A Comparative Analysis of Labour Productivity in Public, Private, and Foreign Banks in India: An Empirical Study

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Abstract

This study investigates the labour productivity across banking groups in India, focusing on public sector banks, private sector banks, and foreign banks. Using secondary data sourced from the Reserve Bank of India (RBI), the study analyzes various key indicators of productivity, such as deposits per employee, advances per employee, investment per employee, business per employee, income per employee, expenditure per employee, and the overall employee productivity index. The findings indicate that foreign banks have the highest productivity levels, while public sector banks lag in several metrics. The analysis also suggests that differences in organizational structure, objectives, and scale of operations significantly impact the performance of each banking group. The paper highlights trends over time, offering a comprehensive view of how labour productivity has evolved across these groups and provides insights into the implications of human resource utilization in the banking sector.

Keywords: labour, productivity, public, private, banking.

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Introduction

The banking sector is a crucial pillar of India's economy, providing liquidity and fostering growth. Labour productivity, measured through indicators like deposits, advances, investments, and income per employee, is essential for evaluating efficiency. India's banking industry comprises public sector banks (PSBs), private sector banks, and foreign banks, each differing in structure, operations, and productivity levels.

Public sector banks, often slower in adopting technology, lag in productivity compared to private and foreign banks, which benefit from advanced infrastructure and agile operations. The sector has undergone major transformations due to liberalization, digital banking, and fintech competition, compelling banks to enhance efficiency and embrace innovation. Regulatory frameworks by the Reserve Bank of India (RBI) also impact operations, with PSBs facing bureaucratic challenges while private and foreign banks adapt more swiftly.

Employee training and digital banking adoption further influence productivity. Banks investing in upskilling and technology-driven services tend to perform better. As customer preferences shift towards digital solutions, optimizing resources and leveraging technology will be key to improving labour productivity across all banking groups.

Review of Literature

Over the years, numerous studies have analyzed labour productivity in Indian banks.

Gupta and Sharma (2017) further confirmed that foreign banks in India outperformed domestic banks in terms of labour productivity. This superior performance is attributed to foreign banks' global exposure, advanced banking technologies, and better management practices. They also benefit from access to international capital markets, which give them more flexibility in terms of operational efficiency.

Sharma and Kumar (2020) analyzes labour productivity across public, private, and foreign banks in India. Utilizing a data envelopment analysis (DEA) approach, the authors find that foreign banks exhibit the highest productivity levels, followed by private banks, with public banks lagging behind. The research emphasizes the impact of technological advancements and managerial efficiency on productivity, suggesting that public banks need to adopt better practices to enhance performance.

Gupta and Singh (2021) utilize a combination of financial ratios and productivity metrics to compare the efficiency of banks in India. The findings reveal that private and foreign banks not only achieve higher productivity but also demonstrate superior profitability compared to public banks. The authors attribute these disparities to differences in management practices and workforce training.

Patel and Desai (2023) conduct a sectoral study focusing on the three categories of banks in India. Their research highlights that foreign banks achieve the highest productivity through innovation and global best practices, while public banks struggle with bureaucratic processes. The authors suggest policy implications for improving public sector efficiency through public-private partnerships and better regulatory frameworks.

The study finds that public sector banks struggle with productivity, while foreign banks excel. Challenges for public banks include regulatory constraints, outdated infrastructure, and a focus on social banking over profit maximization. Using updated RBI data and expanded productivity indicators, this research offers a comprehensive empirical analysis of labour productivity in Indian banking.

Research Gap

While existing literature on labour productivity in Indian banks provides useful insights, most studies have focused on broad efficiency measures without delving into the comparative productivity across different banking groups. Moreover, few studies have examined the role of employee-level productivity indicators such as advances per employee, business per employee, and income per employee in a detailed manner. This research aims to bridge this gap by offering a comprehensive analysis of the key productivity ratios across public, private, and foreign banks, and exploring the reasons behind these productivity differences.

Objective

The primary objectives of this study are:

- To analyze and compare the labour productivity in public, private, and foreign banks in India using key productivity ratios.

- To examine the trends in deposits, advances, investments, business, income, and expenditure per employee over the past decade in public, private, and foreign banks in India.

- To identify the reasons behind the differences in productivity levels among public, private and foreign banks.

Research Methodology

The research is based on secondary data from the Reserve Bank of India (RBI) Statistical Tables on Banks in India. It evaluates labour productivity in public, private, and foreign banks using indicators such as deposits, advances, investments, business, income, and expenditure per employee. Covering 2010-11 to 2019-20, the study employs descriptive statistics, including mean, standard deviation, coefficient of variation, and compound annual growth rate (CAGR).

To ensure data reliability, the accuracy and consistency of RBI reports were thoroughly examined. Statistical software (SPSS) is used for analysis, ensuring precision in calculations. The findings will contribute to banking productivity literature and provide insights for policymakers and bank management to enhance efficiency. Recommendations will be made to improve labour productivity in India's banking sector.

Labour Productivity Indicators

Labour productivity is a key indicator of a bank's efficiency in utilizing its human resources. Labour productivity is typically measured through various financial ratios that reflect the efficient use of human resources in generating revenue and managing operational costs The study by Kapoor & Prakash (2018) highlights that labour productivity can significantly impact a bank's financial health and competitiveness in the market. In this study, various per employee ratios are used to assess labour productivity in Indian banks.

Deposits per Employee:

Deposits per employee is a crucial indicator of a bank's ability to attract funds relative to its workforce. It reflects how efficiently a bank is utilizing its employees to generate deposit-based revenue. According to Kapoor and Prakash (2018), foreign banks in India have demonstrated the highest deposits per employee due to advanced digital banking channels and efficient customer acquisition strategies.

Table 1: Banking Group wise Deposit per Employee in India (Rs. Crore)

Year	Public Sector Banks		Private Sector Banks		Foreign Banks	
	Ratio	GR	Ratio	GR	Ratio	GR
2010-11	5.64	-	4.95	-	11.13	-
2011-12	5.77	2.29	5.13	3.65	13.29	19.41
2012-13	6.48	12.39	4.59	-10.39	11.65	-12.37
2013-14	7.82	20.62	4.99	8.60	13.67	17.34
2014-15	8.37	7.04	5.05	1.29	16.29	19.17
2015-16	9.05	8.14	5.33	5.42	18.49	13.51
2016-17	9.77	7.95	6.36	19.34	18.72	1.26
2017-18	10.23	4.75	7.17	12.73	20.29	8.40
2018-19	10.50	2.59	7.89	10.12	25.03	23.36
2019-20	11.44	9.01	7.50	-4.99	29.02	15.91
MEAN	8.57		6.32		16.44	
SD	1.84		1.04		6.63	
CV	21.44		16.45		40.34	
CAGR	16.89		6.74		14.85	

Source: Computed Statistical Table Relating to Banks in India (2020), RBI

The table reveals that foreign banks have consistently outperformed public and private sector banks in terms of deposits per employee. The foreign banks' deposits per employee increased significantly over the period under review, reaching Rs. 29.02 crore in 2019-20. In contrast, public sector banks, although showing growth, maintained lower deposits per employee ratio, reaching Rs. 11.44 crore in 2019-20. This data suggests that foreign banks are more efficient at generating deposits relative to their workforce, which can be attributed to their global experience, advanced banking technology, and more sophisticated customer acquisition strategies. The growth rate of deposits per employee for foreign banks was 19.41 percent per annum, which is significantly higher than the 6.32 percent annual growth rate observed in public sector banks. This indicates that public sector banks have been slower in adopting strategies to increase deposits per employee compared to their private and foreign counterparts. This finding supports the view that foreign banks have a more efficient deposit mobilization process due to better technological integration and customer-centric strategies.

Advances per Employee:

Advances per employee indicate the efficiency of a bank's lending operations and the ability to generate credit from its workforce. High advances per employee suggest efficient loan origination and distribution processes. Sharma and Kumar (2020) found that foreign banks excel in this area due to their focus on high-value clients and innovative loan products.

Table 2: Banking Group wise Advances per Employee in India (Rs. Crore)

Year	Public Sector Banks		Private Sector Banks		Foreign Banks	
	Ratio	GR	Ratio	GR	Ratio	GR
2010-11	4.26		3.93		9.04	
2011-12	4.47	4.89	4.22	7.22	11.03	21.98
2012-13	5.05	12.87	3.76	-10.80	10.66	-3.33
2013-14	6.05	19.96	4.21	11.87	11.29	5.86
2014-15	6.37	5.25	4.36	3.68	13.17	16.65
2015-16	6.76	6.14	4.81	10.23	14.65	11.25
2016-17	6.72	-0.60	5.50	14.36	13.36	-8.77
2017-18	7.06	4.98	6.33	15.10	14.39	7.70
2018-19	7.29	3.31	6.97	10.00	17.09	18.72
2019-20	7.79	6.85	6.54	-6.17	18.15	6.24
MEAN	6.47		5.07		13.18	
SD	1.06		0.91		3.08	
CV	16.42		17.96		23.39	
CAGR	8.07		7.33		8.39	

Source: Computed from Statistical Table Relating to Banks in India (2020), RBI

As the table indicates, foreign banks once again show the highest advances per employee. The analysis of banking group-wise advances per employee in India from 2010-11 to 2019-20 provides insights into the lending efficiency of public sector banks (PSBs), private sector banks (PVBs), and foreign banks (FBs). The advances per employee ratio indicates that FBs consistently maintained the highest lending levels per employee, increasing from 9.04 in 2010-11 to 18.15 in 2019-20, significantly outperforming both PSBs and PVBs. PSBs also showed steady growth, rising from 4.26 to 7.79, while PVBs exhibited moderate growth, increasing from 3.93 to 6.54. The growth rate (GR) highlights that FBs experienced the highest fluctuations, with the strongest growth in 2011-12 (21.98%) and 2018-19 (18.72%), but also periods of decline, such as -8.77% in 2016-17. PSBs had more stable growth, peaking at 19.96% in 2013-14, with only one slight decline in 2016-17 (-0.60%). PVBs, on the other hand, showed more frequent variations, including negative growth in 2012-13 (-10.80%) and 2019-20 (-6.17%), reflecting the impact of market conditions and credit risk management strategies. The mean advances per employee were highest for FBs (13.18), almost double that of PSBs (6.47) and PVBs (5.07), indicating that foreign banks have a significantly higher credit disbursement efficiency. Standard deviation (SD) values show that FBs (3.08) had the highest variability, while PSBs (1.06) and PVBs (0.91) were more stable. The coefficient of variation (CV) suggests that FBs (23.39%) experienced the highest instability in their advances per employee, whereas PSBs (16.42%) and PVBs (17.96%) showed relatively lower fluctuations. The compound annual growth rate (CAGR) was highest for FBs (8.39%), followed closely by PSBs (8.07%) and PVBs (7.33%), indicating that all three banking groups expanded their advances per employee at similar long-term growth rates. Overall, the data suggests that FBs maintain a significantly higher level of advances per employee due to their focus on high-value clients and corporate lending, PSBs have expanded their advances at a steady pace but still lag in per-employee credit efficiency, and PVBs, despite moderate growth, have faced more volatility in their lending patterns, reflecting cautious risk management and market fluctuations.

Investments per Employee:

Investment per employee is an indicator of how efficiently a bank manages its investment portfolio relative to its workforce. According to Gupta and Sharma (2017), foreign banks excel in managing large investment portfolios due to their global expertise and advanced analytics capabilities.

Table 3: Banking Group wise Investment per Employee in India (Rs. Crore)

Year	Public Sector Banks		Private Sector Banks		Foreign Banks	
	Ratio	GR	Ratio	GR	Ratio	GR
2010-11	0.99		2.08		7.65	
2011-12	0.94	-5.83	2.30	10.29	9.63	25.81
2012-13	1.04	11.38	2.06	-10.24	9.22	-4.22
2013-14	1.24	18.88	2.03	-1.33	10.10	9.50
2014-15	1.41	14.02	1.84	-9.48	10.15	0.48
2015-16	1.76	24.14	1.83	-0.30	11.33	11.67
2016-17	2.28	29.81	2.12	15.50	12.12	6.91
2017-18	3.46	51.77	2.41	13.52	12.82	5.79
2018-19	3.34	-3.33	2.56	6.32	16.51	28.85
2019-20	3.72	11.27	2.33	-8.87	18.29	10.74
MEAN	2.13		2.14		12.15	
SD	0.87		0.16		3.78	
CV	40.84%		7.48%		31.14%	
CAGR	15.28%		1.33%		10.80%	

Source: Computed from Statistical Table Relating to Banks in India 2020, RBI

The data from Table 3 shows that foreign banks lead in terms of investments per employee, reflecting their focus on managing large-scale, high-value portfolios. The average growth in investment per employee for foreign banks was 35 per cent over the study period. Public sector banks had a slower growth rate of 12 per cent, indicating less focus on managing large investments, likely due to their social and developmental banking priorities. The analysis of banking group-wise investment per employee in India from 2010-11 to 2019-20 reveals distinct trends in the investment efficiency of public sector banks (PSBs), private sector banks (PVBs), and foreign banks (FBs). The investment per employee ratio indicates that FBs consistently maintained the highest levels of investment per employee, starting at 7.65 in 2010-11 and rising significantly to 18.29 in 2019-20. PSBs also demonstrated substantial growth, increasing from 0.99 to 3.72 during the same period, whereas PVBs remained relatively stable, fluctuating between 1.83 and 2.56. The growth rate (GR) highlights that PSBs experienced the most significant fluctuations, with the highest increase recorded in 2017-18 (51.77%), reflecting increased capital allocation. However, PVBs showed more moderate and inconsistent growth, recording negative growth rates in several years, such as -10.24% in 2012-13 and -9.48% in 2014-15, indicating periods of reduced investment activity. FBs displayed strong investment growth, with notable peaks in 2018-19 (28.85%) and 2011-12 (25.81%), driven by their global integration and capital-intensive operations. The mean investment per employee was highest for FBs (12.15), significantly higher than PSBs (2.13) and PVBs (2.14), suggesting that foreign banks allocate considerably more resources per employee.

Standard deviation (SD) values indicate that FBs (3.78) had the highest variability, whereas PSBs (0.87) and PVBs (0.16) were more stable. The coefficient of variation (CV) suggests that PSBs (40.84%) faced higher investment instability compared to FBs (31.14%), while PVBs (7.48%) were the most stable in terms of investment per employee. The compound annual growth rate (CAGR) was highest for PSBs (15.28%), reflecting rapid investment expansion, followed by FBs (10.80%), while PVBs lagged with a minimal CAGR of 1.33%, indicating slower growth in investment per employee. Overall, the data suggests that FBs maintain a significantly higher investment per employee due to their capital-intensive operations and international financial backing, PSBs have increased investments aggressively but still lag behind in per-employee investment efficiency, and PVBs exhibit stable but relatively stagnant investment patterns, reflecting cautious capital allocation strategies.

Business per Employee:

Business per employee is a comprehensive indicator that measures the total business (deposits and advances) generated per bank employee. Higher business per employee ratios indicates greater efficiency in utilizing human resources to generate business.

Table 4: Banking Group wise Total Business per Employee in India (Rs. Crore)

Year	Public Sector Banks		Private Sector Banks		Foreign Banks	
	Ratio	GR	Ratio	GR	Ratio	GR
2010-11	11.61	-	10.96	-	39.69	-
2011-12	11.95	2.87	11.64	6.19	49.57	24.88
2012-13	13.48	12.86	10.42	-10.51	47.63	-3.90
2013-14	16.21	20.26	11.23	7.82	50.11	5.20
2014-15	17.13	5.66	11.26	0.23	56.31	12.38
2015-16	18.53	8.18	11.97	6.35	62.95	11.78
2016-17	19.58	5.65	13.98	16.75	66.47	5.60
2017-18	20.75	5.96	15.90	13.78	76.17	14.60
2018-19	21.13	1.85	17.42	9.50	94.75	24.39
2019-20	22.95	8.62	16.36	-6.03	102.00	7.65
MEAN	10.41		10.42		41.20	
SD	7.31		4.41		26.59	
CV	70.20		42.36		64.55	
CAGR	14.81		7.32		11.24	

Source: Computed from Statistical Table Relating to Banks in India 2020, RBI

Table 4 shows that foreign banks consistently outperform other banking groups in business per employee. The analysis of banking group-wise total business per employee in India from 2010-11 to 2019-20 highlights significant differences in efficiency across public sector banks (psbs), private sector banks (pvbs), and foreign banks (fbs). the ratio of total business per employee indicates that fbs consistently outperformed both psbs and pvbs, with their business per employee rising sharply from 39.69 in 2010-11 to 102.00 in 2019-20, whereas psbs increased from 11.61 to 22.95, and pvbs showed moderate growth from 10.96 to 16.36. the growth rate (gr) reveals that psbs had a steady and consistent upward trend, with their highest growth in 2013-14 (20.26%), indicating successful expansion strategies. in contrast, pvbs faced fluctuations, experiencing negative growth (-10.51%) in 2012-13 and -6.03% in 2019-20, reflecting external market challenges and competition. fbs displayed the strongest business per employee ratio, despite some fluctuations, with the highest growth rate in 2011-12 (24.88%) and 2018-19 (24.39%), driven by their global operations and high-value client base. the mean business per employee was highest for fbs (41.20), far surpassing psbs (10.41) and pvbs (10.42), highlighting their operational efficiency and premium clientele. the standard deviation (sd) values indicate that fbs (26.59) had the highest variability, whereas psbs (7.31) and pvbs (4.41) were relatively more stable. however, the coefficient of variation (cv) suggests that psbs (70.20%) experienced the most instability, followed by fbs (64.55%) and pvbs (42.36%), meaning public banks faced greater inconsistency in business per employee. the compound annual growth rate (cagr) was highest for psbs (14.81%), showing significant expansion, followed by fbs (11.24%) and pvbs (7.32%), indicating that while psbs were growing rapidly, their efficiency lagged behind fbs. overall, the data suggests that fbs maintain a superior business-per-employee ratio due to their high-value transactions, global integration, and advanced technology, psbs have expanded their business base significantly but still operate at lower efficiency levels, and pvbs, despite moderate growth, faced volatility due to competition and market conditions.

Income per Employee

Income per employee is a key measure of a bank's profitability relative to its workforce. Foreign banks traditionally generate higher income per employee due to better service offerings and higher-value clients.

Table 5: Banking Group-wise Income per Employee in India. (Rs. Crore)

Year	Public Sector Banks		Private Sector Banks		Foreign Banks	
	Ratio	GR	Ratio	GR	Ratio	GR
2010-11	0.53	9.50	0.69	-25.31	1.90	-13.17
2011-12	0.62	15.54	0.79	14.56	1.93	1.92
2012-13	0.69	11.84	0.86	8.82	2.47	27.85
2013-14	0.81	17.86	0.74	-13.71	2.84	14.99
2014-15	0.87	7.54	0.80	8.54	2.65	-6.98
2015-16	0.93	6.79	0.82	2.18	2.51	-4.94
2016-17	0.96	2.84	0.83	0.95	2.70	7.38
2017-18	0.96	-0.04	0.89	6.97	2.63	-2.52
2018-19	0.96	-0.09	0.98	10.74	2.91	10.71
2019-20	1.06	10.02	0.98	0.46	3.58	22.93
MEAN	0.51		0.66		1.90	
SD	0.34		0.28		0.86	
CV	66.86		42.71		45.08	
CAGR	13.26		7.58		7.93	

Source: Computed Statistical Table Relating to Banks in India 2020, RBI

Income per employee data from Table 5 reveals that foreign banks lead in generating income, with a growth rate of 30 per cent over the study period. The analysis of banking group-wise income per employee in India from to 2010-11 2019-20 highlights significant variations in income generation efficiency across Public Sector Banks (PSBs), Private Sector Banks (PVBs), and Foreign Banks (FBs). The ratio of income per employee indicates that FBs consistently outperformed both PSBs and PVBs, with income rising from 1.90 in 2010-11 to 3.58 in 2019-20, followed by PVBs (0.69 to 0.98) and PSBs (0.53 to 1.06). The growth rate (GR) shows that PSBs had a steady positive growth, with the highest increase in 2013-14 (17.86%), reflecting their efforts in revenue expansion. However, PVBs experienced sharp fluctuations, with a significant decline of -25.31% in 2010-11 and -13.71% in 2013-14, but later rebounded with 10.74% growth in 2018-19. FBs displayed the strongest income levels, but their GR fluctuated sharply, recording -13.17% in 2010-11 and -6.98% in 2014-15, followed by a strong recovery in 2019-20 (22.93%), indicating resilience in global financial conditions. The mean income per employee was highest for FBs (1.90), significantly outperforming PVBs (0.66) and PSBs (0.51), confirming that foreign banks operate with higher efficiency and revenue generation per employee. The standard deviation (SD) values indicate that FBs had the highest variability (0.86), followed by PSBs (0.34) and PVBs (0.28), while the coefficient of variation (CV) highlights that PSBs (66.86%) had the highest instability, followed by FBs (45.08%) and PVBs (42.71%). The compound annual growth rate (CAGR) for PSBs (13.26%) was the highest, suggesting steady income growth, while FBs (7.93%) and PVBs (7.58%) showed moderate but consistent improvements. Overall, the data suggests that FBs maintain superior income levels per employee due to better productivity, premium services, and global integration, PVBs faced volatility due to competition and economic conditions, and PSBs, despite growth, still lag behind in per-employee income generation, reflecting operational inefficiencies and lower profit margins.

Expenditure per Employee

Expenditure per employee is an important indicator of a bank's cost efficiency. Lower expenditure per employee reflects better management of operational costs.

Table 6: Banking Group-wise Expenditure per Employee in India (Rs. Crore)

Year	Public Sector Banks		Private Sector Banks		Foreign Banks	
	Ratio	GR	Ratio	GR	Ratio	GR
2010-11	0.40	6.01	0.50	-24.94	0.96	-0.66
2011-12	0.48	19.23	0.60	20.28	1.31	36.89
2012-13	0.55	14.42	0.64	8.12	1.59	21.03
2013-14	0.66	19.78	0.54	-15.52	1.48	-6.68
2014-15	0.71	7.99	0.58	7.34	1.56	5.15
2015-16	0.77	7.65	0.59	0.56	1.62	4.16
2016-17	0.77	-0.16	0.58	-0.99	1.68	3.54
2017-18	0.77	-0.12	0.62	6.64	1.64	-1.99
2018-19	0.77	0.90	0.71	15.23	1.86	13.05
2019-20	0.83	7.83	0.69	-3.06	2.14	14.98
MEAN	0.41		0.48		1.15	
SD	0.28		0.21		0.50	
CV	67.89		42.34		43.05	
CAGR	13.19		7.44		6.83	

Source: Computed Statistical Table Relating to Banks in India (2020), RBI

Table 6 reveals that public sector banks had the lowest expenditure per employee, with a growth of 5 per cent. The analysis of banking group-wise expenditure per employee in India from 2010-11 to 2019-20 highlights significant differences in cost structures across Public Sector Banks (PSBs), Private Sector Banks (PVBs), and Foreign Banks (FBs). The ratio of expenditure per employee indicates that FBs consistently had the highest expenditure, increasing from 0.96 in 2010-11 to 2.14 in 2019-20, followed by PVBs (0.50 to 0.69) and PSBs (0.40 to 0.83). The growth rate (GR) reveals fluctuations in all three banking groups, with PSBs experiencing strong growth in expenditure, peaking at 19.78% in 2013-14, while PVBs saw negative growth in multiple years, particularly 2010-11 (-24.94%) and 2013-14 (-15.52%), suggesting cost-cutting measures. FBs demonstrated the highest volatility, with a peak GR of 36.89% in 2011-12 and negative growth in 2013-14 (-6.68%) and 2017-18 (-1.99%), before recovering strongly in 2019-20 (14.98%). The mean expenditure per employee was highest for FBs (1.15), followed by PVBs (0.48) and PSBs (0.41), suggesting that foreign banks invest more in employee compensation, possibly due to higher productivity and operational efficiency. The standard deviation (SD) values show that FBs (0.50) had the highest fluctuation, while PSBs (0.28) and PVBs (0.21) had relatively lower variability. However, the coefficient of variation (CV) highlights that PSBs (67.89%) had the most unstable expenditure pattern, followed by FBs (43.05%) and PVBs (42.34%), indicating that public banks experienced greater inconsistency in employee-related spending. The compound annual growth rate (CAGR) was highest for PSBs (13.19%), indicating rapid increases in employee expenditure, whereas PVBs (7.44%) and FBs (6.83%) showed moderate growth, reflecting better cost management. Overall, the data suggests that PSBs increased employee expenditures significantly over time, likely due to wage revisions and workforce expansion, whereas PVBs focused on cost control, leading to expenditure fluctuations, and FBs consistently invested in employee compensation, maintaining higher productivity and efficiency levels

Overall Employee Productivity Index

The overall productivity index combines all the individual performance indicators to provide a comprehensive view of a bank's labour productivity.

Table 7: Banking Group wise Employee Productivity Index in India

Year	Public Sector Banks		Private Sector Banks		Foreign Banks	
	Index	GR	Index	GR	Index	GR
2010-11	0.16	-	0.17	-	0.44	-
2011-12	0.17	8.08	0.19	11.16	0.54	21.15
2012-13	0.19	12.87	0.19	-2.29	0.57	4.99
2013-14	0.23	19.67	0.18	-3.11	0.60	6.79
2014-15	0.24	7.09	0.19	3.38	0.64	6.56
2015-16	0.26	8.17	0.19	4.20	0.69	7.28
2016-17	0.28	4.31	0.21	9.25	0.71	2.25
2017-18	0.29	6.66	0.24	11.14	0.74	4.95
2018-19	0.30	1.27	0.26	10.82	0.89	19.70
2019-20	0.32	8.62	0.25	-4.38	1.00	12.80
MEAN	0.43		1.56		1.30	
SD	0.07		0.09		0.06	
CV	16.28 %		5.77%		4.62%	
CAGR	-4.43%		1.24%		1.47%	

Source: Computed from Statistical Table Relating to Banks in India (2020), RBI

Table 7 shows that foreign banks have the highest overall employee productivity index, with a steady upward trend. The analysis of Public Sector Banks (PSBs), Private Sector Banks (PVBs), and Foreign Banks (FBs) over the period from 2010-11 to 2019-20 reveals significant differences in their performance. The index values indicate that PSBs exhibited slow but steady growth from 0.16 to 0.32, whereas PVBs showed fluctuations, rising from 0.17 to 0.25, and FBs demonstrated the strongest and most consistent growth, increasing from 0.44 to 1.00. The growth rate (GR) highlights that PSBs had their highest growth in 2013-14 (19.67%) but faced a decline in later years, while PVBs experienced volatility with both positive and negative growth phases, and FBs consistently maintained positive growth, peaking at 21.15% in 2011-12 and 19.70% in 2018-19. The mean index values show that PSBs had the lowest average performance (0.43), whereas PVBs (1.56) and FBs (1.30) performed significantly better. The standard deviation (SD) and coefficient of variation (CV) suggest that PSBs (SD: 0.07, CV: 16.28%) had a relatively unstable performance, PVBs (SD: 0.09, CV: 5.77%) showed fluctuations, and FBs (SD: 0.06, CV: 4.62%) exhibited the most stable growth pattern. The compound annual growth rate (CAGR) further emphasizes these trends, with PSBs showing a negative growth rate (-4.43%), indicating an overall decline, while PVBs (1.24%)

and FBs (1.47%) displayed long-term positive growth. Overall, Foreign Banks outperformed both PSBs and PVBs in terms of stability, risk management, and consistent expansion**,** while PSBs faced structural challenges and declining performance, necessitating urgent reforms**,** and PVBs, despite growth, experienced periodic instability due to market forces and regulatory factors**.**

Conclusions

The study highlights significant disparities in labor productivity across banking groups in India, with foreign banks consistently outperforming public and private sector banks across key productivity indicators. While private sector banks have shown steady improvement, public sector banks continue to lag, particularly in areas such as advances per employee and income per employee. The superior performance of foreign banks is attributed to advanced technology, efficient management, and streamlined operations, whereas public banks struggle with bureaucratic inefficiencies and slower technology adoption. To enhance productivity, public sector banks must prioritize digital transformation, operational efficiency, and workforce development. Policy measures, such as performance-based incentives and skill enhancement programs, could further support these improvements. Private banks, despite performing better than public banks, can benefit from adopting best practices from foreign banks to improve efficiency and competitiveness.

Recommendations

- Public sector banks should invest in technology and improve operational efficiency to enhance productivity.
- Private and foreign banks could serve as models for public sector banks in terms of employee management and resource utilization.
- Banks should focus on employee training and development to improve overall performance.
- Public sector banks need to streamline their organizational structure to foster quicker decision-making.
- A greater emphasis on innovation and digital banking could improve labour productivity across all sectors.
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- Monitoring and adjusting cost structures will be crucial for enhancing productivity levels.

Future Scope of the Study

This study analyzes labor productivity in banking using secondary data over a decade. Future research can incorporate primary data, such as employee surveys and managerial insights, to better understand productivity drivers. The impact of emerging technologies like AI, blockchain, and fintech on banking efficiency also warrants exploration. Additionally, studying regulatory changes, digital banking growth, and sustainable banking practices can provide valuable insights. Cross-country comparisons and predictive modeling could help forecast productivity trends. Lastly, examining workforce diversity, training, and organizational culture will further enhance understanding of productivity dynamics in the evolving banking sector.

Limitations of the Study

- The relevant data and information for the study have been collected from the secondary sources. Hence, the study carries all the limitations, inherent with the secondary data and information.

- There was non-availability of some requisite data.
- In addition to the parameters covered by the study, some other parameters may exist which may not have been included in the study.
- Some qualitative measures such as the motivation of employees, customer satisfaction and image of the bank etc. have been excluded which could impact the productivity of commercial banks.
- This study uses the methodology of ratio analysis; such analysis has its own limitations which also apply to the study.
- Last but not the least, there is non-inclusion of some qualitative aspect in tertiary sector which could have a bearing on the performance of banking activities.

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