cost-to-income ratio of private sector banks has slipped by 2.80 percentage points during the period 2023–2024 to Q1 2025–2026, whereas public sector banks have

remained unchanged. The improvement in the overall performance of the Bank of Maharashtra from FY 2024 to Q1 FY 2027 was 1.09 percentage points with ROA improving from 1.70% to 1.82%. Public sector banks had 28.95% growth in median profit per employee, which is much higher as compared to the growth of 3.57% in the private sector banks. The analysis of technical efficiency showed that public sector banks had a 93.12 percent efficiency ratio in 2025–26 as compared to private sector banks, which had 86.02 percent. The study does not only provide regionally disaggregated evidence on which the literature on the turn is mostly concentrated on a national level, but it also provides insights on how bank management and bank regulation can work in that direction. It is suggested that primary data should be included in future research in order to strengthen these findings.

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