Vol. 3 No. 2 March 2015 ISSN: 2319-961X

PERFORMANCE ANALYSIS OF PUBLIC SECTOR BANKS IN INDIA

Dr. H. N. Devanand

Assistant Professor, Centre for Rural Development Studies, Bangalore University

Dr. T. Rajendra Prasad

Professor, Department of Economics, Bangalore University, Bangalore- 560 0056

Abstract

Banking as a major part of the financial sector, is the life blood of the economy. It plays a decisive role in accelerating the rate of economic growth. The importance of commercial banks in the process of economic development has been stressed from time to time by the economic thinkers and progressive bankers in the country. Banks are the heart of our financial structure. Banks play a positive role in the economic development of a nation as depositories of community's savings and as purveyors of credit. Indian banks have aided the economic development during the past fifty eight years (1949-2007) in an effective way. The banking sector has shown remarkable responsiveness to the needs of planned economy.

Keywords: financial sector, modern economy, financial intermediaries, commercial banks, economic growth, PSBs

A well planned, organized, efficient and viable banking system is a necessary concomitant for the economic development of a nation. Banking occupies a crucial place in undertaking the development effort and acts as a vehicle for socio-economic transformation. In a modern economy, income is partly spent for consumption and partly saved and much of the saving is channalised into investment via a variety of financial intermediaries. In India, the commercial banks constitute the heart of the financial structure since they have the ability to add to the money supply and thus create additional purchasing power. As an important segment of the tertiary sector of our economy, commercial banks act as the back-bone of economic growth and prosperity by playing an all pervasive role as a catalyst of development.

Hence, the PSBs had to be the prime-movers and leaders for the achievement of the socio-economic objectives of our economy. In the post-nationalisation period, there has been a perceptible change in the structure, composition and direction of Public Sector Banking in India. Its progress in quantitative and qualitative terms has been phenomenal. Besides, a massive qualitative change in the operations of banking system, Public Sector Banks have been called upon to assume a great variety of new responsibilities in the area of social banking. Moreover, PSBs have made conscious efforts to become an engine of growth by undertaking a number of innovative activities.

With this background the present paper examine the following aspects in detail viz.,

- Performance of Scheduled Commercial Banks in India
- Profitability Analysis of Public Sector Banks

Performance of Scheduled Commercial Banks in India

The banking sector in India is largely dominated by the public sector banks (PSBs) that account for nearly 70 per cent of the banking assets. The fast pace of deposits growth can be viewed from the fact that over a year time (2011-12), total bank deposits increased by 14.9 per cent. Not only that, the total bank credit and investments in government, and other approved securities made by the scheduled commercial banks (SCBs) grew at an impressive rate of 18.1 per cent and 16.0 per cent respectively, during the same period. Latest available statistics reveal that the new private sector banks have registered the highest growth rate at 18.9 per cent in the branch network during 2011-12 while SCBs as a whole marked 10.1 per cent expansion in their total branch network during the same period. During 2012, the capital base of all SCBs increased by 16.1 per cent over the previous year. Return on assets (ROA) has been higher than the benchmark (1%) in 8 public sector and 15 private sector banks. These figures portray that the private and foreign banks have carved a niche for themselves in the Indian financial system. These banks also started setting new standard for the entire banking sector in terms of capital adequacy, return on capital and profit per employee etc. The World Economic Forum in its Financial Development Index (2008) credits the gradual reforms and prudential regulations for the reasonable stability of the Indian banking system. Table 1 quickly assess the performance of the different commercial bank groups at three different years-1991, representing the initiation of the reform process, 2002 after a decade of reform process and 2012 for the recent performance. The table 1 reveals the dismal performance of all the different bank groups on the eve of the reforms; however, the private banks had an edge over others. Since 1991, profit per employee has consistently increased and cost-income ratio has shown a secular fall across all the bank groups.

Table 1: Profitability and Cost-based Indicators of Efficiency

Bank Groups	Net Profit per Employee (Rs '000)			Cost-Income Ratio (in %)		
	1991	**2002**	**2012**	**1991**	**2002**	**2012**
SBI and Associates	5.04	121.43	547.12	94.46	52.11	45.13
Nationalised Banks	4.76	102.58	675.82	93.89	56.65	43.05
Private Banks	7.42	170.94	1060.08	92.63	51.46	46.73
Average	5.74	131.65	761.01	93.66	53.40	44.97

Source: Authors' calculation based on Database on Indian Banking 1987-98, IBA (1999) and Performance Highlights of Public and Private Sector Banks, IBA (various issues)

Financial repression best describes the state of banking sector until the dawn of the era of liberal economic policies in India. The banking sector had remained shielded from foreign competition consequent of the various restrictive policies in place. The banking sector reforms were aimed at ushering efficiency and stability in Indian banking sector.

Table 2 represents the ratio of net profit to total assets of the public and private sector banks respectively, for the last decade. There is an overall improvement in terms of profitability for both the banks groups as indicated by their average values. However, the private sector banks have experience a better improvement; 16 of the 20 private sector banks ended with a higher net profit to assets ratio in 2012.

Table 2: Net Profit/Total Assets (in %) of Public Sector Banks

Banks	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Allahabad Bank	0.32	0.59	1.31	1.20	1.28	1.11	1.18	0.79	0.99	0.94	1.02
Andhra Bank	0.97	1.63	1.72	1.59	1.19	1.13	1.02	0.95	1.16	1.16	1.08
Bank of Baroda	0.77	1.01	1.14	0.71	0.73	0.72	0.80	0.98	1.10	1.18	1.12
Bank of India	0.72	1.12	1.19	0.36	0.62	0.79	1.12	1.33	0.63	0.71	0.70
Bank of Maharashtra	0.68	0.89	0.95	0.54	0.16	0.70	0.68	0.64	0.62	0.43	0.49
Canara Bank	1.03	1.24	1.34	1.01	1.01	0.86	0.87	0.94	1.14	1.20	0.88
Central Bank of India	0.31	0.54	0.98	0.52	0.34	0.54	0.44	0.39	0.58	0.60	0.23
Corporation Bank	1.31	1.58	1.73	1.19	1.10	1.02	1.1	1.03	1.05	0.98	0.92
Dena Bank	0.06	0.57	1.04	0.25	0.27	0.64	0.93	0.87	0.89	0.86	0.92
Indian Bank	0.11	0.53	1.04	0.93	1.06	1.35	1.43	1.48	1.53	1.41	1.24
Indian Overseas Bank	0.65	1.01	1.08	1.28	1.32	1.23	1.18	1.10	0.54	0.60	0.48
Oriental Bank	0.99	1.34	1.67	1.34	0.95	0.79	0.93	0.79	0.83	0.93	0.64
Punjab & Sind Bank	0.17	0.03	0.06	-0.45	0.57	0.99	1.24	1.04	0.90	0.77	0.62
Punjab National Bank	0.77	0.98	1.08	1.12	0.99	0.95	1.03	1.25	1.32	1.17	1.07
Syndicate Bank	0.79	1.00	0.92	0.77	0.88	0.80	0.79	0.70	0.58	0.67	0.72
UCO Bank	0.52	0.59	0.99	0.63	0.32	0.42	0.46	0.50	0.74	0.55	0.61
Union Bank of India	0.71	1.08	1.22	0.99	0.76	0.82	1.12	1.07	1.06	0.88	0.68
United Bank of India	0.52	1.26	1.22	1.03	0.62	0.63	0.59	0.30	0.42	0.58	0.62
Vijaya Bank	0.81	1.03	1.71	1.30	0.40	0.78	0.64	0.42	0.72	0.64	0.61
SBI & its associates	0.77	0.91	1.02	0.91	0.86	0.82	0.89	0.93	0.88	0.74	0.87
IDBI Bank	…	…	…	0.38	0.63	0.61	0.56	0.50	0.44	0.65	0.70
Average	**0.65**	**0.94**	**1.17**	**0.84**	**0.76**	**0.84**	**0.90**	**0.86**	**0.86**	**0.84**	**0.82**

Note: IDBI Bank was established in the year 2004

Source: Performance Highlight of Public Sector Banks, IBA (various issues).

Among the PSBs, there are a few whose performances have improved. In total, 23 banks (public and private) participated in M & A of which 4 PSBs (Bank of Baroda, IDBI, PNB and SBI) and 3 private banks (Federal Bank, ICICI Bank and HDFC) have improved their profitability in the post-merger period.

In the pre-reform days, interest rate regulation had been a major hindrance to the development and efficient functioning of the banking sector. Competition among banks was virtually absent and the nationalised banks were to perform many ‘social duties’. All these were at the cost of profitability of the banks and eventually led to cumulative rise in non-performing assets (NPA). In spite of a rapid increase in the bank deposits, the profitability was extremely low- the average ROA in the second half of 1980s was only about 0.15 per cent.

By 1991, the Indian banking sector had become unprofitable, inefficient and financially weak; Joshi and Little (2003). Following the nationalisation of banks in 1969, the primary objective was not attaining efficiency but an increase in deposits and loans by way of branch expansion. The banking sector in the recent past has shown stability and resilience.

Both the bank groups experience a decrease in the cost of intermediation by around 38 per cent vis-a-vis their 1991 position. While the PSBs took some time to adjust to the regulatory changes, the private banks were able to adapt quickly to the new business environment. In the recent past, the PSBs had maintained a lower intermediation cost than their private sector counterparts implying their relative cost advantage with respect to the domestic private banks.

In comparison to the Basel II norms, only the (domestic) private banks perform above the benchmark in 2002. In the later period, though SBI group have witnessed a fall in the average ROA, it has subsequently improved its performance along with the other nationalized banks in 2010. In contrast, the private banks as a whole experienced an initial decline in their ROA before improving it in 2010. Operating profit declined by 29.34 and 21.67 per cent respectively for SBI group and the private sector banks. However, the nationalized banks recorded an impressive growth of 176.47 per cent.

Profitability Analysis of Public Sector Banks

Banking sector in India has undergone remarkable changes since the nationalisation of 14 major commercial banks in 1969. The geographical and functional coverage of banks has surged at a rate that is unprecedented in the world. Similarly, services rendered by banks witnessed major changes after liberalisation of the financial sector carried out from the early 1990s. In the recent years the Indian banking system has witnessed a significant transformation. Prior to the institution of financial sector reforms, Indian banks were operating in a highly regulated environment. In view of the social responsibility placed on the banking sector, profitability was not considered as an important yardstick to judge their performance. From the time of the nationalisation of 14 major commercial banks in 1969 till the early 1990s, the main thrust of banking operation was on social banking. Accordingly the emphasis was placed on enhancing the branch network in rural and semi-urban areas. Moreover, banks had to undertake several other responsibilities, which included financing the fiscal deficit and facilitating the development of certain specific sectors as reflected in high and increasing prescription of SLR and direct lending. By and large, banking remained concentrated in the public sector and functioned in a highly regulated environment.

With the institution of financial sector reforms, competition among the banks has increased. Barriers to entry have been sharply reduced. Economies of scale and scope have to be exploited for facing competition. Productivity, efficiency and profitability have, as a result, become critical objectives to be aimed at. However, in post reforms period of liberalisation, privatisation and globalisation the focus of banking changes towards increasing productivity, profitability, improving operation efficiency in the banking sector and the profit planning has become a complex phenomenon under competitive and deregulated environment. The growth in profits of the banks now assumes a greater significance as a measure of efficiency and credibility of the organisation and retaining the confidence of customer and the investors.

Profitability Ratio

Profitability ratio is an important analytical technique which is used to measure the results of banking operation or overall performance and effectiveness of the organization. Profitability analysis is indispensable for a banking organization from the view point of its survival and growth. "The growth in profits of the banks now assumes a greater significance as a measure of efficiency and credibility of the organisation and retaining the confidence of customer and the investors. Profitability also assumes importance for management of capital in the banking sector and adoption of prudential norms in order to meet international standards of accounting". Thus, in the present study, the following three ratios have been considered for the purpose of evaluating the performance of the Public Sector Banks, Private Sector Banks and Foreign Banks:

- Profit in Relation to Working Fund.
- Profit in Relation to Total Income.
- Profit in Relation to Deposits.

Profit in Relation to Working Fund

The ratio of profit in relation to working fund is derived when the net profit is divided by the working fund and expressed in terms of percentage. This ratio explains as to what percentage of working fund is earned by a bank as net profit. Stated otherwise, this ratio determines the level of efficiency with which a bank can be able to utilise its resources to the maximum extent to enhance its volume of profit.]

In table 3 the trends of the ratio of net profit to working fund of the sample bank groups have been exhibited. The table indicates that during the study period, the PSBs, Private Sector Banks and Foreign Banks showed the increasing trend of the ratio. The group wise analysis shows that the ratio ranged from -1.15 per cent in 1993-94 to 1.12 per cent in 2003-04 in case of Public Sector Banks. Likewise, this ratio of Private Sector Banks ranged from 0.34 per cent in 1992-93 to 1.19 per cent in 1995-96. Further, this ratio varied in between -2.88 per cent in 1992-93 and 1.65 per cent in 2006-07.

When phase-wise analysis of this ratio is made in all the three sample bank groups, it is confirmed that in the first phase of the study period (1992-93 to 1998-99), the Public

Sector Banks improved their ratio of profit to working fund to 0.77 per cent in 1997-98 from -1.15 per cent in 1993-94. During the same period, the Private Sector Banks raised their profit from 0.34 per cent in 1992-93 to 1.19 per cent in 1996-97 where as the Foreign Banks accelerated their profit to 1.60 per cent in 1994-95 from -2.88 per cent in 1992-93. During the second phase (1999-2007), it was observed that the ratio of Public Sector Banks declined to 0.42 per cent in 2000-01 from 0.77 per cent in 1997-98 but in the year, i.e., 2003-04 it rose to 1.12 per cent over the previous year and further declined to 0.83 per cent in the last year, i.e., 2006-07.

Similarly, the same tendency was observed in case of Private Sector Banks in the second phase of the study period. The ratio of Private Sector Banks declined to 0.64 per cent in 2001-02 from 0.89 per cent in 1999-2000. However, during the same period, the ration of Foreign Banks rose to 1.65 per cent in 2003-04 against 1.18 per cent in 1999-2000.

The average ratios of net profit to working fund were found to be 0.41 per cent with a coefficient of variation of 165.41 per cent of Public Sector Banks, 0.86 per cent with a coefficient of variation of 27.29 per cent for Private Sector Banks and 1.05 per cent with a coefficient of variation of 106.58 per cent of Foreign Bank. The coefficient of correlation between net profit and working fund in case of Public Sector Banks, Private Sector Banks and Foreign Banks were 0.95, 0.99 and 0.95 respectively. Moreover, the correlation is significant at 5 per cent level of significance.

Table 3: Profit in Relation to Working Fund of Public Sector Banks and Other Bank Groups during 1992-93 to 2006-07

(In percentage)

Year	Public Sector Banks	Private Sector Banks	Foreign Banks
1992-93	-1.00	0.34	-2.88
1993-94	-1.15	0.58	1.51
1994-95	0.25	1.16	1.60
1995-96	-0.07	1.19	1.45
1996-97	0.56	1.13	1.19
1997-98	0.77	1.03	0.96
1998-99	0.42	0.70	0.83
1999-00	0.57	0.89	1.18
2000-01	0.42	0.71	0.92
2001-02	0.72	0.64	1.32
2002-03	0.96	1.00	1.56
2003-04	1.12	0.95	1.65
2004-05	0.87	0.83	1.29
2005-06	0.82	0.87	1.54
2006-07	0.83	0.87	1.65
Average	0.41	0.86	1.05
CV	165.41	27.39	106.58
Co-efficient of correlation	0.95	0.99	0.95

Sources: IBA Bulletins, Various issues; Mumbai

So, it clearly indicates that among the sample bank groups, the Foreign Banks have accelerated their profit to the maximum extent at an average of 1.05 per cent. Whereas the Public Sector Banks have improved their profit in relation to working fund to the minimum extent with highest variation.

Table 4: Profit in Relation to Total Income of Public Sector Banks and Other Bank Groups during 1992-93 to 2006-07

(In per centage)

Year	Public Sector Banks	Private Sector Banks	Foreign Banks
1992-93	-9.34	3.25	-22.83
1993-94	-11.65	5.46	12.33
1994-95	2.60	11.18	13.27
1995-96	-0.69	9.97	12.30
1996-97	5.05	9.24	8.77
1997-98	7.42	8.91	7.23
1998-99	4.02	6.32	8.27
1999-00	5.63	8.59	10.11
2000-01	4.17	7.01	8.54
2001-02	7.08	8.22	11.51
2002-03	9.57	9.29	15.13
2003-04	12.02	10.50	15.23
2004-05	10.68	10.83	15.20
2005-06	10.35	11.35	17.38
2006-07	10.66	10.38	18.37
Average	4.50	8.70	10.05
CV	156.14	26.61	96.62
Co-efficient of correlation	0.92	0.99	0.92

Sources: IBA Bulletins, Various issues; Mumbai

Profit in Relation to Total Income

The profit in relation to total income tends ratio of all the sample bank groups have been exhibited in Table 4. Table 4 discloses a fluctuating trend of the ratio of all the bank groups during the study period. During the study period, the Public Sector Banks have suffered losses to the tune of 9.34 per cent, 11.65 per cent and 0.69 per cent in 1992-93, 1993-94 and 1995-96 respectively. But, from 1996-97 to 2006-2007 the Public Sector Banks have improved their profitability over the study period. The profit as percentage to total income of Private Sector Banks ranged from 3.25 per cent in 1992-93 to 11.35 per cent 2005-06. The Foreign Banks have sustained loss of 22.83 per cent in the beginning year

(1992-93) of the study period. But, thereafter, they improved their profitability which varied in between 7.23 per cent in 1997-98 and 18.37 per cent in 2006-07.

The phase-wise analysis of the ratio reveals that during the first phase of the study period (1992-93 to 1998-99), the Public Sector Banks have incurred losses in the year 1992-93, 1993-94 and 1995-96. The main reason was the introduction of prudential norms as per banking sector reforms. The Foreign Banks have incurred loss in the year 1992-93 only. But the Private Sector Banks accelerated their profitability without suffering any losses during the study period. However, during the second phase the profitability of Public Sector Banks accelerated and the ratio varied around 4 to 12 per cent. The growth in profit has been achieved due to increase in net interest income and containment of operating expenses at a moderate level, the ratio varied around 7 to 11 per cent in case of Private Sector Banks and 8 to 18 per cent in case of Foreign Banks showed good performance in the second phase whereas the Private Sector Banks and Foreign Banks have performed well in the first phase.

The fifteen yearly average of the ratio of Public Sector Banks was 4.50 per cent (whereas it was 1.43 per cent in 2001-2002) with a high coefficient of variation of 156.14 per cent. The same in case of Private Sector Banks was 8.70 per cent with a coefficient of variation of 26.61per cent. But the Foreign Banks earned income at higher rate while the Public Sector Banks earned the income at a lower rate with the highest variation. Moreover, the Private Sector Banks earned the income at a moderate rate with negligible variation. The coefficient of correlation between profit and total income of the three sample bank groups were 0.92, 0.99 and 0.92 in case of Public Sector Banks, Private Sector Banks and Foreign Banks. It was found to be significant at 5 per cent level of significance in all the cases.

Profit in Relation to Total Deposits

The ratio of Profitability in relation to total deposits is an important ratio of Profitability for the assessment of profitability of Public Sector Banks. This ratio provides information relating to the profit derived by banks as percentage of total deposits over a period of time.

In Table 5 it is observed that the ratio of profit in relation to the total deposits of all the three sample bank groups reflected a fluctuating trend over the fifteen year study period. Moreover, the ratio of Public Sector Banks highly fluctuated with a coefficient of variation of 170.48 per cent followed by Foreign Banks with 104.69 per cent and Private Sector Banks with 33.73 per cent. The ratio varied in between -1.43 per cent in 1993-94 and 1.35 per cent in 2003-04 in case of Public Sector Banks, 0.40 per cent in 1992-93 and 1.48 per cent in 1995-96 in case of Private Sector Banks and -4.31 per cent in 1992-93 and 3.04 per cent in 2006-07 in case of Foreign Banks. The PSBs and Foreign Banks incurred losses due to higher provisioning requirement during the beginning years of the study period.

Table 5: Profit in Relation to Total Deposits of Public Sector Banks and Other Bank Groups during 1992-93 to 2006-07

(In percentage)

Year	Public Sector Banks	Private Sector Banks	Foreign Banks
1992-93	-1.28	0.40	-4.31
1993-94	-1.43	0.64	1.95
1994-95	0.32	0.36	2.16
1995-96	-0.09	1.48	2.45
1996-97	0.69	1.33	1.79
1997-98	0.95	1.21	1.47
1998-99	0.51	0.84	1.34
1999-00	0.69	1.07	1.96
2000-01	0.50	0.85	1.57
2001-02	0.86	1.00	1.26
2002-03	1.14	1.43	2.63
2003-04	1.35	1.30	2.57
2004-05	1.07	1.12	2.29
2005-06	1.02	1.16	2.70
2006-07	1.01	1.17	3.04
Average	0.49	1.02	1.66
CV	170.48	33.74	104.67
Co-efficient of correlation	0.95	0.99	0.96

Sources: IBA Bulletins, Various issues; Mumbai

Yet, they could be able to gear up their profit in the succeeding years by lowering their provisioning requirements as per the norms prescribed in the banking sector reforms.

The phase-wise analysis exhibited that during the first phase of the study period (1992-93) to (1998-99), the public sector banks and foreign banks suffered losses, due to higher provisioning requirements where as the private sector banks performed well. The ratio increased with fluctuation in case of all the sample banks oscillated significantly in between -1.43 per in 1993-94 and 0.95 per cent in 1997-98. Similarly, the ratio of private sector banks fluctuated in between 0.40 per cent in 1992-93 and 1.48 per cent in 1995-96 whereas the ratio of foreign banks varied substantially in between -4.31 per cent in 1992-93 and 2.45 per cent in 1995-96. But, in the second phase the ratio showed a declining trend with fluctuation in case of all the sample bank groups. So, the ratio of public sector banks hovered in between 0.50 per cent in 2000-01 and 3.04 per cent in 2006-07 in case of foreign banks. Similarly, the ratio varied in between 0.85 per cent in 2000-01 and 1.43 per cent in 2002-03 in case of Private Sector Banks.

From the above analysis it was concluded that among the three sample banks groups, the Foreign Banks utilised their deposits most efficiently and effectively by generating the highest profit registering an average of 1.66 per cent of their total deposits in spite of suffering losses in the initial year of the study period. Whereas, the Public Sector Banks showed a poor performance in respect of generating profit in relation to their deposits recording an average of 0.49 per cent only. On the other hand, the Private Sector Banks retained its position in between the Foreign Banks and Public Sector Banks with an average of 1.02 per cent of their total deposits. The coefficient of variation of all the three sample banks was 170.48, 33.73 and 104.67 per cent in case of Public Sector Banks, Private Sector Banks and Foreign Banks respectively.

The coefficient of correlation between profit and total deposits of Public Sector Banks, Private Sector Banks and Foreign Banks were 0.95, 0.99 and 0.96 respectively. This was found to be significant at 5 per cent level of significance in all the cases.

Conclusion

Thus it has been clearly observed that in the post reform period the focus of banking changed towards increasing the productivity, profitability, improving operational efficiency in the banking sector. The profit planning has become a complex phenomenon under competitive and deregulated environment. In the present scenario, there has been an increased focus on profitability, although other social objectives continue to be important. Moreover, the setting up a new competitive environment has resulted in new challenges for the public sector banks to retain their position.

References

1. Agarwal B P (1981): Commercial Banking in India after Nationalisation, Classic publications, New Delhi.
2. Desai, Vasant (1999): The Indian Financial System, Himalaya Publishing House, Bombay.
3. Hussain, Farhat (1986): Public Sector Commercial Banking in India, Deep and Deep Publications, New Delhi.
4. Rangaswamy B (1985): Public Sector Banking in India, Publication Division Ministry of Information and Broadcasting, Government of India.
5. Raut, Kishore C and Das, Santosh K (1996): Commercial Banks in India- Profitability, Growth and Development, Kanishka Publishers, New Delhi.
6. Dash S S (2007): Trends in Growth and Development of Nationalized Banks in India, The Indian Bankers, Mumbai October 2007.
7. Das a Nag A and Ray S C (2005): Liberalisation, Ownership and Efficiency in Indian Banking – A Non parametric Analysis, Economic and Political Weekly, Mumbai.
8. Mohan, Rakesh (2003): Transforming Indian Banking: In search of a Better Tomorrow, RBI Bulletin.

9. Jagirdar B and Dubey A K (2007): Performance of Public Sector Banks, The Indian Banker, December 2007.
10. Ram T T (2002): Deregulation and Performance of Public Sector Banks, EPW, Vol 37 No. 5, Mumbai.
11. Venkatesan, Sumathy (2007): Banking Industry Vision 2010, The Indian Banker, Mumbai.