

Cost and Productivity of Employees in Commercial Banks of India: A Comparative Study of State Bank of India and HDFC Bank Limited



Neeta Vaydande, Vinod Kumar Adwani

Abstract: *The Public sector and private sector banks in India have evolved in terms of productivity and performance since its inception, immensely contributing to the economy. These banks have become an undivided part of the entire banking industry of the country. State Bank of India, as the market leader in the public sector bank and HDFC Bank Limited as the fastest growing leading private sector bank is competitively challenging each other developing healthy business environment. Using their own strength and weakness both the banks are functioning with an objective of providing seamless, fast and safe financial services to the citizens of the country. Banking is the mental labour-based industry, as it is completely depending upon the cost and the productivity of its employees. The research paper attempts to compare the cost and productivity of the employees of these two banks (as a representative from public and private sector banks) for which the data of last ten financial years have been taken as a appropriate sample for the study. Various parameters and ratios with proper analysis and interpretation have been highlighted to measure the cost and productivity of the employees of the respective banks. The data collected also enable the researchers to find out the variation between the employees cost and productivity of these banks.*

Keywords: *Business per Employee, Cost Per Employee, HDFC Bank, Revenue Per Employee, SBI Bank.*

I. INTRODUCTION

Commercial banks are considered as the vital component of the economy, providing finance to the entire nation. Commercial banks have a direct impact on the income, output and employment level of the nation. The deposits and credit facilities provided by the commercial bank facilitates smooth economic functioning that contributes positively to the nation.

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* Correspondence Author

Dr. Neeta Vaydande*, Department of Commerce, The Bhopal School of Social Sciences, Bhopal (M.P), India. Email: neeta_vaydande@yahoo.co.in

Dr. Vinod Kumar Adwani, Department of Commerce, The Bhopal School of Social Sciences, Bhopal (M.P), India. Email: vinodadwani16@gmail.com

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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. 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.

A. Employee Productivity

The productivity is the relation between the inputs used for the purpose of production and the quantity of production or the value of the production. In short we can say the productivity in the terms of following formulae:

B. Productivity = Output / Input

For the analysis of productivity of employees of banking sector following parameters are available such as:

Business Per Employee (BPE),
Revenues Per Employee (RPE),
Profit Per Employee (PPE) etc.

These parameters are extremely useful helpful for taking any decision regarding human resources management in banking sector.

C. Employees Cost

For the production of the services like banking, finance and insurance more of mental labour is required. The reward for the labour is in form of monetary or non-monetary 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 employee cost or employee benefit, expenses or compensation of employees etc.

A Brief Profile of State Bank of India (As On 31st March 2021)

1	Name	State Bank of India
2	Industry	Commercial Bank
3	Sector	Public Sector (State Owned)
4	Establishment Year	1 st July 1955
5	Registered Office	Mumbai, Maharashtra (India)



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6	Promoter	Government of India
7	Promoter's Holding (In %)	57%
8	Total No. of Branches	22,219
9	Total No. of BCs Outlets	71,968
10	Total No. of ATMs	62,617
11	Total No. of Employees	0.25 Million
12	Total No. of Customers	459.2 Million
13	Paid Up Share Capital	INR 8924.6 Million
14	Total Assets	INR 45,34,4300 Million
15	Total Deposits	INR 36,81,2770.8 Million
16	Total Advances	INR 24,49,4977.9 Million

Source: Annual Report of SBI [9]

A Brief Profile Of Hdfc Bank (As On 31st March 2021)

1	Name	HDFC Bank Limited
2	Industry	Commercial Bank
3	Sector	Private Sector
4	Establishment Year	30 th August 1994
5	Registered Office	Mumbai, Maharashtra (India)
6	Promoter	Housing Development Finance Corporation (HDFC)
7	Promoter's Holding (In %)	25.83%
8	Total No. of Branches	5,608
9	Total No. of BCs Outlets	15,556
10	Total No. of ATMs	14,779
11	Total No. of Employees	0.12 Million
12	Total No. of Customers	61.8 Million
13	Paid Up Share Capital	INR 5510 Million
14	Total Assets	INR 17,99,5060 Million
15	Total Deposits	INR 13,33,7200Million
16	Total Advances	INR 11,85,2830 Million

Source: Annual Report, HDFC Bank [10]

II. LITERATURE REVIEW

Review of literature is a critical analysis of work related to our research topic. There are many books, reports; research papers etc are available on the analysis of the employees' productivity, branches productivity, performance and various financial aspects of the Indian Banking Sector. Few of them are as under:

1. **Gupta and Kaur (2013)** [4]: 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 this improvements in profitability, maintain efficiency level and technology and exploring available Similarly, in banking industry productivity is defined as a cost-effective solutions.
2. **Jha and Mishra (2015)** [5] 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.
3. **Ghosh, Rai, Singh and Ragini (2016)** [2] examined the impact of work support measures on employee engagement among employees in the Indian banking sector. The results indicated that all the dimensions were found to have a significant impact on employee

engagement. Employee engagement is perceived to have appositive in fluence on employee performance, employee retention, loyalty, productivity and customer satisfaction.

4. **Ghosh, Rai, Chauhan, Baranwal and Srivastava (2016)** [3] 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.
5. **P. S. Aithal, Prasanna Kumar, & Mike Dillon (2018)** [6] 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 each and every employee at different organizational levels. The applicability of Theory ABA on both private and public sector banks are discussed in general and suitable suggestions are proposed to the banking sector to improve productivity.

III. OBJECTIVES

- i. To measure the productivity of the employees of State Bank of India and HDFC Bank Limited.
- ii. To measure the cost of the employees of State Bank of India and HDFC Bank Limited.
- iii. To compare the cost and productivity of the employees of State Bank of India and HDFC Bank Limited.

IV. LIMITATIONS

This research study is based on the employees' productivity and cost of SBI and HDFC banks only from F.Y. 2011-12 to 2020-21 on the basis of selected parameters.

V. HYPOTHESES

1. H_{01} : "There is no significant difference between Revenue Per Employee (RPE) of the State Bank of India and HDFC Bank Limited from F.Y. 2011-12 to 2021-22."
2. H_{02} : "There is no significant difference between Cost Per Employee (CPE) of the State Bank of India and HDFC Bank Limited from F.Y. 2011-12 to 2021-22."

VI. RESEARCH METHODOLOGY

This research study is purely quantitative and analytical and is mainly based on published source which includes annual Reports of SBI and HDFC Bank for last ten financial years, along with reports and publications of Reserve Bank of India. Following parameters are applied to measure the productivity and cost which were discussed in the research paper "Analysing the effect of alternative banking channels on the employees productivity of commercial banks: Evidence from the State Bank of India 2021) [1]:

Part 01: For the measurement of Employees Productivity:
 (a) *Business Per Employee (BPE)* =
$$\frac{\text{Total Business}}{\text{Total No. of Employees}}$$



Total Business: Total Deposits + Total Advances

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

$$(c) \text{ Revenue Per Employee (RPE)} = \frac{\text{Total Revenue}}{\text{Total No. of Employees}}$$

Part 02: For the measurement of Employees Cost:

$$(a) \text{ Cost Per Employee (CPE)} = \frac{\text{Employees Cost}}{\text{Total No. of Employees}}$$

$$(b) \text{ Employees Cost to Operating Expenditures (ECO)} = \frac{\text{Employees Cost} * 100}{\text{Operating Expenditures}}$$

$$(c) \text{ Employees Cost to Total Business (ECTB)} = \frac{\text{Employees Cost} * 100}{\text{Total Business}}$$

$$(d) \text{ Employees Cost Ratio (ECR)} = \frac{\text{Employees Cost} * 100}{\text{Total Revenue}}$$

Part 03: For the Test of Hypotheses:

Student's t-Test:

$$t = \frac{x_1 - x_2}{S} * \sqrt{\frac{n_1 * n_2}{n_1 + n_2}}$$

VII. EMPLOYEES PRODUCTIVITY OF SBI AND HBL

Accepting deposits and granting loans are the core activities of all the commercial banks. Commercial 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 HBL on these basic parameters through the following table:

Table 01: Business Per Employee, Revenue Per Employee and Profit Per employee of SBI And HBL [11] ((From F.Y. 2011-12 to 2020-21) (In. INR Million)

STATE BANK OF INDIA (SBI)			
Financial Year	BPE	RPE	PPE
2011-12	88.70	5.61	0.86
2012-13	98.48	5.94	0.87
2013-14	116.88	6.95	0.73
2014-15	134.91	8.2	0.91
2015-16	153.77	9.23	0.66
2016-17	172.54	10.07	0.71
2017-18	175.78	10.04	-0.59
2018-19	198.14	10.81	0.06
2019-20	223.17	11.88	0.99
2020-21	249.57	12.56	1.12
MEAN	161.19	9.13	0.63
CAGR	12.18%	9.37%	2.98%
HDFC BANK LIMITED (HBL)			
Financial Year	BPE	RPE	PPE
2011-12	66.91	4.92	0.78
2012-13	77.60	6.07	0.97
2013-14	98.34	6.15	1.24
2014-15	107.00	7.53	1.34
2015-16	115.47	8.11	1.4
2016-17	142.09	9.68	1.73
2017-18	163.97	10.82	1.98
2018-19	177.7	11.89	2.15
2019-20	183.05	11.80	2.24
2020-21	205.5	12.16	2.59
MEAN	133.76	8.91	1.64
CAGR	13.28%	10.58%	14.26%

Source: Own Computation using excel on the basis of banking Data. [12]

Analysis:

On the bases of the study of the above table, it is perceptible that:

- In the terms of the Business Per employee (BPE), The SBI is leading as compare to HBL. The mean BPE of SBI is around Rs. 161 million, but for HBL it is around Rs.133 million. However, in the terms of the CAGR the HBL is slightly ahead of SBI with 1% margin.
- In the terms of the Revenue Per employee (RPE), The position of SBI and HBL is almost equal, as the mean RPE of SBI is Rs. 9.13 million, but for HBL it is Rs. 8.91

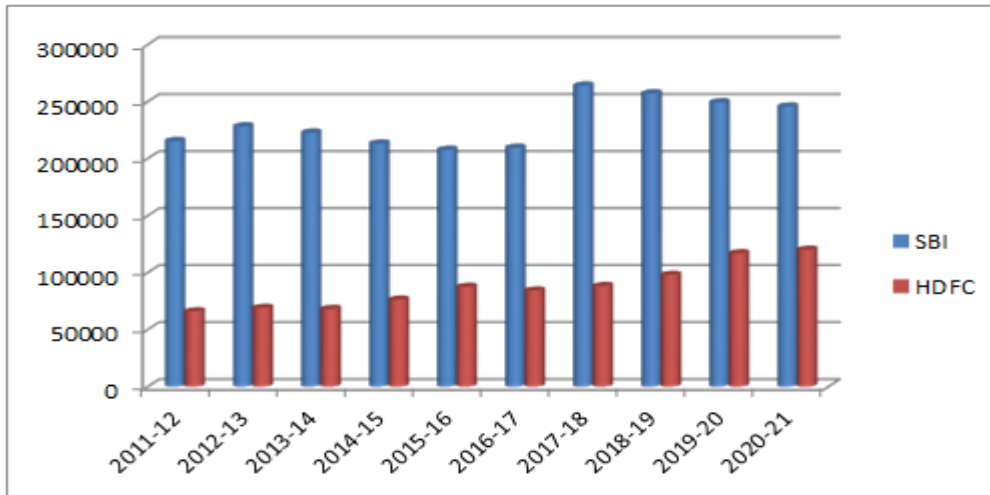
million. However, in the terms of growth rate again the HBL is slightly ahead of SBI with 1% margin.

- In the terms of the Profit Per employee (PPE), The HBL is well ahead of SBI. The mean PPE of HBL is Rs. 1.64 million, but for SBI it is only Rs.0.63 million. It means the PPE of HBL is 160% greater than the SBI. We can observe the same strong position of HBL in the terms of the CAGR in PPE. The growth rate of PPE of HBL is more than 14%, while for SBI it is just 3. There were certain fluctuations in the PPE of SBI, while in the case of HBL there was a consistent growth in the PPE.



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Chart 01: Number of Employees of SBI and HBL (From F.Y. 2011-12 to 2020-21)



Source: Own creation using excel on the basis of banking Data.

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 HBL on these basic parameters through the following table:

VIII. EMPLOYEES COST OF SBI AND HBL

Table 02: Employees Cost of SBI and HDFC (From F.Y. 2011-12 to 2020-21)

STATE BANK OF INDIA (SBI)				
Financial Year	CPE (In INR Million)	ECOE (In %)	ECTB (In %)	ECR (In %)
2011-12	0.79	16.58	0.89	14.04
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
MEAN	1.29	15.31%	0.81%	14.04%
HDFC BANK LIMITED (HBL)				
2011-12	0.51	12.43	0.77	10.45
2012-13	0.57	11.27	0.74	9.46
2013-14	0.61	12.50	0.62	9.97
2014-15	0.62	10.05	0.58	8.27
2015-16	0.65	9.72	0.56	8.03
2016-17	0.77	9.67	0.54	7.95
2017-18	0.77	8.73	0.47	7.13
2018-19	0.79	8.13	0.45	6.66
2019-20	0.81	8.52	0.44	6.90
2020-21	0.86	9.02	0.42	7.10
MEAN	0.69	10.00%	0.56%	8.19%

Analysis:

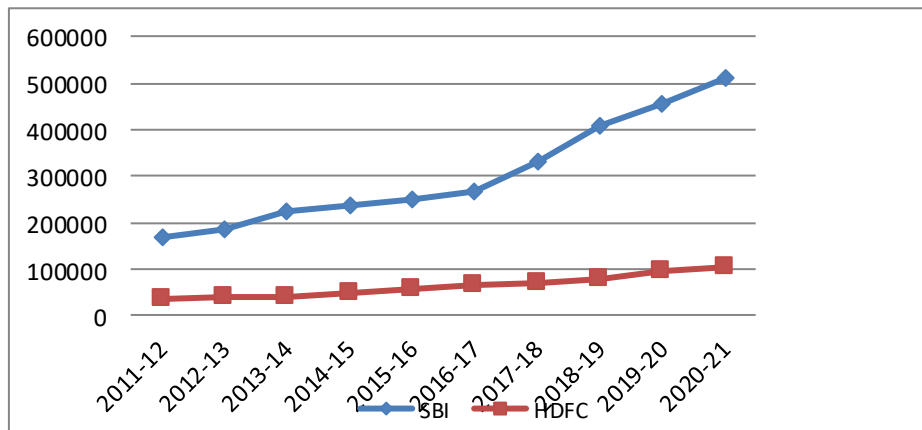
On the bases of the study of the above table, it is perceptible that:

- In the terms of the Cost Per employee (CPE) [7], The SBI is leading as compare to HBL. The mean BPE of SBI is Rs. 1.29 million, but for HBL it is Rs.0.69 million. It means SBI is spending Rs. 107,500 per month per employee, while HBL is spending Rs. 57,500 only. Thus per employee cost for SBI is just double of HBL.

In the terms of the percentage, The CPE of SBI is increased by 162%, while CPE of HBL is increased by only 69%. During this period, employees of SBI are increased by only 14%, while the employees of HBL are increased by 82%. However, in the terms of the CAGR the HBL is slightly ahead of SBI with 1% margin.

- 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 HBL. Out of the total operating expenditures 1/6th part of expenditures of SBI is for the employees, while in case of HBL it is only 1/10th part. In other terms the employee cost of SBI is more than 50% greater as compare to the HBL.

Chart 02: Employees Cost of SBI and HBL (from F.Y. 2011-12 to 2020-21) (in. INR Million)



Source: Own creation using excel on the basis of banking Data.

IX. TEST OF HYPOTHESES

H₀₁: “There is no significant difference between Revenue Per Employee (RPE) of the State Bank of India and HDFC Bank Limited from F.Y. 2011-12 to 2021-22.”

Particulars	RPE OF SBI	RPE OF HDFC BANK
Sample Size (N)	10	10
Mean (X)	0.913	0.891
Standard Deviation (S.D.)	0.2405	0.2712
Degree of Freedom (DF)	18	
Significance Level	0.05	
T-Test Value	0.192	
p-value (Computed)	0.424946	
p-value (Critical)	0.05	
Result	0.424946 > 0.05. Ho1 is Accepted, as p > 0.05.	

Source: Own Calculations using excel based on Annual Reports of SBI and HDFC Bank.

(H₀₂): “There is no significant difference between Cost Per Employee (CPE) of the State Bank of India and HDFC Bank Limited from F.Y. 2011-12 to 2021-22.”

Particulars	CPE OF SBI	CPE OF HDFC BANK
Sample Size (N)	10	10
Mean (X)	0.129	0.07
Standard Deviation (S.D.)	0.0423	0.0117
Degree of Freedom (DF)	18	
Significance Level	0.05	
T-Test Value	4.2446	
p-value (Computed)	0.000244	
p-value (Critical)	0.05	
Result	0.000244 < 0.05. Ho2 is Rejected, as p < 0.05.	
Alternate Hypothesis Accepted	There is a significant difference between Cost Per Employee (CPE) of the State Bank of India and HDFC Bank Limited from F.Y. 2011-12 to 2021-22.”	

Source: Own Calculations using excel based on Annual Reports of SBI and HDFC Bank.

X. KEY FINDINGS, CONCLUSION AND SUGGESSTIONS

The analysis of employee’s productivity and cost of SBI and HDFC bank has enabled the researchers to draw a conclusion on the basis of certain parameters and hypothesis testing. The statistical tool used for data analysis has helped the researchers to observe a significant variation pertaining to the above mentioned parameters. The comprehensive analysis of productivity and cost reveals that:

- In the terms of the BPE, RPE and PPE, the growth rate of HBL is higher than the SBI. For SBI, the BPE is higher, for HBL the PPE is significantly higher and in the terms of the RPE both are just alike. So the growth in the productivity of HDFC Bank is well ahead of SBI. The employees’ productivity of HDFC 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 HBL. 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 HBL. 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.

With the analyses the main reasons for the variation in productivity has been observed for which following suggestions have been offered by the researchers:

1. Employees and management of SBI are required to improve their performances. [8]
2. Management of SBI should work on the issue of NPAs, with dual approach. Credit should be disbursed in favour of solvent and honest customers, after proper enquiry and without political pressure.



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3. According to the guidelines of RBI, previous matter of NPAs should be resolved first by the employees before the disbursement of another credit.
4. SBI is also suggested to launch new credit products for maximum utilisation of the bulk amount of the deposits available. Proper use of advance technology will be helpful for them to reduce their operating cost. They should also try to improve their HRM efficiency to achieve greater profit per employee [7].
5. HDFC Bank is suggested to open their new branches in rural and semi urban area to collect their savings and to give banking facilities cover to large unbanked population



Dr. Vinod Kumar Adwani, is working as an Assistant Professor in the Department of Commerce from the Bhopal School of Social Sciences. He is a distinguished academicians with an extensive teaching experience of more than 15 years in Higher Education. He has completed M.com from Government Hamidia Arts and Commerce College, Bhopal and Ph.D in commerce

from Barkatullah University. His area of specialization is Accounting, Taxation, Banking and finance. He has interest in the capital market operations and financial inclusiveness. His 15 research papers have been published in reputed national and international Journals. He has presented 5 research papers in areas of Banking, finance, Foreign Trade and Accounting in international conferences and seminars. He has also contributed some chapters in edited books on various streams of commerce. He has a credit of Two authored books "Accounting and Financial Management for BCA and "Customs Duty for B.Com.. He has completed 5 certificate courses from NPTEL with elite gold and silver certification for financial accounting and cost accounting and two refresher courses in commerce and financial market from SWAYAM. He is an expert in the field of counseling and mentoring of college students. He is a passionate academicians and a researcher.

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AUTHORS PROFILE



Dr. Neeta Vaydande, is an Associate Professor in the Department of Commerce, The Bhopal School of Social Sciences. She has more than 10 years of teaching experience and she is also associated with Prismane Consulting Pvt Ltd, Pune as a Sr. Consultant -Economics & Trade. She was connected with many colleges in Mumbai as a regular faculty and visiting faculty. She has done

M.Phil from SNDT University, Mumbai and Ph.D from Savitribai Phule Pune University. With her wide teaching experience she has managed to gather good command over the varied subjects of commerce and management. She is a registered Ph.D guide at Barkatullah University, Bhopal and a member of Board of Studies, Commerce. She has authored five books for four different universities. She has many National and International Publications to her accord. She has presented three research papers and has contributed chapters in the many edited books.