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PRODUCTIVITY, COST AND PROFITABILITY PERFORMANCE OF SCHEDULED COMMERCIAL BANKS IN INDIA- A COMPARATIVE EVALUATION

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ABSTRACT

The Indian banking sector is characterized by large numbers of banks with varied ownership. Based on their ownership, the landscape is classified into five major groups - State Bank of India Group (SBIG), Nationalized Banks (NBs), Old Private Sector Banks (OPRSBs), New Private Sector Banks (NPRSBs) and Foreign Banks (FBs).The SBIG and NBs are collectively known as Public Sector Banks (PSBs). Many of the public sector banks and old private sector banks have their existence for over 75 years and have numerous legacy issues that needs to be addressed, while the new private sector banks which come into existence consequent RBI's liberalization policy on banking sector in the year 1991 and foreign banks are well equipped with contemporary innovations, monetary tools and techniques to handle the complexities of modern banking needs and thereby stand a better chance to be more competitive as compared to public sector and old private sector banks. For the purpose of the study SBIG, NBs and OPRSBs been classified as traditional banks (TBs), while NPRSBs and FBs have been classified as modern banks (MBs) The study aims to examine the productivity,cost and profitability performance of Traditional banks Vis a Vis Modern banks for the period from 2005-2011. A total number of 12 variables/ratios have been selected with a minimum of three and maximum of five in each category to examine the extent of Gap between the modern and traditional banks. The study reveals that the gap between the modern and traditional banks significantly reduced during the study period.

Keywords: Cost Efficiency, Gap Index, Modern Banks, Ownership, Productivity, Profitability Traditional Banks

INTRODUCTION

The reforms in the Indian banking sector were initiated in the early 1990's with the main objective to create a more profitable, efficient and sound banking system. While in the past several committees have been constituted to resolve problems of Commercial Banking in India, three of them,namely– the Narasimham committee -I (1992) and II (1998) and the Verma committee have aimed at major changes in the banking system. The regime of reforms began with radical departure from regulated banking towards market oriented banking. The strategy adopted was to improve operational efficiency of the banking system and to impart functional autonomy through reduced regulator's direct intervention in the working of the institutions. During this phase of reforms the commercial banks, particularly the public sector banks had overcome several challenges and progressed significantly in many facets.

This study primarily aims to assess the performance of scheduled commercial banks on productivity, cost efficiency and profitability dimensions. The paper is organized into 4 sections. Section I provides a brief of literature review. Section II presents objectives of the study, while methodology and data base for the study is presented in Section III. Data Analysis is discussed in Section IV. The concluding section presents the findings of the study.

LITERATURE REVIEW

Several studies that examined the productivity, efficiency and profitability of commercial banks in the reforms era revealed that public sector banks have shown improvement during the past two decades, however the inter group comparisons display that public sector banks are far beyond their private and foreign counterparts.

Sayuri, Shirai (2002) assessed the impact of reforms by examining the changes in the performance of banking sector. It is found that the performance of public sector banks improved in the second half of the 1990's. Profitability (measured by the return on assets) of nationalized banks turned positive in 1997-2000 and that of SBI group have steadily improved their cost efficiency over the reform period. Even though foreign banks and private sector banks performed better than the public sector banks in terms of profitability, earning efficiency (measured by ratio of income to assets), and cost efficiency in the initial stages, such differences have diminished as public sector banks have improved profitability and cost efficiency.

Mckinsey &Company (2007), report highlighted a clear divide between the new private sector and foreign banks (attackers) and the public and old private sector banks (incumbents). The report reveals that between 2000 and 2007 attackers have increased assets from 12% to 26%, profits from 21% to 32 % and market capitalization from 37% to 49%.

Kumar and Sreeramulu (2008) in their study compared the employee's cost and productivity ratios of banks in India from 1997 to 2008, and found that the performance of modern banks (new private sector and foreign banks) has been superior that traditional banks(public and old private sector banks)

D'Souza (2002) provides an overview of performance of public sector, private sector and foreign banks during the period from 1991 to 2000. The efficiency of banking system was measured in terms of spread/working funds ratio and turnover/employees ratio. Though the turnover /employees ratio has risen in the public sector banks, the turnover per employee in the private and foreign banks doubled relative to the ratio of the public sector banks during this decade .However the analysis revealed that the profitability of the public sector banks in the late nineties improved relatively to that of the private and foreign banks.

Saumitra N Bhaduri; KR Shanmugam (2008) analyzed the ownership –performance issue for the Indian banking sector during the post reform period (1992–2007). Results indicate that both foreign and domestic private banks are superior to their public counterparts with respect to four performance indicators namely, Return on Asset, Operating Profit Ratio, Operating Cost Ratio and Staff Expense Ratio. The one indicator in which the private banks are less efficient than their counterpart is Net Interest Margin. The study highlights that foreign banks were superior among the private banks, while the State bank group shows better performance among the public banks. The results also highlight a convergence in the performances across various ownership groups over the reform period.

OBJECTIVES OF THE STUDY

1. To examine bank group-wise productivity, cost efficiency and profitability performance of scheduled commercial banks.
2. To compare the productivity, cost efficiency and profitability of traditional banks vis a vis modern banks.
3. To examine the extent of gap between traditional banks and modern banks.
4. To analyze and conclude the findings of the study.

METHODOLOGY AND DATA BASE

For the purpose of this study SBI group, nationalized banks and old private sector banks are classified as traditional banks while the new private sector banks and foreign banks are classified as modern banks based on the legendary aspects faced by these banks. The data on the select variables/ratios are retrieved from "Performance Highlights of Banks" and "Indian banking at a Glance" – reports published by Indian Banks' Association, Mumbai. The ratios have been categorized as productivity, cost efficiency and profitability. From each category a minimum of 3 and a maximum of 5 ratios have been selected. Finally, gap index has been calculated to trace the the extent of gap between traditional and modern banks of during the period of study. The results are based on the time period 2005-2011. The following ratios are used for the study.

Productivity Ratios

1. Business per employee
2. Profit per employee
3. Net income per employee
4. Business per branch
5. Profit per branch

Cost efficiency Ratios

1. Staff cost as percentage to operational expenses
2. Staff cost as percentage to net income
3. Staff cost to Total business

Profitability Ratios

1. Return on Assets
2. Interest Income as percentage to Total income
3. Spread as percentage to total assets
4. Credit – deposit ratio

The Gap Index Calculation

Gap Index is the percentage difference of the value of ratios between modern banks and traditional banks as a ratio of their aggregate. To calculate gap index for productivity ratios, the value of ratios of traditional banks have been subtracted from modern banks. For cost efficiency, modern banks have been subtracted from traditional banks. In case of profitability, for variables like ROA, credit -deposit ratios and spread as % to total assets, the value of ratios of traditional banks have been subtracted from modern banks, while for interest income as % to total income the values of ratios of modern banks have been subtracted for traditional banks. The gap index primarily helps us to trace the extent of gap of during the period of study.

Empirical Analysis

Productivity Ratios (Employee and Branch Productivity)

Business per employee: (Table-1) presents productivity of traditional and modern banks in terms of business per employee. The business per employee of traditional banks increased 2.68 times (Rs.32.87 million to Rs.88.20 million) from the year 2005 to 2011, whereas in case of modern banks the increase in only 0.79 times (Rs.91.55 million to Rs.114.60 million).The business per employee has marginally declined during 2007 in case of modern banks. The ratios between the modern and traditional banks have shown a significant decline from 2.78 times in 2005 to 1.30 times in 2011, implying that traditional banks made a significant improvement on this indicator. The gap between the modern and traditional banks reduced significantly from 47.15 percent in 2005 to 13.02 per cent in 2011(72.39 per cent reduction).

Table 1. Business for Employee **(**Rs. in Millions)

Year	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
SBIG	28.48	33.78	43.64	54.92	65.03	73.70	79.30
NBs	30.81	37.00	47.52	59.56	74.81	89.40	110.50
PSBs	29.65	35.39	45.58	57.24	69.92	81.55	94.90
OPRSBs	36.10	42.90	49.70	56.90	60.60	69.70	81.50
TBs	**32.87**	**39.14**	**47.64**	**57.07**	**65.26**	**75.63**	**88.20**
NPRSBs	90.00	90.40	80.80	83.20	78.70	84.00	82.60
FBs	93.10	95.50	97.50	103.90	125.20	133.60	146.60
MBs	**91.55**	**92.95**	**89.15**	**93.55**	**101.95**	**108.80**	**114.60**
Gap Index	**47.15**	**40.73**	**30.41**	**24.22**	**21.94**	**18.00**	**13.02**

Profit per employee : It can be observed from (Table-2) that the profit per employee of traditional banks during the period 2005-2011 increased from Rs.0.13 million to Rs.0.55 million (4.34 times increase), while for the modern banks the increase is 1.80 times (Rs.1.01 million to Rs.1.82million). It is pertinent to note that the profit per employee declined in 2010 as compared to previous year for modern banks. The ratios between modern and traditional declined from 7.96 times in 2005 to 3.31 times in 2011 indicating improvement shown by traditional banks on this front. The gap between modern and traditional banks reduced from 77.70 per cent in 2005 to 53.67 per cent in 2011(30.93 per cent reduction).

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Table 2. Profit per Employee (Rs. in Millions)

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
SBIG	0.20	0.22	0.26	0.36	0.44	0.47	0.42
NBs	0.20	0.21	0.28	0.37	0.47	0.56	0.68
PSBs	0.20	0.22	0.27	0.36	0.46	0.51	0.55
OPRSBs	0.05	0.16	0.31	0.41	0.44	0.42	0.55
TBs	**0.13**	**0.19**	**0.29**	**0.39**	**0.45**	**0.47**	**0.55**
NPRSBs	0.88	0.72	0.59	0.69	0.68	0.85	0.89
FBs	1.14	1.39	1.61	1.95	2.48	1.70	2.76
MBs	**1.01**	**1.06**	**1.10**	**1.32**	**1.58**	**1.28**	**1.82**
Gap Index	**77.70**	**69.69**	**58.26**	**54.62**	**55.71**	**46.46**	**53.67**

Net income per employee: The performance in terms of net income per employee is depicted in (Table -3). It can be observed that per employee net income of traditional banks increased from Rs. 0.98 million in 2005 to Rs.2.22 million in 2011 (2.26 times increase) and that of the modern banks reported an increase from Rs.2.78 million to Rs.5.43 million(1.95 times increase) during the same period. The gap between the traditional and modern banks revealed a slight decline till 2007 and thereafter assumed low to moderate fluctuations for the remaining years during the period of the study.

Table 3. Net Income per Employee (Rs. in Millions)

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
SBIG	1.03	1.14	1.18	1.38	1.62	1.88	2.20
NBs	0.99	1.00	1.16	1.32	1.67	1.92	2.48
PSBs	1.01	1.07	1.17	1.35	1.64	1.90	2.34
OPRSBs	0.95	1.08	1.29	1.40	1.70	1.74	2.10
TBs	**0.98**	**1.07**	**1.23**	**1.38**	**1.67**	**1.82**	**2.22**
NPRSBs	0.37	0.39	0.39	0.48	0.50	0.52	0.54
FBs	5.18	5.66	6.11	7.19	10.95	9.87	10.32
MBs	**2.78**	**3.02**	**3.25**	**3.84**	**5.73**	**5.20**	**5.43**
Gap Index	**47.87**	**47.68**	**45.09**	**47.13**	**54.86**	**48.15**	**41.96**

Business per branch: It can be observed from (Table-4) that the business per branch of traditional banks increased from 456.4 million in 2005 to Rs.1048.41 million in 2011 (2.29 times increase) ,whereas in case of modern banks the increase in only 1.67 times. It is pertinent to note that the modern banks have shown exemplary performance through out the period as compared to traditional banks The gap between the modern and traditional banks reduced significantly from 164.72 in 2005 to 153.20 in 2011 (6.99 per cent reduction).

Table 4. Business per Branch (Rs. in Millions)

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
SBIG	573.00	655.92	789.41	880.33	1070.05	1124.79	1215.95
NBs	425.17	502.62	616.53	724.56	861.78	986.20	1140.20
PSBs	498.59	579.27	702.97	802.45	965.92	1055.50	1178.07
OPRSBs	414.15	477.79	526.62	612.32	656.65	758.26	918.74
TBs	**456.37**	**528.53**	**614.79**	**707.38**	**811.29**	**906.88**	**1048.41**
NPRSBs	2282.50	2783.47	2811.94	2871.13	2301.05	2093.12	1977.59
FBs	7155.18	8286.55	10339.14	12792.50	12996.30	12878.17	13848.49
MBs	**4718.84**	**5535.01**	**6575.54**	**7831.81**	**7648.68**	**7485.65**	**7913.04**
Gap Index	**164.72**	**165.14**	**165.80**	**166.86**	**161.64**	**156.78**	**153.20**

Profit per branch: It can be observed from (Table-5) that the profit per branch of traditional banks increased steadily during the period 2005-2011 from Rs.2.0 million to Rs.6.5 million (3.21times increase), whereas in case of modern banks, profit per branch increased from Rs.55.1 million to 133.1 million (2.41 times increase) during this period. Modern banks reported decline in profit per branch in 2010 as compared to the previous years. The gap between the modern and traditional banks reduced marginally from 9.30 per cent in 2005 to 9.06 per cent in 2011 (2.48 per cent reduction)

Table 5. Profit per Branch (Rs. in Millions)

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
SBIG	4.10	4.30	4.60	5.80	7.30	7.10	6.40
NBs	2.80	2.90	3.70	4.50	5.50	6.20	7.00
PSBs	3.50	3.60	4.20	5.10	6.40	6.60	6.70
OPRSBs	0.60	1.70	3.30	4.40	4.80	4.60	6.30
TBs	**2.00**	**2.70**	**3.70**	**4.80**	**5.60**	**5.60**	**6.50**
NPRSBs	22.40	22.30	20.40	23.60	19.80	21.10	21.40
FBs	87.70	120.40	171.10	239.60	257.20	154.20	244.80
MBs	**55.10**	**71.30**	**95.80**	**131.60**	**138.50**	**87.70**	**133.10**
Gap Index	**9.30**	**9.27**	**9.26**	**9.30**	**9.22**	**8.80**	**9.07**

Cost Efficiency Ratios

Staff cost as % to operational expenses: It can be observed from (Table- 6) that the staff cost as a ratio of operating expenses with regard to traditional banks is more or less constant with slight fluctuations towards the close of the period. In case of modern banks , the ratios revealed a upward trend during the entire period. The staff cost to operational expenses of traditional banks have been significantly higher than modern banks during the period of study (almost double in the year 2005 and 2006) The gaps between the modern and traditional banks on this indicator reduced from 37.77 per cent in 2005 to 20.39 percent in 2011 (46.02 per cent reduction) implying the efforts made by traditional banks to reduce the percentage staff cost to operating expenses.

Table 6. Staff cost as % to operational expenses (In per cent)

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
SBIG	67.43	67.67	65.49	60.58	61.39	61.91	63.39
NBs	68.91	66.41	64.37	62.63	62.65	63.41	67.35
PSBs	68.17	67.04	64.93	61.61	62.02	62.66	65.37
OPRSBs	54.50	56.17	56.44	55.77	56.49	58.05	60.95
TBs	**61.34**	**61.61**	**60.69**	**58.69**	**59.26**	**60.36**	**63.16**
NPRSBs	24.51	25.66	28.91	31.18	35.32	36.89	40.45
FBs	30.90	34.25	39.78	40.38	39.71	42.38	43.08
MBs	**27.71**	**29.96**	**34.35**	**35.78**	**37.52**	**39.64**	**41.77**
Gap Index	**37.77**	**34.56**	**27.71**	**24.25**	**22.46**	**20.72**	**20.39**

Staff cost to net income: It can be observed from (Table-7) staff cost to net income of traditional banks and modern banks remained more or less constant with slight to moderate fluctuation during the period. The staff cost to net income of traditional banks were almost double the cost of modern banks during the year 2005, 2006 and 2007 and thereafter showed a declining trend revealing significant efforts made by traditional banks to be cost efficient. The gap index between the traditional and modern banks reduced from 38.99 per cent in 2005 to 23.39 per cent in 2011 (40.02 per cent reduction)

Table 7. Staff cost % net income (In per cent)

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
SBIG	31.52	34.64	34.58	29.89	28.35	31.23	29.78
NBs	34.50	35.01	31.61	29.83	28.11	27.99	30.31
PSBs	33.01	34.83	33.09	29.86	28.23	29.61	30.04
OPRSBs	30.18	33.13	27.37	26.38	25.46	28.59	29.52
TBs	**31.60**	**33.98**	**30.23**	**28.12**	**26.85**	**29.10**	**29.78**
NPRSBs	12.57	13.88	15.50	16.26	16.92	15.76	18.21
FBs	15.18	16.02	17.74	17.15	15.08	17.18	18.77
MBs	**13.87**	**14.95**	**16.62**	**16.70**	**16.00**	**16.47**	**18.49**
Gap Index	**38.99**	**38.89**	**29.05**	**25.48**	**25.32**	**27.72**	**23.39**

Staff cost as % to total business: It can be observed from (Table-8) that staff cost to total business of traditional banks revealed an declining trend from 0.96 per cent in 2005 to 0.71 per cent 2010 and then an increase in 2011, while in the case of modern banks the staff cost to total business increased form 0.63 per cent in 2005 to 0.96 per cent in 2009, then declined in 2010 and again increased in 2011. The staff cost to total business of modern banks remained significantly lower as compared to traditional banks up to 2006, but the traditional banks overtook the modern banks during the next 5 years of the study period. During this period the gaps between the modern and traditional banks reduced drastically from 20.75 per cent to -11.11 per cent (153.54per cent reduction)

Table 8. Staff cost per cent Total Business (In per cent)

Year	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
SBIG	1.14	1.17	0.94	0.75	0.71	0.80	0.82
NBs	1.11	0.94	0.77	0.66	0.63	0.60	0.68
PSBs	1.12	1.06	0.86	0.70	0.67	0.70	0.75
OPRSBs	0.79	0.83	0.71	0.65	0.71	0.71	0.76
TBs	**0.96**	**0.95**	**0.78**	**0.68**	**0.69**	**0.71**	**0.76**
NPRSBs	0.41	0.43	0.49	0.58	0.64	0.62	0.66
FBs	0.84	0.95	1.11	1.19	1.29	1.19	1.24
MBs	**0.63**	**0.69**	**0.80**	**0.88**	**0.96**	**0.91**	**0.95**
Gap Index	**20.75**	**15.85**	**-1.27**	**-12.82**	**-16.36**	**-12.35**	**-11.11**

Profitability

Return on Assets: It can be observed from (Table-9) that traditional banks have reported a steady increase in terms of ROA during the study period except for the year 2007 and 2010 wherein the ROA was reported significantly high and significantly low as compared to the previous years. The ROA has increased 1.66 times (0.55 per cent to 0.91 per cent) from 2005 to 2011. In case of modern banks the ROA has increased 1.21 times. The ratios of ROA between modern banks and traditional banks have decreased from 2.24 times in 2005 to 1.59 times in 2011. The gap index between traditional and modern banks reduced from 38.2 in 2005 to 22.88 in 2011 (40.10 per cent) implying the traditional banks made efforts to improve on the profitability front.

Table 9. Return of Assets (ROA) (In per cent)

Year	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
SBIG	0.91	0.86	0.82	0.89	0.93	0.88	0.74
NBs	0.89	0.81	0.86	0.92	0.94	0.92	0.91
PSBs	0.90	0.84	0.84	0.91	0.94	0.90	0.83
OPRSBs	0.20	0.52	0.92	1.02	1.02	0.86	1.00
TBs	**0.55**	**0.68**	**0.88**	**0.98**	**0.98**	**0.88**	**0.91**
NPRSBs	1.17	1.00	0.91	1.06	1.06	1.22	1.34
FBs	1.29	1.54	1.67	1.68	1.68	1.09	1.56

Table 9. Return of Assets (ROA) (In per cent) (Contd….)

Year	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
MBs	**1.23**	**1.27**	**1.29**	**1.37**	**1.37**	**1.16**	**1.45**
Gap Index	**38.20**	**30.26**	**18.89**	**16.60**	**16.60**	**13.73**	**22.88**

Interest income as % to Total income: (Table-10) presents the performance in term of Interest income to total income. It can be observed that the income interest to total interest of traditional banks remained more or less constant with sight fluctuations in their year to year performance and so is the case of modern banks during the study period. The ratios between traditional banks and modern banks decreased marginally from 1.42 times in 2005 to 1.15 times in 2011. The gap index between traditional and modern banks reduced from 17.38 in 2005 to 7.06 in 2011 (59.38 per cent)

Table 10. Interest income to Total income (In per cent)

Year	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
SBIG	82.29	83.81	85.02	85.63	84.73	**84.19**	**85.09**
NBs	83.94	88.23	88.75	87.40	87.47	**87.46**	**89.96**
PSBs	83.12	86.02	86.89	86.52	86.10	85.83	87.53
OPRSBs	87.72	89.21	87.83	87.08	87.03	86.67	88.50
TBs	**85.42**	**87.62**	**87.36**	**86.80**	**86.57**	**86.25**	**88.01**
NPRSBs	49.90	78.44	78.00	79.18	81.38	78.30	80.60
FBs	70.34	69.59	71.79	69.70	67.06	72.62	72.22
MBs	**60.12**	**74.02**	**74.90**	**74.44**	**74.22**	**75.46**	**76.41**
Gap Index	**17.38**	**8.41**	**7.68**	**7.67**	**7.68**	**6.67**	**7.06**

Spread as % to total assets: The spread as % to total assets of traditional and modern banks is presented in (Table-11). It can be observed that traditional banks reported an increase in 2006 as compared to the previous year, subsequently registered decline from 2007 to 2010 and significant increase in the year 2011. In case of modern spread as % to total assets increased from 2.76 percent in 2005 to 3.25 per cent in 2011(1.17 times increase). Except for the year 2005, modern banks have reported higher ratio on this indicator during the period of study. The gaps between traditional banks and modern banks during the period of study revealed a year to year fluctuations.

Table 11. Spread as % to total assets (In per cent)

Year	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
SBIG	3.06	3.07	2.59	2.24	2.14	2.25	2.68
NBs	2.82	2.89	2.66	2.17	2.21	2.17	2.56
PSBs	2.94	2.98	2.63	2.21	2.18	2.21	2.62
OPRSBs	2.66	2.74	2.76	2.43	2.56	2.39	2.76

Table 11. Spread as % to total assets (In per cent) (Contd….)

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
TBs	**2.80**	**2.86**	**2.69**	**2.32**	**2.37**	**2.30**	**2.69**
NPRSBs	2.17	2.28	2.10	2.40	2.79	2.86	2.86
FBs	3.34	3.58	3.76	3.78	3.92	4.01	3.63
MBs	**2.76**	**2.93**	**2.93**	**3.09**	**3.36**	**3.44**	**3.25**
Gap Index	**-1.06**	**0.51**	**9.68**	**14.85**	**17.18**	**19.86**	**9.43**

Credit -Deposit Ratio: The performance of traditional banks and modern banks with respect ot credit-deposit ratio is presented at (Table-12). It can be observed that Credit -deposit ratio of traditional banks increased by 1.27 times (57.49 per cent to 73.18 per cent) from the year 2005 to 2011. In case of modern banks the credit -deposit ratios were more or less constant except for the year 2010. The gap index between traditional and modern banks reduced from 18.04 per cent to 5.75 per cent (68.13 per cent)

Table 12. Credit- Deposit ratio (In per cent)

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
SBIG	56.31	68.52	76.13	76.72	73.44	77.43	79.80
NBs	57.22	64.69	67.97	69.79	71.09	70.56	73.11
PSBs	56.77	66.61	72.05	73.26	752.27	74.00	76.46
OPRSBs	58.21	63.53	67.69	67.44	64.28	67.02	69.90
TBs	**57.49**	**65.07**	**69.87**	**70.35**	**68.27**	**70.51**	**73.18**
NPRSBs	78.39	77.37	77.79	79.84	83.19	80.68	82.98
FBs	87.18	85.77	83.81	84.74	77.27	70.34	81.24
MBs	**82.79**	**81.57**	**80.80**	**82.29**	**80.23**	**75.51**	**82.11**
Gap Index	**18.04**	**11.25**	**7.25**	**7.82**	**8.05**	**3.42**	**5.75**

CONCLUSION

The analysis of data on productivity ratios i.e. Business per employee, Profit per employee Net income per employee, Business per branch, Profit Per Branch reveal that modern banks have out performed the traditional banks. However the gap between the modern banks and traditional banks registered a declining trends on all the five indicators during the period 2005-2011.

On cost efficiency ratios, modern banks out performed traditional banks in terms Staff cost as % to operational expenses and Staff cost to net income .Traditional banks registered exceptional improvement post 2006 with regard to Staff cost as % to total business by registering low on this ratio .

In terms of profitability, modern banks have registered above the benchmark (more than one per cent) on ROA, while the traditional banks displayed a significant improvement on this ratio during the period of study. With regard to interest income as % to total income, traditional banks outperformed the modern banks while modern banks performed better than traditional banks in terms Credit -Deposit ratio.

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