Productivity and Cost of Banking Employees: A Comparative Study of State Bank of India and ICICI Bank Limited

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Keywords: State Bank of India (SBI), Revenue Per Employee, ICICI Bank, Business Per Employee, Cost Per Employee.

Abstract: Since the commencement of 21st Century, Indian public and private sector banks have shown a strong growth in the economy of the country. Both types of the banks are becoming an undivided part of valuable banking industry of the country. State Bank of India, as the market leader in the public sector banks and ICICI Bank Limited, as the fastest growing private sector banks is giving a challenge to each other in a healthy business environment of India. Banking is the mental labour-based industry, as it is completely depending upon the proficiency of its employees. This paper is an attempt to compare the cost and productivity of the employees of these two banks (as a representative from public and private sector banks) by taking the data of last ten financial years as an appropriate sample. To measure the cost and productivity of employees of these two public and private sector banks, various parameters and ratios are used along with their appropriate analysis and interpretation.

1 INTRODUCTION

Commercial banks are the suppliers of finance as the vital component to the entire economy of the nation. Deposits and credit facilities provided by the commercial banks directly affect the output, income, and employment level. Banking sector is one of the largest labour or human resources-based service sector, because the banks performance predominantly depends upon the performance and efficiency of their human resources. For the growth and survival of each and every commercial bank, it's all employees have to give their positive contribution. The main expenditure of the bank is the payment of the interest to the depositors, after that second largest head of the expenditure is the payment and provision for the employees or employees' cost. This head has the significant impact on the profitability and the operational performance of the bank. So, at the end of a particular period, it is essential to assess the human resources or employees' productivity and cost of this large service sector of the country.

Banking sector is completely depending upon its employees working. In this way measurement of the employee's productivity of the banking sector is just like measurement of productivity of entire banking sector. Some parameters are specially developed for the analysis of the productivity of employees of the banking sector, such as Business Per Employee (BPE), Revenues Per Employee (RPE), Profit Per Employee (PPE) etc. With the analysis and interpretation of these parameters we can easily compare and assess their performance in a systematic manner. These are very helpful to take any decision regarding human resources management in banking sector.

To produce the services like banking, finance, and insurance more of mental labour is required. The reward for the labour is in form of monetary or nonmonetary gains. Monetary gains include salary, allowances, commission, bonus, and pension etc., while non-monetary gains include all the benefits, perquisites, and social security schemes provide by the employer to the employees. The amounts spend by the employer on both monetary and non-monetary gains are known as employees cost or employee benefit expenses or compensation of employees.

This research paper aims to conduct a comparative analysis of cost and productivity between two banks: SBI and ICICI, one representing the public sector and the other representing the private sector. The analysis is based on data collected over different financial years, which serves as a

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Adwani, V. and Vishwakarma, M. Productivity and Cost of Banking Employees: A Comparative Study of State Bank of India and ICICI Bank Limited. DOI: 10.5220/0012498800003792 Paper published under CC license (CC BY-NC-ND 4.0) In Proceedings of the 1st Pamir Transboundary Conference for Sustainable Societies (PAMIR 2023), pages 592-598 ISBN: 978-989-758-687-3 Proceedings Copyright © 2024 by SCITEPRESS – Science and Technology Publications, Lda. substantial sample for drawing meaningful conclusions. This paper employs a multifaceted approach to measure and analyze the cost and productivity of employees in the two banks. This approach involves using various parameters and ratios.

2 LITERATURE REVIEW

- Chaudhary, Rangnekar and Barua (2013) identified six factors determining the effectiveness of HRM practices in Indian manufacturing and service firms. The factors identified were – Top Management Belief & Commitment to HRM; Employee Development; Autonomy, Openness & Authenticity; Rewards, Performance & Potential Appraisals; Superior Subordinate Relationship & Trust; and Collaboration & Team Spirit.
- Gupta and Kaur (2013) in their study on 'productivity and performance of public sector banks in India' on the basis of Branch Productivity and Total Output Employee Productivity for the period of 1991-2010 suggested that banks need to improve their productivity Total Input apart to these improvements in profitability, maintain efficiency level and technology and exploring available Similarly, in banking industry productivity is defined as a cost-effective solution.
- Jha and Mishra (2015) studied the impact of HRM practices on performance of employees in Indian banking industry. The authors concluded that various remedial HRM measures can be taken to improve the employee performance in banks. The measures suggested include staff meetings, brain storming sessions, study circles and quality circles.
- Shashi (2015) stated that SBI Group Banks must organize training and development programmes to have more efficiency and better productivity.
- Anand et al., (2016) analyzed the influence of employee engagement practices on the productivity of banks in Trichy region in India. The results indicated that factors like coworkers, department, rewards & recognition, opportunities, team work and immediate supervisor have a significant influence on the productivity of employees.
- Ghosh, Rai, Chauhan, Baranwal and Srivastava (2016) explored the potential

mediating role of employee engagement and rewards to employees among private bank employees in India. The results of the study concluded that rewards & recognition to employees was found to be a strong predictor of employee engagement, finally leading to better performance of banks.

- Mahila (2016) Found that the number of branches and number of employees of are highly influencing the productivity of banks.
- P. S. Aithal, Prasanna Kumar, & Mike Dillon (2018) analyzed the business model and the organizational strategy of Indian Banks in terms of their business objectives, service planning, target setting for the employees, employee motivational factors, working strategies to improve productivity and finally accountability of every employee at different organizational levels.
- Paul et al. (2021) investigated the effect of banks' liquidity on its profitability, and concluded that, the liquidity has a significant effect on the profitability in the commercial banking sector of Bangladesh. They suggested that Bangladeshi banks to keep equality between its liquidity and profitability.

3 RESEARCH HYPOTHESIS

(Ho1):"There is no significant difference between Revenue Per Employee (RPE) of the State Bank of India and ICICI Bank Limited from F.Y. 2012-13 to 2021-22."

(Ho2):"There is no significant difference between Cost Per Employee (CPE) of the State Bank of India and ICICI Bank Limited from F.Y. 2012-13 to 2021-22.".

4 RESEARCH METHODOLOGY

The research paper employs a multifaceted approach to measure and analyze the cost and productivity of employees in the two banks. This approach involves using various parameters and ratios. These parameters and ratios are likely financial metrics that shed light on different aspects of the banks' operations. PAMIR 2023 - The First Pamir Transboundary Conference for Sustainable Societies- | PAMIR

4.1 Research Period and Sample Size:

This research study is based on the financial data of SBI and ICICI Bank during the period of last ten financial years from 1st April 2012 to 31st March 2022.

4.2 Data Sources:

This quantitative and analytical research study is mainly based on secondary or published data. The main source of data is the Annual Reports of SBI and ICICI Bank for last ten financial years, along with reports and publications of Reserve Bank of India (RBI).

4.3 Analysis Methods and Tools:

As per the RBI guidelines following parameters are applied to measure the productivity and cost of the employees:

For Measurement of Employee Productivity: (a) **Business Per Employee (BPE)**

 $BPE = \frac{Total Business}{Total No. of Employees}$

Total Business = Total Deposit + Total Advances

(b) **Profit Per Employee (PPE)** $PPE = \frac{Net Operating Profit}{Total No. of Employees}$

(c) Revenue Per Employee (RPE) Total Revenue

 $RPE = \frac{1}{Total \ No. \ of \ Employees}$

For Measurement of Employee Cost: (a) Cost Per Employee (CPE)

CPE =	Employee Cost		
CFL =	Total No. of Employees		

(b) Employee Cost to Operating Expenditures (ECOE)

$$ECOE = \frac{Employee\ Cost\ x\ 100}{Operating\ Expenditures}$$

(c) Employee Cost to Total Business (ECTB)

 $ECTB = \frac{Employee\ Cost\ x\ 100}{Total\ Business}$

(d) Employee Cost Ratio (ECR)

$$ECR = \frac{Employee \ Cost \ x \ 100}{Total \ Revenue}$$

For Testing of Hypothesis:

Student's t-Test $t = \frac{x_1 - x_2}{S} * \sqrt{\frac{n_1 * n_2}{n_1 + n_2}}$

5 FINDINGS AND ANALYSIS

5.1 Employee Productivity

Accepting deposits and granting loans are the core activities of all the commercial banks. Commercial bank (From F.Y. 2012-13 To 2021-22) (In. INR Million) banks are used to accept deposits from the public in order to arrange the funds to be distributed as advances to the needy customers. In the same manner the interest earned on the loans distributed is the main source of the revenue of the commercial banks. So, we can measure the productivity of the employees of SBI and ICICI on these basic parameters through the following table: **Analysis**

- Analysis
- In the terms of the BPE, the SBI is leading as compare to ICICI. The mean BPE of SBI is around Rs. 180 million, but for ICICI it is around Rs.130 million. However, in the terms of the CAGR the SBI is also considerably ahead of ICICI with 4.5% margin.
- In the terms of the RPE, the position of SBI and ICICI is almost equal, as the mean RPE of SBI is Rs. 9.86 million, but for ICICI it is Rs. 8.98 million. However, in the terms of growth rate again the SBI is significantly ahead of ICICI with 6% margin.
- In the terms of the Profit Per employee (PPE), The ICICI is well ahead of SBI. The mean PPE of ICICI is Rs. 1.28 million, but for SBI it is only Rs. 0.67 million. It means the PPE of ICICI is 91% greater than the SBI. The growth rate of PPE of ICICI is almost equal to SBI. There were certain fluctuations in the PPE of SBI and ICICI during the research period.







Figure 2: Employees Cost of SBI and ICICI (From F.Y. 2012-13 to 2021-22) (In INR Million)

ICICI BANK LIMITED (ICICI)					
FY	CPE	ECOE	ЕСТВ	ECR	
2012-13	0.63	9.71	0.67	8.04	
2013-14	0.58	9.421	0.63	7.73	
2014-15	0.72	9.482	0.63	7.75	
2015-16	0.42	5.164	0.35	4.43	
2016-17	0.69	8.979	0.6	7.78	
2017-18	0.73	9.014	0.55	8.17	
2018-19	0.78	9.132	0.55	8.74	
2019-20	0.83	9.928	0.58	9.06	
2020-21	0.82	9.881	0.49	8.25	
2021-22	0.91	11.86	0.5	9.22	
MEAN	0.71	9.26	0.56	7.92	

STATE BANK OF INDIA (SBI)						
FY	СРЕ	ECOE	ЕСТВ	ECR		
2012-13	0.81	15.88	0.82	13.55		
2013-14	1.01	16.24	0.86	14.53		
2014-15	1.1	15.12	0.82	13.45		
2015-16	1.21	14.10	0.79	13.09		
2016-17	1.26	13.51	0.73	12.56		
2017-18	1.26	11.82	0.71	12.52		
2018-19	1.6	14.85	0.81	14.76		
2019-20	1.83	16.84	0.82	15.43		
2020-21	2.07	18.12	0.83	16.5		
2021-22	2.36	20.24	0.85	18.21		
MEAN	1.44	15.67	0.80	14.46		

5.2 Employee's Cost

Payments and provisions for the employees or employees' cost is one of the major operating expenses of all the commercial banks. We can measure the cost of the employees of SBI and ICICI on these basic parameters through the following table: **Analysis:**

- In the terms of the CPE, the SBI is leading as compare to ICICI. The mean CPE of SBI is Rs. 1.44 million, but for ICICI it is Rs.0.71 million. It means SBI is spending Rs. 1,20,500 per month per employee, while ICICI is spending Rs. 59,167 only. Thus, per employee cost for SBI is just double of ICICI. In the terms of the percentage, The CPE of SBI is increased by 78%, while CPE of ICICI is increased by only 44%. During this period, employees of SBI are increased by only 7%, while the employees of ICICI are increased by 71%.
- However, in the terms of the CAGR of CPE, for SBI it is 12.72% and for ICICI it is 4.17%, means the SBI is well ahead of ICICI.

• In the terms of ECOE, ECTB and ECR same position is visible i.e., in all these terms the parameters of SBI is significantly greater than the ICICI. Out of the total operating expenditures $1/6^{th}$ part of expenditures of SBI is for the employees, while in case of ICICI it is only $1/11^{th}$ part. In other terms the employee cost of SBI is 50% grater as compare to the ICICI. In the terms of the revenue, payment to employees by SBI is almost double of the ICICI. In the terms of the Business, employee cost of SBI is 50% greater than the ICICI.

5.3 Test of Hypothesis

(Ho1): "There is no significant difference between Revenue Per Employee (RPE) of the State Bank of India and ICICI Bank Limited from F.Y. 2012-13 to 2021-22."

(Ho2): "There is no significant difference between Cost Per Employee (CPE) of the State Bank of India and ICICI Bank Limited from F.Y. 2012-13 to 2021-22."

Particulars	RPE OF	RPE OF
	SBI	ICICI BANK
Sample Size (N)	10	10
Mean (X)	9.86	8.98
Standard Deviation (S.D.)	5.42	0.61
Degree of Freedom (DF)		18
Significance Level	0.05	
T-Test Value	1.13263	
p-value (Computed)	0.136117	
p-value (Critical)	6	0.05
Result	0.1361	17>0.05.
	How is Accepted, as $p > 0.05$.	

Particulars	CPE OF SBI	CPE OF ICICI BANK		
Sample Size (N)	10	10		
Mean (X)	1.44	0.71		
Standard Deviation (S.D.)	0.25	0.02		
Degree of Freedom (DF)	i i	18		
Significance Level	0.	05		
T-Test Value	4.5.	4.51785		
p-value (Computed)	0.00	00133		
p-value (Critical)	0.	0.05		
Result	0.00013	23 < 0.05.		
	Ho2 is Rejected	d, as p < 0.05.		
Alternate Hypothesis Accepted	-	There is a significant difference		
		between Cost Per Employee (CPE) of the State Bank of India and ICICI Bank Limited from F.Y. 2012-13 to		
		1-22."		
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6 CONCLUSIONS

On-going through the analysis of the employee's productivity and cost of SBI and ICICI Bank with the appropriate parameters and test of hypothesis we can easily observe a significant variation. The comprehensive analysis of productivity and cost reveals that:

- In the terms of the BPE and RPE, the growth rate of SBI is higher than the ICICI. For ICICI, the PPE is higher, for SBI the BPE and RPE is significantly higher. So, the growth in the productivity of SBI is well ahead of ICICI. The employees' productivity of ICICI Bank is also significantly higher than the SBI in terms of the PPE, due to the problem of NPAs in SBI.
- Such variation is also visible in average CPE, as average per employee cost for SBI is just double of ICICI. In the terms of ECOE, ECTB and ECR same position is visible i.e., the employee cost for the SBI is significantly greater than the ICICI. It means SBI is spending more amounts on their employees in form of their salary and allowances etc. So, banking sector is one of the few service sectors in our country where salaries offered public by sector banks is significantly higher than the private sector.
- The employees and management of SBI are required to improve their efficiency. They suggested to work on the issue of NPAs and to introduce innovative credit products for better utilization of the bulk deposits available. The effective utilization of advance technology will helpful for them to improve their HRM efficiency to achieve greater profit per employee. ICICI Bank is also suggested expand the business to every corner of this large country, for that they require to open their new branches in untapped rural and semi urban area. So that they can collect their huge amount of such savings for the credit generation.

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