
BRANCH PRODUCTIVITY IN INDIAN COMMERCIAL BANKS

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ABSTRACT

Banking industry plays a pivotal role in the economic development of the country. It is the most intensively synchronised industry as it deals with others money. The success of a bank depends not merely on its financial performance but also depends upon its productivity of its branches. Banks are very much concern on the role of branch and their efficient utilization as they are important factor on the operational efficiency and other parameters of banks performance. Performance of the banks depends upon the efficiency of its branches in performing banking functions. Hence branch productivity is an important factor while measuring overall productivity and .operational efficiency of banks. In the present study, to analyse the branch productivity four parameters like deposits, advances. business and profitability (spread - burden) are selected and tools like average and average annual growth rate have been used for analysing the data. The time period selected for the study is 2006-2018. This study reveals that performance growth rate of State Bank Group was much superior as compared to other bank groups. This study helps the commercial banks in India for utilising their branches effectively.

Keywords: Branches productivity, Operational Efficiency

1.1 INTRODUCTION

The Indian financial system consists of different types of financial institutions which are responsible for the development of the country's economy. Financial institutions can broadly be classified into banking and non-banking institutions. The most active sector of the financial system is the commercial banking sector. They are the financial intermediaries which perform the dual functions of mobilisation of deposits and deployment of surplus fund to the diverse sectors of the financial system. Commercial banks are institutions, which deal with money and credit primarily for earning profit. It serves as the central channel for all economic activities.

Commercial banks constitute the heart of the financial structure as they have the capability to put in to the money supply and thus generate extra purchasing power. This characteristic



distinguishes commercial bank from other financial institutions. It is one of the many institutions that impinges on the economy and affects its performance. These banks occupy a predominant place in the modern banking structure and are considered to be the mart of the world, the nerve centre of economies, finance of a nation and the barometer of its economic perspective.

Prior to nationalization, the growth of Indian banking sector was not up to the mark as they are giving more importance to socio-economic requirements of the country. But after nationalization the banking sector in India has made a praiseworthy progress and it extended its geographical coverage and functional reach. Along with the commendable growth and development in the post-nationalization period, some problems of the banking sector have developed reflecting a turn down in productivity and efficiency and reduction of the profitability as an outcome. Thus, maintaining continued viability and productivity can be regarded as the greatest challenge before banks during this decade. Thus it is very much imperative to assess its productivity and efficiency. Such an analysis becomes particularly significant in Indian banking scenario since the banking sector has been undergoing various far reaching structural reforms since 1991.

1.2 CONCEPT OF PRODUCTIVITY

Productivity is the key to prosperity of every nation. The overall growth of a nation depends to a great extent on the efficiency and productivity of each and every sector. Every sector including the banking sector should struggle hard to enhance the productivity as the increase in productivity aims at the effective and efficient mobilisation of resources. In economics, Productivity is the ratio of output produced per input. Symbolically,

$$\text{Productivity} = \frac{\text{Output}}{\text{Input}}$$

It is a comparison between quantity of goods and services produced and quantity of resources employed in turning out these goods and services. Productivity is not just increasing the production but optimum use of resources, i.e., to produce the maximum with minimum cost. Each input must produce results according to its optimum and potential capacity. The increasing productivity means increasing efficiency of various resources of production or getting better results with lesser efforts. Hence productivity indicates the operationally efficiency of an organisation.

1.3 PRODUCTIVITY IN BANKS

In the context of banking industry, productivity may be defined as the percentage change in operating earnings in relation to percentage change in operating cost. In the banking industry, higher cost responsiveness leads to lower productivity and vice versa. If the percentage increase in operating cost is greater than that of operating earnings, the average cost per unit of output (earnings) increases as output expands. Conversely, if the percentage increases in operating cost is lower than that of operating earnings (output) the average cost per unit of output declines. In the former case productivity of a bank is likely to fall, while in the latter case, the productivity would improve symbolically.

Therefore the issue of productivity and efficiency of bank is of considerable importance. Against such a backdrop, the need for studying the trends and ratios of different components of

earning and expenditure structure which influence productivity and efficiency of the bank cannot be overemphasized.

1.4 LITERATURE REVIEW

Uppal and kaur (2007)¹, in their paper “**Indian Banking Sector–Efficiency in Post Banking Sector Reform Era-New Challenges and Future Opportunities**” analyse the efficiency of all bank groups for the period from 1999-00 to 2004-05. The paper concluded that in the second post bank reform era, efficiency of all bank groups has increased in terms of some parameters of efficiency such as Profit per Employee, Profit per Branch, Business per Employee, Business per Branch, Expenses per Employee and Branch. The performance of Public Sector Banks is very poor and the reforms are more beneficial to the New Private Sector Banks and Foreign Banks.

Bansal (2010)², in his Ph.D. thesis “**Impact of Liberalisation on Productivity and Profitability of Public Sector Banks in India**” analysed the impact of liberalisation on productivity and profitability of Public Sector Banks and concluded that the ability of banks to face competition was dependent on technological up gradation and improvement in operational and managerial efficiency.

Uppal (2011)³ in his paper “**Global Crisis: Problems and Prospects for Indian Banking Industry**” analysed the efficiency of all the bank groups in the post- banking sector reforms era. The researcher analysed the efficiency of banks on the basis of some parameters like profitability per branch and branch, business per branch and branch and expenses per branch and branch. The paper concluded that efficiency of all the bank groups has increased in the second post-banking reforms period but these banking sector reforms are more beneficial for new private sector banks and foreign banks.

Vivek (2013)⁴, in their study, “**Analysis of Productivity of Indian Banks: A Comparative Study of Selected Private Banks**” made a comparison between selected Private Sector Banks in India on the basis of Deposits, Advances, Business per Employee and Branch and concludes that Employee Productivity of ICICI bank is far better than other selected Private Sector Bank, but per Branch Productivity of ICICI bank is less than the other selected banks.

Malaya (2015)⁵ in her research paper, “**A Study of Operational Efficiency of Commercial Banks in Indian Financial System at a Glance**” analyzed the comparative performance of public sector, old private sector, new private sector and foreign sector banks and the profitability position of different sector commercial banks in relation to its number of branches. The study revealed that overall operational efficiency of public sector banks is not satisfactory as compared to other bank groups. The growth rate of new private sector banks in case of number of branches are maximum followed by public sector banks and old private sector banks and the study also revealed that business per branch and profit per branch is maximum in case of foreign banks during the study period.

1.5 OBJECTIVES OF THE STUDY

1. To study and analyse exponential growth rate of productivity of commercial banks in India.

2. To make a comparison among productivity of commercial bank groups in India.

1.6 RESEARCH METHODOLOGY

This study is an attempt to fill important theoretical and methodological gaps that were found. This study is based on secondary data collected from the statistical tables published by RBI. It covers a period of 13 years with a gap of two years (2005-2006 to 2017-2018). Data have been collected from secondary source only.

Secondary Data

Secondary data necessary for measuring operational efficiency of Indian commercial banks were collected from:

- i) Report on Trend and Progress of Banking in India, RBI, Mumbai.
- ii) Statistical Tables relating to Banks, RBI, Mumbai.
- iii) Annual Reports and Monthly Bulletins, RBI, Mumbai.
- iv) Annual Reports of various Commercial Banks in India.
- v) Publication of Indian Bankers Association (IBA, Mumbai)
- vi) Books, Journals, Magazines, Periodicals, Websites and E-articles.

1.7 ANALYSIS OF PRODUCTIVITY OF COMMERCIAL BANKS IN INDIA

The present study attempts to analyse the productivity of Indian commercial banks for a period of 13 years with an interval of two years commencing from 2005-06 to 2017-18.

In the present study for analysing the productivity of commercial banks, two important techniques viz. **Ratio Analysis and Trend Analysis** have been used by the researcher. For the purpose of analysing the productivity, Indian commercial banks are comprehensively grouped into four unique classifications;

- i) Nationalised Banks (NBs)
- ii) State Bank Group (SBG)
- iii) New Private Sector Banks (NPSBs) and
- iv) Old Private Sector Banks (OPSBs).

For measuring the branch productivity, the following indicators have been used in this study. They are

- a) Profitability per Branch
- b) Business per Branch
- c) Deposits per Branch
- d) Advances per Branch
- a) **Profitability per Branch**

This ratio has been computed by dividing the profit (Spread – Burden) by total number of branches. It measures the efficiency of the branch. Higher the Profitability per Branch ratio, higher the efficiency of the branch.

$$\text{Profitability per Branch} = \frac{\text{Spread - Burden}}{\text{Total Number of Branches}}$$

Profitability per Branch in four sample bank groups is depicted in Table 1.1.

Table 1.1**Profitability per Branch (Amount in Rs Crore)**

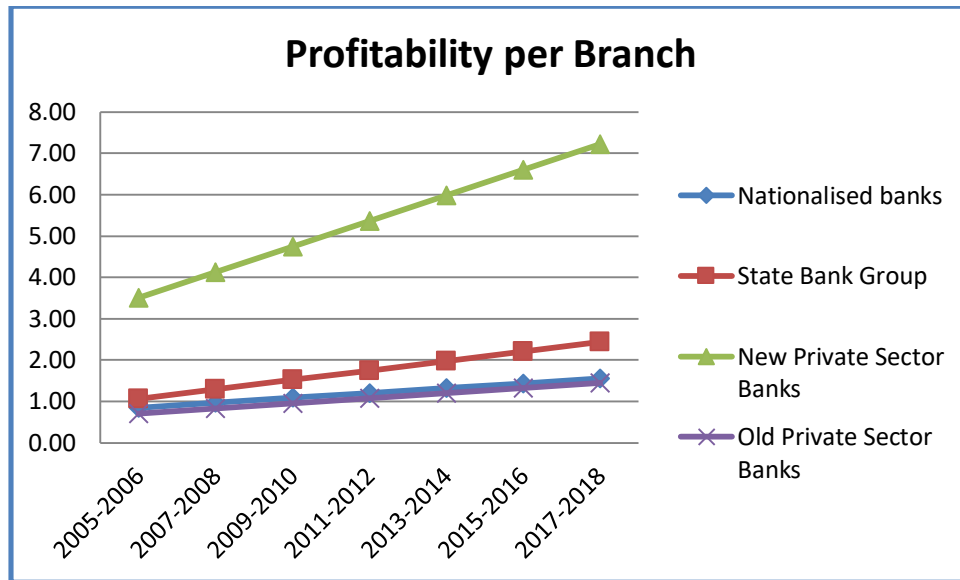
Year	Nationalised Banks	State Bank Group	New Private Sector Banks	Old Private Sector Banks
2005-2006	0.67	1.10	4.30	0.51
2007-2008	0.83	1.15	4.43	0.81
2009-2010	1.26	1.44	4.79	0.99
2011-2012	1.57	2.10	3.87	1.28
2013-2014	1.44	1.88	5.06	1.47
2015-2016	1.18	2.10	6.38	1.23
2017-2018	1.47	2.47	8.70	1.23
AVERAGE	1.20	1.75	5.36	1.07
S D	0.34	0.53	1.67	0.33
C V	28.18	30.07	31.23	30.47
EG	11.40	14.90	10.40	13.80

(Source: Figures compiled from the Statistical Tables relating to Banks in India, 2005-2006 to 2017-2018 and Report on Trend and Progress of Banking in India, 2005-2006 to 2017-2018. Ratios are computed by the researcher)

For Nationalised Banks, Profitability per Branch was in the range of Rs. 0.67 crore to Rs. 1.47 crore during the study period. State Bank Group showed in between Rs. 1.10 crore to Rs. 2.47 crore and New Private Sector Banks showed in between Rs. 4.30 crore to Rs. 8.70 crore. Similarly it lies in between Rs. 0.51 crore to Rs. 1.23 crore in Old Private Sector Banks.

New Private Sector Banks showed the highest average of Rs 5.36 crore in Profitability per Branch followed by State Bank Group with Rs 1.75 crore, Nationalised Banks with Rs, 1.20 crore and Old Private Sector Banks with Rs 1.07 crore. It indicates that State Bank Group, Nationalised Banks and Old Private Sector Banks shown poor efficiency in terms of Profitability per Branch as compared to New Private Sector Banks.

Figure 1.1
Profitability per Branch



Exponential growth rate in Profitability per Branch is highest in State Bank Group by 14.90 per cent followed by Old Private Sector Banks with 13.80 per cent, Nationalised Banks with 11.40 per cent and New Private Sector Banks with 10.40 per cent. But as far as within the variation of the ratio is concerned New Private Sector Banks showed the highest coefficient of variation of 31.23 per cent which shows more unstable growth. The pictorial representation of Profitability per Branch is shown in Figure 1.1.

b) Business per Branch

Deposits and Advances of the bank together reflect the overall banking system and its productivity. When Deposits and Advances of the branch increase, the productivity of the branch also increases. i.e., higher the ratio, higher the productivity.

$$\text{Business per Branch} = \frac{\text{Deposits} + \text{Advances}}{\text{Total Number of Branches}}$$

Table 1.2 reveals the Business per Branches of all sample commercial bank groups.

Table 1.2

Business per Branch (Amount in Rs Crore)

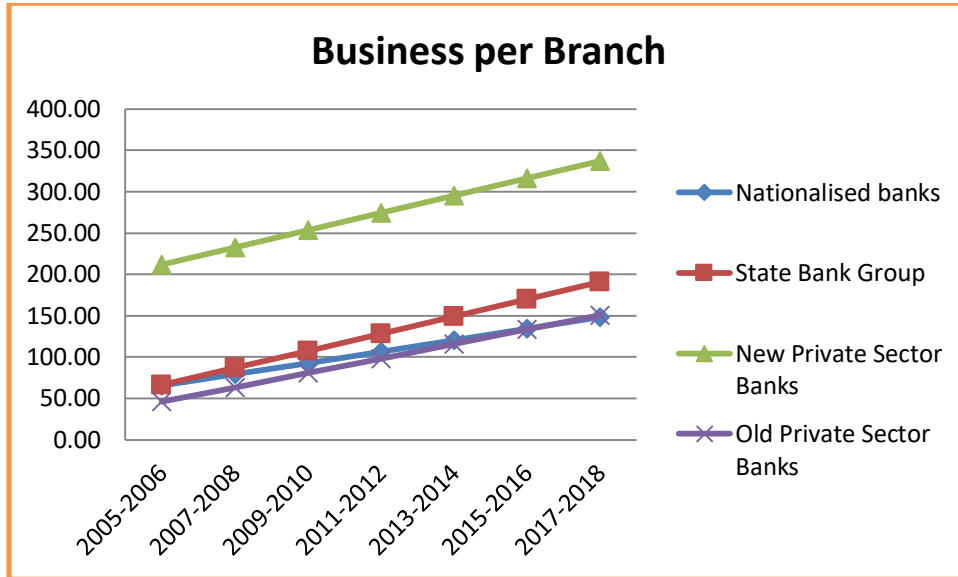
Year	Nationalised Banks	State Bank Group	New Private Sector Banks	Old Private Sector Banks
2005-2006	51.03	66.07	270.77	46.67
2007-2008	72.02	84.34	259.90	62.31
2009-2010	99.24	105.03	211.08	77.54
2011-2012	127.93	135.79	197.74	101.36
2013-2014	139.91	154.19	265.00	129.70
2015-2016	127.28	160.22	280.80	109.70
2017-2018	129.80	193.29	434.63	160.74
AVERAGE	106.74	128.42	274.27	98.29
S D	33.83	45.31	77.37	39.61
C V	31.70	35.28	28.21	40.30
EG	15.30	17.50	6.40	19.10

(Source: Figures compiled from the Statistical Tables relating to Banks in India, 2005-2006 to 2017-2018 and Report on Trend and Progress of Banking in India, 2005-2006 to 2017-2018. Ratios are computed by the researcher)

Business per Branch of Nationalised Banks and Old Private Sector Banks has shown an increasing trend except in the year 2015-2016. Whereas the State Bank Group has shows a steady increasing trend from 2005-2006 to 2017-2018. In the case of New Private Sector Banks show a declining trend in the first half (2011-2012), after that Business per Branch ratio has increased.

This ratio on an average is higher in New Private Sector Banks i.e Rs. 274.27 crore per Branch followed by State Bank Group with Rs. 128.42 crore, Nationalised Banks with Rs. 106.74 crore and Old Private Sector Banks with Rs. 98.29 crore. The New Private Sector Banks showed minimum fluctuation with 28.21 per cent in terms of coefficient of variation. Figure 1.2 shows the diagrammatic presentation of the Business per Branch.

Figure 1.2
Business per Branch



Exponential growth rate in Business per Branch is highest in Old Private Sector Banks with 19.10 per cent followed by State Bank Group with 17.50 per cent, Nationalised Banks with 15.30 per cent and New Private Sector Banks with 6.40 per cent.

c) Deposits per Branch

In order to differentiate efficiency of the branch, Deposits per Branch ratio seem to be better. Higher the Deposits per Branch, better the system of collection and vice versa.

$$\text{Deposits per Branch} = \frac{\text{Total Deposits}}{\text{Total Number of Branches}}$$

Table 1.3 reveals the Deposits per Branch of all sample commercial bank groups. For Nationalised Banks, Deposits per Branch were in the range of Rs 30.99 crore to Rs 74.14 crore during the study period. State Bank Group showed in between Rs 39.21 crore to Rs 112.71 crore and New Private Sector Banks in between Rs 152.82 crore to Rs 161.54 crore. For Old Private Sector Banks, the ratio lies in between Rs 28.55 crore to Rs 59.91 crore.

Table 1.3**Deposit per Branch (Amount in Rs Crore)**

Year	Nationalised Banks	State Bank Group	New Private Sector Banks	Old Private Sector Banks
2005-2006	30.99	39.21	152.82	28.55
2007-2008	41.41	48.22	144.52	37.22
2009-2010	57.43	60.12	116.82	46.42
2011-2012	71.90	74.61	106.45	58.65
2013-2014	80.51	84.71	139.17	74.70
2015-2016	74.26	87.93	143.98	63.36
2017-2018	74.14	112.71	161.54	59.91
AVERAGE	59.79	72.50	137.90	52.69
S D	20.09	25.36	19.57	16.06
C V	33.60	34.98	14.19	30.48
EG	14.72	16.80	1.20	14.30

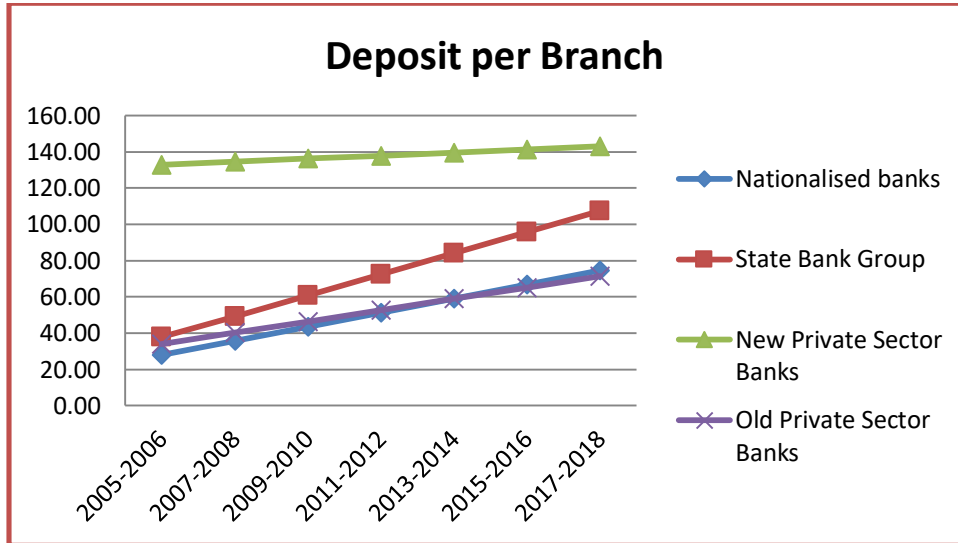
(Source: Figures compiled from the Statistical Tables relating to Banks in India, 2005-2006 to 2017-2018 and Report on Trend and Progress of Banking in India, 2005-2006 to 2017-2018. Ratios are computed by the researcher)

New Private Sector Banks showed the highest average of Rs 137.90 crore Deposits per Branch followed by State Bank Group with Rs 72.50 crore, Nationalised Banks with Rs 59.79 crore and Old Private Sectors Banks with Rs 52.69 crore during the study period. The New Private Sector Banks showed minimum fluctuation with 14.19 per cent and State Bank Group showed highest fluctuation with 34.98 per cent in terms of coefficient of variation.

Exponential growth rate of Deposits per Branch is highest in State Bank Group with 16.80 per cent followed by Nationalised Banks with 14.72 per cent, Old Private Sector Banks with 14.30 per cent and New Private Sector Banks with 1.20 per cent.

The graphical representation of Deposits per Branch is depicted in Figure 1.3.

Figure 1.3
Deposit per Branch



d) Advances per Branch

In excess of employees skill, the loan policies and interest rate of banks, also affect the advances of banks and thereby productivity. The ratio has been computed by dividing the amount of total advances by the number of branches. Higher the Advances per Branch, better the advance policies and hence productivity.

$$\text{Advances per Branch} = \frac{\text{Total Advances}}{\text{Total Number of Branches}}$$

Table 1.4 reveals the Advances per Branch of all sample commercial bank groups. Advances per Branch of Nationalised Banks and Old Private Sector Banks have shown an increasing trend except in the year 2015-2016. Whereas the State Bank Group has shown a steady increasing trend from 2005-2006 to 2017-2018. But New Private Sector Banks fluctuate between Rs 117.95 crore to Rs 173 crore during the study period. On an average per Branch Advances, is highest in New Private Sector Banks i.e, Rs 122.08 crore followed by State Bank Group with Rs 56.63 crore, Nationalised Banks with Rs 45.09 crore and Old Private Sector Banks with Rs 38.29 crore. The fluctuation in the ratio is lowest in New Private Sector Banks with 22.70 per cent.

Table 1.4**Advances per Branch (Amount in Rs Crore)**

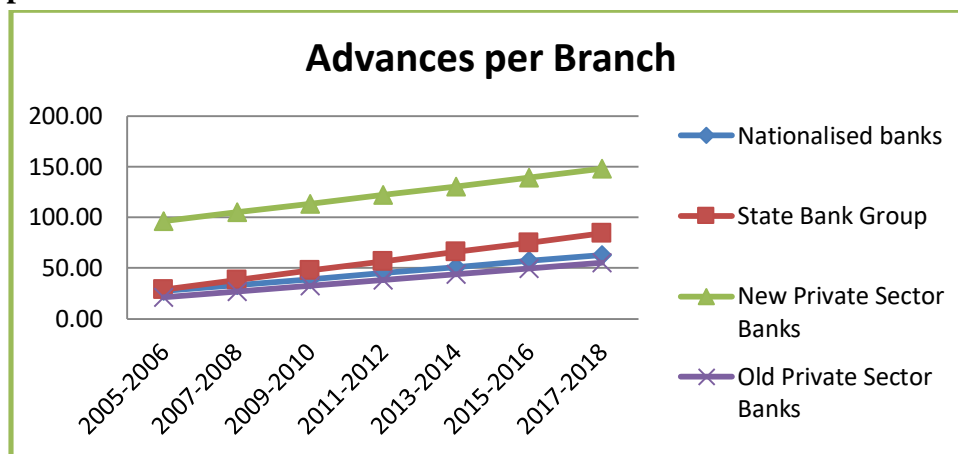
Year	Nationalised Banks	State Bank Group	New Private Sector Banks	Old Private Sector Banks
2005-2006	20.04	26.86	117.95	18.14
2007-2008	30.61	36.12	115.38	25.09
2009-2010	41.81	44.91	94.25	31.11
2011-2012	56.04	66.17	91.28	42.71
2013-2014	59.39	69.48	125.88	55.04
2015-2016	53.01	72.29	136.81	46.36
2017-2018	54.70	80.58	173.00	49.57
AVERAGE	45.09	56.63	122.08	38.29
S D	14.87	20.49	27.72	13.69
C V	32.99	36.18	22.70	35.75
EG	15.90	18.30	6.40	17.20

(Source: Figures compiled from the Statistical Tables relating to Banks in India, 2005-2006 to 2017-2018 and Report on Trend and Progress of Banking in India, 2005-2006 to 2017-2018. Ratios are computed by the researcher)

Exponential growth rate in Advances per Branch is highest in State Bank Group with 18.30 per cent followed by Old Private Sector Banks with 17.20 per cent, Nationalised Banks with 15.90 per cent and New Private Sector Banks with 6.40 per cent. The figure 1.4 shows a diagrammatic presentation of Advances per Branch.

Figure 1.4

Advances per Branch



Trend Analysis of Business per Branch (Branch Productivity)

The table 1.5 exhibits the trend eliminated values of growth rate of Branch Productivity in terms of Business for the period 2005-2006 to 2017-2018 and predicted values up to 2023-2024 of the sample bank groups under study.

Table 1.5

Trend Value of Business per Branch for the period 2005-2006 to 2023-2024

Year	Nationalised Banks	State Bank Group	New Private Sector Banks	Old Private Sector Banks
2005-2006	65.23	66.00	211.35	45.88
2007-2008	79.07	86.81	232.32	63.35
2009-2010	92.91	107.61	253.30	80.82
2011-2012	106.74	128.42	274.27	98.29
2013-2014	120.58	149.23	295.25	115.76
2015-2016	134.42	170.03	316.22	133.23
2017-2018	148.26	190.84	337.20	150.70
2019-2020	162.10	211.64	358.17	168.17
2021-2022	175.94	232.45	379.15	185.64
2023-2024	189.78	253.26	400.12	203.11

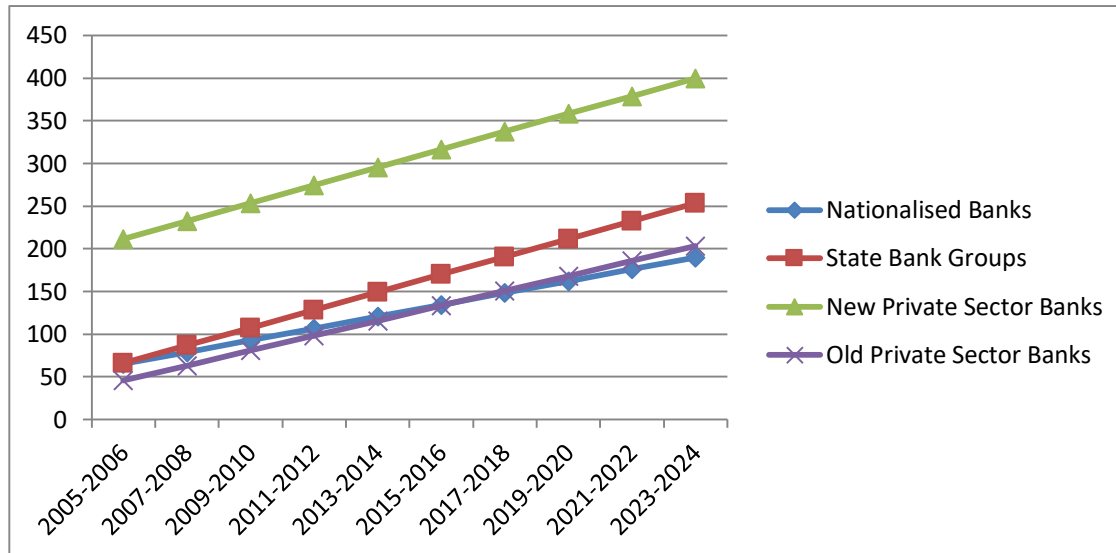
Source: Calculated

The Figure 1.5 portrays the pictorial representation of trend values of Branch Productivity in terms of Business of the sample bank groups under study. From the figure, it is clear that State Bank Group, Nationalised Banks, New Private Sector Banks and Old Private Sector Banks show an

increasing trend in Branch Productivity in terms of Business. State Bank Group and New Private Sector Banks showed rapid increase in the trend.

Figure 1.5

Trend Value of Business per Branch



1.8 COMPARISON OF EXPONENTIAL GROWTH RATE

Exponential growth rate of productivity ratios are compared in the following sections. The comparison of exponential growth rate of Branch Productivity in terms of Profitability and Business of sample bank groups is exhibited in Table 1.6.

Table 1.6

Comparison of Exponential Growth Rate of Productivity Ratios with Respect to Profitability and Business of Sample Banks

Bank Groups	Profitability per Branch	Business per Branch
Nationalised Banks	11.40	15.30
State Bank Group	14.90	17.50
New Private Sector Banks	10.40	6.40
Old Private Sector Banks	13.80	19.10

It is clear that, With respect to Branch Productivity, State Bank Group have higher Profitability per Branch and New Private Sector Banks have the lowest. Old Private Sector Banks and Nationalised Banks come after State Bank Group. The table further reveals that exponential growth rate of Business per Branch, Old Private Sector Banks have the highest exponential growth

rate and the New Private Sector Banks have the lowest. State Bank Group and Nationalised Banks followed Old Private Sector Banks.

1.9 FINDINGS OF THE STUDY

Profitability per Branch: In the case of Profitability per Branch, Exponential growth rate is highest in State Bank Group (14.90 per cent) followed by Old Private Sector Banks (13.80 per cent), Nationalised Banks (11.40 per cent) and New Private Sector Banks (10.40 per cent).

Business per Branch: Old Private Sector Banks showed highest Business per Branch (19.10 per cent) followed by State Bank Group (17.50 per cent), Nationalised Banks (15.30 per cent) and New Private Sector Banks (6.40 per cent).

Deposits per Branch: Exponential growth rate of Deposits per Branch is highest in State Bank Group (16.80 per cent) followed by Nationalised Banks (14.72 per cent), Old Private Sector Banks (14.30 per cent) and New Private Sector Banks (1.20 per cent).

Advances per Branch: While considering the Exponential growth rate of Advances per Branch, State Bank Group have the highest (18.30 per cent) followed by Old Private Sector Banks (17.20 per cent), Nationalised Banks (15.90 per cent) and New Private Sector Banks (6.40 per cent).

Trend Analysis of Productivity Ratios

In the present study the researcher has estimated the trend values of six years i.e., up to 2023-2024 from the trend eliminated values of growth rate from 2005-2006 to 2017-2018.

Branch Productivity: In comparing the trend of Branch Productivity, all the sample bank groups show an increasing trend in branch productivity in terms of Business. State Bank Group and New Private Sector Banks showed rapid increase in trend of Business per Branch.

1.10 CONCLUSION

While comparing 13 years data for the period from 2005-2006 to 2017-2018 on productivity factors viz. Deposit per branch, advances per branch, total business per branch and profitability per branch, it was observed that performance growth rate of State Bank Group was much superior as compared to other bank groups. Nationalised Bank and Old Private Sector Banks were following State Bank Group and New Private Sector Banks have the lowest productivity with respect to these ratios. Hence Private Sector Banks should give more importance to their branch productivity and should realise the fact that higher amount of branch productivity have a great impact on the operational efficiency of the banks.

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