CHAPTER: 3

PROGRESS OF INDIAN BANKING INDUSTRY

CHAPTER: 3

PROGRESS OF INDIAN BANKING INDUSTRY

A strong and efficient financial system is critical for the attainment of economic objectives of a country. Banking is the most dominant segment of the financial system and plays a pivotal role in the development of a sound economy. Besides laying out a strong foundation for economic growth, banks also serve as a repository of liquidity.

Historically, the Indian banking industry has stood out as one of the most stable systems across economies. In the scenario of global players manifesting alarming credit-to-GDP gaps, India has the advantage of a significantly lower gap of (-)5.7 percent indicating resilience and ability of the economy to payback its debts and a well-functioning financial system. The banking industry in India has come a long way since the enactment of Banking Regulation Act in 1949. It has undergone massive transformation with radical changes, important developments and innovative disruptions taking place across the sector. Challenges like nationalization and social control, consolidation and deregulation, mechanization and computerization of banking operations, liberalization and global reforms, and the latest digitalization process have paved way for unforeseen success of the banking industry. With three decades of financial sector reforms behind them, the Indian banking industry today is competitive and comparable to international standards and world systems.

The banking industry in India has registered a phenomenal growth, perhaps, having few parallels in the world history of banking. By the end of last decade, total assets of banking industry stood at Rs. 202 trillion, its contribution to GDP was over 7 percent, and share in country's total employment was 35 percent (1.5 million). As per the Reserve Bank of India (RBI), the sector is sufficiently capitalized, well regulated and is supplemented by superior financial and economic conditions in the country. In the Indian banking sector, besides commercial banks there are a number of smaller banks such as cooperative banks, small finance banks and payment banks serving the needs of different spectrum of borrowers. Yet, commercial banks constitute a lion's share of 70 percent in total banking business and are the most important source of credit in the economy. Rising incomes in the country has further enhanced the need for banking services, thereby driving economic growth.

The commercial banking system in India has been dominated by government-owned banks with an asset contribution of around 60 percent. The foreign banks hold 7 percent of total assets of commercial banks. The private sector banks have gained prominence over time revealing healthier balance sheets, contributing the remaining share of total assets. The commercial banking sector has evolved over time and made considerable progress since the country's independence. Being an indispensable component of the banking system, it becomes imperative to explore the growth narrative of commercial banks in the country. The objective of the present chapter is to review the important milestones observed by the Indian banking industry and to examine its growth and progress over time.

There are *four sections* in this chapter. *Section 3.1* throws light on the structure and framework designed to fulfil the main objectives. *Section 3.2* covers the important milestones witnessed by the Indian banking industry. The growth and progress of the most dominant segment of the banking industry, that is the scheduled commercial banks in India has been examined in *section 3.3.* The last *section 3.4* concludes the chapter.

3.1 Structure and Framework

The commercial banking system has emerged as one of the fastest growing sectors in India in the span of 70 years of independence of the country. In the last decade itself, these banks witnessed a CAGR of over 9 percent in assets, deposits as well as credit. Commercial banks are important financial intermediaries of the economic system underpinning growth and development. The Indian commercial banks have traversed a long journey and witnessed critical landmarks. To explore important milestones in the Indian banking industry and to assess its growth and progress, the present study has focused on scheduled commercial banks (including RRBs), as these banks constitute the largest market share and banking business.

The study of milestones of the Indian banking industry covers a long time period of over seven decades right from 1947 to the very recent period. Four important milestones have been identified for analysis – *Post Independence (1947 to 1968), Post Nationalization (1969 to 1992), Post Reform (1993 to 2006), and Post Global Crisis (2007 onwards)*. A comprehensive evaluation of growth and progress of scheduled commercial banks in India (SCBs) has also been undertaken for a period of 50 years beginning with bank nationalization in 1969 to the year 2018. On the basis of important turning points in the history of Indian banking industry, different growth phases have been identified. These are *Nationalization*

Phase: 1969 to 1985, Technology Upgradation Phase: 1987 to 1997, Deregulation Phase: 1993 to 2005, and Digitalization Phase: 2000 to 2018. The variables used to examine the progress of commercial banks over the specified phases are number of SCBs, number of bank branches, number of bank branches in rural areas, population served per branch, deposits of SCBs, credit of SCBs, deposits per bank branch, credit per bank branch, number of bank employees, deposits of SCBs as a percentage of national income, SCBs' advances to priority sectors, and share of priority sectors advances in total credit of SCBs. Additional variables have been taken for analysis purposes as required. A detailed evaluation of the growth phases has been pursued in section 3.3.

The data for analysis has been sourced from varied reports such as Basic Statistical Returns of Scheduled Commercial Banks in India, Report on Trend and Progress of Banking in India, Statistical Tables Relating to Banks in India, and Handbook of Statistics on Indian Economy.

3.2 Milestones of the Indian Banking Industry

The current section deliberates upon the issues and challenges faced by the Indian banking industry due to regulatory changes in the sector, process of bank nationalization, banking sector reforms, and effects of global crisis.

3.2.1 Post Independence (1947 to 1968)

At the time of independence, the Indian banking sector was entirely in the hands of private players. Credit was largely targeted towards financing big business houses while agriculture sector was totally neglected. Private banks were profit motivated and unwilling to diversify their loan portfolios across different scales of operation, as lending to agriculture sector would raise their transaction costs and reduce profits. Banks overlooked the social objective of wide reach of banking system and channelization of credit towards disadvantaged sections of the society.

In 1949, the Indian government enacted the Banking Companies Act with the purpose of propelling the social developmental goals of banking and to reform the working of commercial banks. The Act was renamed as Banking Regulation Act in 1966. It vested the RBI with the responsibility of regulating and controlling the banks, monitoring and supervising their working, and restructuring of unviable banks. Between 1954 and 1966, 154 small private banks were liquidated which led to a drastic fall in the number of banks in the sector (RBI, 2008).

An unregulated banking industry often leads to unfair competition among banks, resulting into excessive speculation, over-banking and concentration of control over the system. RBI took the initiative of strengthening the banking sector by weeding out the unviable banks and liquidating the weak banks. Banks with high non-performing assets were merged with stronger banks. Regulation was needed to protect public interest and to prevent bank failures as it could have disastrous impact on the economy.

More concentrated efforts towards fostering growth and development of the agriculture and rural sector were initiated with economic planning in 1951. The government nationalized the Imperial Bank of India in 1955 and renamed it as the State Bank of India (SBI). The bank was made the principal-agent of RBI under the State Bank of India Act 1955, to handle government's banking transactions across the country (RBI, 1955). State Bank of India was the first bank to get the status of nationalized bank in the country. Eight princely state banks were made subsidiaries of the SBI in 1960 under the State Bank of India (Subsidiary Banks) Act, 1959.

Even after two decades of independence, a number of business houses continued to control a major proportion of total banking assets. The small-scale industries, rural sector and agriculture continued to have meagre share in bank credit. Despite considerable progress in functional and geographical coverage of the Indian banking system, the nexus of banks with industries became a major cause of concern in the economy. This highlighted the need for social control leading to the formation of the Banking Laws (Amendment) Act, 1968. The aim of social control was to spread bank credit, channelize them towards priority sectors, and prevent credit misuse; making it an effective instrument of economic growth and development (RBI, 1969). Despite the central bank efforts, a large section of the society were underserved or left out of the formal banking space during this phase of the banking industry.

3.2.2 Post Nationalization (1969 to 1992)

The year 1969 marked a historical milestone in the growth story of Indian banking sector. Excess control of private banks, concentration of credit in few industries, and lack of social perspective amplified the urgency for nationalization of private banks in the country. The two main objectives of nationalization were mobilization of deposits and channelization of credit into priority sectors. The process of nationalization of private banks was undertaken in two phases under the Banking Companies (Acquisition and Transfer of Undertakings) Ordinance, 1969. In the first phase of bank nationalization in 1969, fourteen major commercial banks with deposits not less than 50 crores were brought under the government control. In the second phase in 1980, six more banks with deposits not less than 200 crores were nationalized. Gradually, people's confidence in the banking sector increased and banks started offering attractive interest rates for higher deposit mobilization. Besides, bank nationalization in 1969 coincided with the process of green revolution in the Indian economy, which led to rise in people's income and increase in bank deposits. The impact of nationalization of banks and green revolution together led to an escalation in total deposits of scheduled commercial banks from around Rs. 46 billion in 1969 to Rs. 1,735 billion in 1990. There was a rapid expansion in total branch network of banks from 8,262 branches in 1969 to 59,756 bank branches in 1990. The share of rural bank branches in total bank branches increased from around 22 percent in 1969 to the extent of 58 percent in 1990.

To serve the credit needs of rural population and priority sectors, Regional Rural Banks (RRBs) were set up on the recommendation of Narasimham Committee, 1975. The number of RRBs grew exponentially over the years and were 196 by the end of this phase. A substitution of organized institutional banking in place of unorganized non-institutional sources was gradually witnessed in the rural economy over the decade following nationalization of banks.

The bank nationalization plan brought 20 commercial banks in the ambit of public sector. By the end of the phase, these banks had eclipsed the banking scenario with 90 percent share in total deposits and credit advanced in the sector. Despite the merits of nationalization, the public sector banks started facing issues of asset quality and financial soundness. The mid-eighties onwards, public sector banks began exhibiting declining performance with falling profitability and rising bad loans.

3.2.3 Post Reform (1993 to 2006)

In the later part of 1980s, the Indian economy faced acute economic crisis which was triggered by an increase in oil prices, unmanageable balance of payment situation, fall in forex reserves, and debt crisis. The banking system of the country was also operating under structural rigidity and external constraints, besides working under a protected environment. The policy of social control and bank nationalization led to rapid branch expansion but affected the quality of bank assets and drained out their profitability. In response, the early phase of reforms was initiated in the banking sector in mid-eighties. However, reforms were formally launched in the Indian economy in the 1990s. In order to speed up the pace of economic growth, economic reforms were introduced by the government in 1991 which focused on the policy of liberalization, privatization, and globalization. In 1993, financial sector reforms were instituted by RBI to overcome the problems of banking sector.

Banking sector reforms mainly focused on three pillars – consolidation, diversification, and deregulation of banks. Bank consolidation measures were aimed at strengthening bank structure, enhancing customer services, improving internal procedures and credit management system, making loan recovery mechanism effective, and increasing employee productivity and profitability. In the 1980s, commercial banks were facing strict competition from Non-Banking Financial Corporations (NBFCs) as the schemes offered by NBFCs led to higher remuneration and tax benefits to customers. The banking regulation act then limited banks into performing traditional banking functions, which resulted in a steep fall in bank deposits from household sector. The amendment of the banking regulation act in 1984 propelled the process of diversification in the banking sector, whereby banks were allowed to undertake merchant banking activities through their subsidiaries. This helped banks to diversify their business activities and increase profitability. The deregulation measures introduced by RBI involved a reduction in statutory pre-emptive rates, deregulation of interest rates, and granting operational and functional autonomy to public sector banks. This led to increase in business building capacity of banks by enhancing their lending activities and investment in remunerative assets.

A committee on banking sector reforms was constituted by RBI in 1993 under the chairmanship of Shri M. Narasimham. The committee made a wide range of recommendations and suggested various measures to improve the health of financial sector in general and that of banking sector in particular. The reform measures suggested by Narasimham Committee I (1993) included introduction of internationally accepted prudential norms relating to income recognition, asset classification and provisioning, and capital adequacy norms in a phased manner[1]. An important objective of reforms was to create competitive conditions for growth in the banking space. Prior to reforms, domestic banks were effectively shielded from competition by restricting entry of private banks in the sector. RBI lowered the entry barriers for new banks but competition in the sector remained muted despite the measures taken.

To further strengthen the banking sector, Narasimham Committee II was set up in 1998. The committee made recommendations that aimed at strengthening the prudential norms to match international standards, management of non-performing asset, intensifying competition, improving ownership and corporate governance, emergence of universal banking, promoting financial inclusion, revamping credit delivery, improving customer service, and making people financially literate (Mohan, 2004). Liberalization in the banking industry resulted into increased competition for government banks from private sector banks. Many foreign banks also entered the industry bringing with it advanced technology and world’s best banking practices. Overall, the banking sector reforms brought about a significant improvement in financial performance, capital position, and asset quality of banks.

The full impact of reforms was felt predominantly only by the turn of the 1990s decade. The banking sector became aggressively competitive and recorded unprecedented growth for the next 10 years. This was a period of rising competition, technology upgradation, automation of banking processes, digitalization, and improved productivity and profitability for the banking sector. Specific attention was given to the recovery of non-performing assets. The results of reforms were fruitful as banks were able to lower their non-performing assets. There was an improvement in the asset quality of banks, their credit portfolio expanded and capital base improved significantly. Private sector banks eventually surpassed the performance of public sector banks with higher profitability.

3.2.4 Post Global Crisis (2007 onwards)

By the end of 2007, financial and economic crisis engulfed the world economy. Global growth slumped, unemployment burgeoned, inter-bank markets froze on account of heightened counterparty concerns and risk aversion, banking activity plummeted, and non-performing assets of banks accumulated; highlighting the vulnerability of financial systems across the globe (Sinha, 2012). The world economy was in the face of a full-blown economic and financial crisis by the fourth quarter of 2008.

The global meltdown had a significant impact on the Indian economy as well. The impact was on account of India’s growing trade and financial integration with the world economy. Despite the negative effects of global crisis, the Indian banking sector exhibited resilience and remained relatively insulated. Even after the global crisis, banks in India continued to maintain robust capital adequacy ratio, which was higher than the stipulated regulatory requirement of 9 percent. The asset quality of commercial banks was also good with a gross NPA of 2.5 percent and net NPA of 1.13 percent (as on March 2010). The direct effects of crisis on Indian banking industry were almost negligible due to their limited exposure to risky assets and relatively lower presence of foreign banks (Thorat, 2009). Nonetheless, Indian banks did face some stress because of the foreign investors withdrawing their money from the economy and creating a liquidity crunch. This led to an economic slowdown in the Indian banking sector. The spillover effect of the crisis was mostly perceived in the credit growth of banks. Banks started sitting on surplus cash restricting the flow of credit to industries. This led to fall in interest income and poor profitability of banks. Public sector banks were the worst hit and exhibited a drastic fall in their return on equity and net interest margin. The return on equity of public sector banks declined from 16 percent in 2006, reaching a negative by 2018 at (-)11.4 percent. The net interest margin also reduced from 4.36 percent to 2.33 percent over this period. Mounting bad loans was yet another concern for the banks post crisis. Gross NPA of public sector banks increased from 2.64 percent in 2006 to as high as 11.6 percent in 2018. Private banks were cautious in expanding their balance sheets and saw a gradual improvement in their asset quality and efficiency parameters.

The Indian government and RBI took prompt actions to counter the problems of economic slowdown. Rigorous efforts were taken to relax monetary policy by reducing interest rate on one hand, and to boost domestic demand by giving fiscal stimulus on the other. It is globally believed that India’s stringent regulations and prudent policies have enabled the country to survive through the crisis.

To summarise, the four important milestones of the Indian banking industry as discussed above throws light on significant landmarks in the industry right from the independence of the country. There were a number of regulatory changes in the sector beginning with the enactment of the banking regulation act in 1949. Nationalization of 20 commercial banks in two phases ushered in a new chapter in the history of Indian banking with increasing dominance of public sector banks. Banking sector reforms led to a liberalized era of banking, with sharp improvement in financial health, capital adequacy, and asset quality of banks. The resilience of Indian banking industry in the face of global financial crisis and its subsequent recovery highlights the system's core strengths and vulnerabilities. Banks have taken a significant leap into the world of new age banking driven by concerted efforts of the policy makers.

3.3 Growth and Progress of the Indian Banking Industry

The Indian commercial banking sector has a long history and has grown exponentially ever since the independence of the country. The sector has witnessed major transformations and sea changes. It has metamorphosed from a traditional banking system to modern digital banking over the span of last 70 years. The details of important events in the history of banking industry have been discussed to a large extent in the previous section. The main goal of the study in this section is to map the growth and progress of commercial banks in India. For this purpose, the period beginning from bank nationalization in 1969 up to 2018 has been divided into shorter time periods or phases to examine the changes in progress indicators of scheduled commercial banks.

3.3.1 1969 to 1985: Nationalization Phase

The decision regarding nationalization of commercial banks was taken by the then prime minister Mrs. Indira Gandhi in 1969. Bank nationalization was undertaken in two phases. In 1969, 14 major commercial banks were nationalized followed by 6 more in 1980. The core objective of bank nationalization was to spread banking services in rural areas and provide credit to Indian farmers at concessional rates. This period was characterized by rapid branch expansion that enabled monetary transmission far and wide across the country. Post nationalization, the share of unorganized credit fell sharply as public sector banks extended their reach in rural areas catering to the underserved population. These banks launched various programs and schemes to serve banking services to all segments of society. To assess the impact of nationalization of banks on progress of scheduled commercial banks in India, the time period taken spreads over 16 years, right from 1969 to 1985.

Table: 3.1 Progress of SCBs in India: Nationalization Phase

Variables	1969	1975	1980	1982	1985
Number of Scheduled Commercial Banks	73	74	148	202	264
• *SBI & Associates*	*8*	*8*	*8*	*8*	*8*
• *Nationalized Banks*	*14*	*14*	*20*	*20*	*20*
• *Private Banks*	*51*	*46*	*47*	*53*	*53*
• *Regional Rural Banks*	-	-	*73*	*121*	*183*
Total Number of Bank Branches	8,262	18,730	32,419	39,177	51,385
Number of Bank Branches in Rural Areas	1,833	6,807	15,105	20,401	30,185
Population Served per Bank Branch (in '000)	64	35	21	18	15
Deposits of SCBs in India (Rs. Cr.)	4,646	12,545	33,377	46,128	77,075
Credit of SCBs in India (Rs. Cr.)	3,599	8,955	22,068	30,180	50,921
Deposits of SCBs as percentage of National Income*	15.5	19.7	35.8	36.2	41.5
SCBs' Advances to Priority Sector (Rs. Cr.)	504	2,242	7,278	10,975	19,829
Share of PSA# in Total Credit of SCBs (%)	14.0	27.5	33.0	36.4	38.9

*Measured at current prices # PSA – Priority Sector Advances

Table 3.1 presents the growth and progress of scheduled commercial banks in India after the initiatives of bank nationalization taken in the country by RBI. The important observations drawn are:

- Between 1969 and 1985, number of scheduled commercial banks (SCBs) went up from mere 73 to 264 banks. The jump in number of SCBs was prominent particularly after 1975 with the formation of regional rural banks (RRBs) under the Regional Rural Bank Act, 1976. The banking sector saw an expansion in number of RRBs from 19 in 1976 to 183 in 1985. By the end of this phase, there were 8 SBI & its associate banks, 20 nationalized banks, and 53 private banks in the Indian banking sector.

- After nationalization, there was a spectacular expansion in bank branches majorly on account of the Lead Bank Scheme[2] that was introduced by RBI in December 1969. Total number of bank branches of SCBs expanded from 8,262 in 1969 to over 51,000 branches by 1985. The data reveals major growth in bank branches in rural areas from only 1,833 in 1969 to as high as 30,185 in 1985. By the end of 1985, the rural bank branches constituted 59% of total bank branches in the country highlighting the rural presence and penetration by SCBs. Population served per bank branch also improved tremendously. Against a burden of 64,000 people per bank branch in 1969, banks served only 15,000 people per branch in 1985.

- Deposits and credit of SCBs multiplied substantially between 1969 and 1985. Deposits grew at a CAGR of 19% while credit at 18%, generating banking business worth Rs. 1,27,996 crores by 1985. Deposit mobilization has been an important aspect of bank nationalization to raise financial resources in the country and to enhance economic growth. Deposits of SCBs as a percentage of national income increased from 15.5% in 1969 to 41.5% in 1985.

- Private banks operating in the country did not cater to the rural masses and lacked the willingness to lend to priority sector. The government-owned banks supplemented the country's social objective by channelizing credit towards the agriculture sector, and small and medium enterprises. After nationalization of banks, the advances by SCBs to priority sector[3] increased significantly from Rs. 504 crores in 1969 to almost Rs. 20,000 crores in 1985. The share of priority sector advances in total credit of SCBs increased from 14% in 1969 to 38.9% in 1985.

Overall, there was a major improvement in the progress indicators of SCBs during the nationalization phase. There was a rapid branch expansion in rural areas, the burden of population served per bank branch reduced, banking business of SCBs multiplied significantly, higher deposit mobilization led to economic growth, and bank lending towards priority sector increased considerably.

3.3.2 1987 to 1997: Technology Upgradation Phase

The Indian banking industry has witnessed radical changes after mid-1980s. Banks have shifted from conventional form of banking to convenient way of banking. The first step taken towards technology upgradation in the Indian banking sector was computerization. The then Governor of RBI, Dr. Manmohan Singh took up the task of computerization in the banking system. Resistance from bank unions and staff was anticipated but modernization of banks was inevitable to meet the pace of global growth and technological advancement. Bank internal factors that propelled the need for computerization in banks were poor customer service, manual book keeping methods, and delayed management information system reporting.

In the year 1984, RBI set up a committee on "Mechanisation in the Banking Industry" headed by Dr. C. Rangrajan. The committee recommended banks to set up service branches at centres of banks having more than ten branches. These service branches were exclusively devoted to clearing services. The committee also suggested introduction of Magnetic Ink Character Recognition (MICR) clearing cheques in metro cities. MICR technology for cheque clearing was introduced to facilitate quick processing of cheques and prompt settlement. The other recommendations of Rangarajan Committee I (1984) were adoption of standardized cheque forms, reorganization of work procedures, and training of employees at the branch level (RBI, 1984). These recommendations were implemented in a phased manner. It began with implementation of automated cheques sorting techniques, clearing of outstation cheques at the national level, and the adoption of computerization in clearing houses in key metro cities.

A noticeable drive in the mechanization and computerization process of banks was witnessed after the announcement of action plan for installing Advanced Electronic Ledger Posting Machines (AELPMs) at various bank branches in July 1985. By end of June 1987, the number of AELPMs installed in public sector banks were 2,750 that increased to 13,522 by 1996. The number of bank branches that were equipped with AELPMs increased from 1,050 in 1987 to 4,238 in 1996. In 1987, 100 mini-computers were installed in regional offices of banks that increased to 454 by 1995. In the following year, mini-computers were replaced by personal computers. 2,120 personal computers were installed in 1,920 bank branches by end of 1996. Due attention was given to customer service with installation of online terminals at corporate customer sites. Training was imparted to employees of banks for using the new technology at branch level. More than 85,000 employees were trained for computer application in banking services (RBI, 1996).

The Rangarajan Committee was appointed a second time in 1988 to recommend a comprehensive plan with a major thrust on online banking for the five year period from 1990 to 1994. The committee recommended setting up of BANKNET as a common data communication network, providing a gateway to the Society for Worldwide Interbank Financial Telecommunication (SWIFT) for more accessible, faster, and cheaper transmission of messages abroad on behalf of banks and customers. It also made suggestions for standardizing security features to ensure efficient and risk-free transfer of funds electronically, setting up a network of ATMs, and framing of uniform rules and regulations for clearing houses (RBI, 1998). Towards the end of 1997, the focus of RBI shifted to introduction of online banking in the sector.

To examine the impact of technology upgradation process on banks progress, a decade long period has been taken from 1987 to 1997. Table 3.2 highlights the progress of SCBs in India after the introduction of computers in the banking industry.

Table: 3.2 Progress of SCBs in India: Technology Upgradation Phase

Variables	1987	1990	1992	1995	1997
Number of Scheduled Commercial Banks	274	260	268	281	299
• *SBI & Associates*	*8*	*8*	*8*	*8*	*8*
• *Nationalized Banks*	*20*	*19*	*19*	*19*	*19*
• *Private Sector Banks*	*29*	*24*	*25*	*28*	*34*
• *Foreign Banks*	*21*	*19*	*21*	*23*	*42*
• *Regional Rural Banks*	*196*	*190*	*195*	*194*	*196*
Total Number of Bank Branches	53,859	59,756	60,570	62,367	63,550
Population Served per Bank Branch (in '000)	15	14	14	15	15
Deposits of SCBs in India (Rs. Cr.)	1,07,898	1,73,515	2,37,566	3,86,859	5,05,599
Credit of SCBs in India (Rs. Cr.)	64,213	1,05,450	1,31,520	2,11,560	2,78,401
Deposits per Bank Branch (Rs. Lakhs)	200	290	392	620	796
Credits per Bank Branch (Rs. Lakhs)	119	176	217	339	438
Deposits of SCBs as % of National Income*	44.9	50.0	49.5	51.7	50.1
Credit-Deposit ratio (%)	59.5	60.8	55.4	54.7	55.1
Number of Bank Employees	9,00,472	9,80,428	9,85,213	10,19,025	10,23,971
SCBs' Advances to Priority Sector (Rs. Cr.)	26,743	41,497	47,318	69,209	93,807
Share of PSA# in Total Credit of SCBs (%)	42.9	40.7	37.1	33.7	34.8

*Measured at current prices # PSA – Priority Sector Advances

The main observations from Table 3.2 are as follows:

- Due to enhanced technology and computerization in banks, the banking business of SCBs in India increased significantly. Deposits and credit of SCBs expanded remarkably over the ten years span with a CAGR of 16.7% and 15.8%, respectively. Deposits per bank branch and credit per bank branch multiplied manifold between 1987 and 1997. Deposits of SCBs as a percentage of national income improved from 45% to 50% during the same period. A marginal fall was observed in credit-deposit ratio from 59.5% in 1987 to around 55% in 1997.

- Total number of SCBs was 274 in 1987 that increased to 299 in 1997. Around 10,000 new bank branches were added between this period. With the expansion of bank branch network, human resource absorption capacity of the banks increased. In 1987, SCBs employed nearly 9 lakh people and by 1997 the number of bank employees increased by more than 1.2 lakh.

- Advances to priority sector by SCBs continued to grow at a CAGR of 13.37%. However, the share of priority sector advances in total credit started declining.

During this phase of technology upgradation, there was a significant improvement in the business of SCBs, expansion in the ratio of deposits as a percentage of national income, higher growth in priority sector advances, and increasing employment opportunities in the banking sector.

3.3.3 1993 to 2005: Deregulation Phase

The year 1993 marked the onset of financial sector reforms in the Indian banking industry. The time period from 1993 to 2005 has been recorded as a period of liberalization and deregulation initiatives in the banking sector. This phase is distinct with major transitions taking place in the banking industry from a regulated banking system to a market-oriented one. In mid-1980s, Indian banking system was operating under structural rigidities. The bank nationalization process led to branch expansion but affected the quality of bank assets. By late 1980s, major issues faced by government banks were fragile health, low profitability, and a weak capital base.

To tackle the issues in the banking industry, a high-powered committee on banking sector reforms was constituted by RBI under the chairmanship of Shri M. Narasimham in 1993. An important recommendation of Narasimham Committee I was reduction in cash reserve ratio and statutory liquidity ratio. The committee suggested RBI to give some interest on the CRR balance to SCBs. The committee also recommended the introduction of prudential norms related to income recognition, asset classification, provisions for bad and doubtful debts, and capital adequacy. Priority sector was redefined and marginal farmers, tiny sectors, small business houses, transportation services, and cottage industries were included under the priority sector. The committee advised on deregulation of interest rates and autonomy to banks to decide interest rates for their customers (Kamesam, 2003; RBI, 2013). The committee also advocated setting up of tribunals for loan recovery, restructuring of weak banks, grant of operational autonomy to public sector banks, and relaxation of entry norms for new private and foreign banks in the country. However, competition in the sector did not penetrate much and paved way for the second phase of reforms.

In 1998, Narasimham Committee was appointed for the second time. The Narasimham Committee II recommended strengthening of prudential norms and bringing them at par with the international standards. The committee suggested the central bank to take additional measures to improve the competitive environment in banking sector by liberalizing foreign direct investment and raising its limit in case of private sector banks. The committee proposed bank consolidation in the form of mergers and acquisitions of banks (RBI, 2001a). In addition, the committee made recommendations to improve the credit delivery mechanism for small and medium enterprises and rural sector, to set up banking ombudsman offices, and to give more emphasis on technology advancement in banks.

The recommendations of Narasimham Committee I and II were meant to ensure safety and soundness of banks, greater transparency and accountability in banking operations, and functional autonomy for public sector banks. It led to recapitalization of public sector banks, improvement in financial health of banks, increasing competition in the banking industry, and fulfilment of capital adequacy requirements by banks. Table 3.3 shows the progress of SCBs in India right from 1993 to the year 2005.

Table: 3.3 Progress of SCBs in India: Deregulation Phase

Variables	1993	1998	2000	2002	2005
Number of Scheduled Commercial Banks	272	299	297	294	284
• *SBI & Associates*	*8*	*8*	*8*	*8*	*8*
• *Nationalized Banks*	*19*	*19*	*19*	*19*	*20*
• *Private Sector Banks*	*25*	*33*	*32*	*29*	*28*
• *Foreign Banks*	*23*	*44*	*42*	*36*	*29*
Number of Branches	61,169	64,218	65,412	66,190	68,355
Population Served per Branch (in '000)	14	15	15	16	16
Deposits of SCBs in India (Rs. Cr.)	2,74,938	5,98,485	8,51,593	11,31,187	17,32,858
Credit of SCBs in India (Rs. Cr.)	1,54,838	2,78,401	4,54,069	6,09,053	11,24,300
Deposits per Bank Branch (Rs. Lakhs)	449	932	1302	1709	2535
Credit per Bank Branch (Rs. Lakhs)	253	505	694	920	1645
Deposits of SCBs as % of National Income*	50.4	47.3	53.5	60.7	68.5
Credit-Deposit ratio (%)	56.3	54.2	53.3	53.8	64.9
Number of Employees	9,94,459	10,17,490	9,26,518	9,01,149	9,00,124
Cash Reserve Ratio (%)	14.5	10.0	8.0	4.7	5.0
Statutory Liquidity Ratio (%)	31.75	25.0	25.0	25.0	25.0
SCBs' Advances to Priority Sector (Rs. Cr.)	51,739	1,08,905	1,55,779	2,05,604	4,00,775
Share of PSA# in Total Credit of SCBs (%)	34.4	34.6	35.4	34.8	36.7

*Measured at current prices # PSA – Priority Sector Advances

The following observations are made from Table 3.3:

- After the initiation of reforms in the nineties, removal of restrictions on entry of private banks and consolidation of banks led to addition of 8 new private sector banks and 21 foreign banks to the already existing banks. By 1998, the total number of SCBs had increased to 299. However, between the years 2000 and 2005, private sector banks and foreign banks reduced in number. Private sector banks decreased from 32 to 28, while foreign banks declined from 42 to only 29 banks. Nonetheless, the number of bank branches increased from over 61,000 in 1993 to around 68,300 in 2005. During this period, there was an increase in the average population served by each bank branch. The burden of population served per bank branch increased from 14,000 in 1993 to 16,000 by 2005.

- The total business of SCBs in 1993 was worth Rs. 4,29,776 crores, that increased notably to over Rs. 28,57,100 crores by 2005. Deposits as well as credit of SCBs multiplied by almost six times between 1993 and 2005. The quick rise in deposits was on account of the launch of Resurgent India Bonds (RIBs) in 1994[4]. SCBs witnessed a CAGR of 15.5% and 16.9% in deposits per bank branch and credit per bank branch, respectively. Deposits as a percentage of national income increased from over 50% to almost 69% during this phase. Private sector banks and foreign banks have significantly contributed towards an increase in the credit-deposit ratio of SCBs from 56% to almost 65% between 1993 and 2005.

- The banking industry witnessed a fall in employment during this phase. The number of employees of SCBs declined from over 9,94,000 in 1993 to around 9,00,000 in 2005.

- On the recommendation of Narasimham Committee to reduce the pre-emptive rates, the high CRR of 14.5% held by commercial banks earlier in 1993 was reduced to as low as 5% by 2005. Similarly, a high SLR of 31.75% in 1993 was brought down to 25% in 2005.

- SCBs made enormous efforts towards channelizing credit supply to priority sectors. The amount of priority sector lending in total lending by SCBs multiplied from mere Rs. 51,000 crores in 1993 to as high as Rs. 4,00,775 crores by 2005.

The banking sector reforms led to significant improvement in the progress indicators of SCBs. Deposits and credit of SCBs expanded exponentially with higher credit-deposit ratio. Deposits of SCBs as a percentage of national income improved. There was a reduction in pre-emptive rates, and increase in priority sector advances by the sector.

3.3.4 2000 to 2018: Digitalization Phase

Banks are investing heavily on digital technologies to meet the demands of a rapidly growing digital citizenry and to catch up with leading global competitors, offering wide-range of sophisticated services. By convention, banks have been in the forefront of harnessing technology to improve their products, services and efficiency (RBI, 2001b). The efforts of RBI to digitize the Indian population cuts across provision of social services, government transfers and transactions, and formal banking. A radical shift towards universal digitization in the country has incentivised India's banks to adopt a digital mode of banking as against the conventional way of banking.

The banking sector in India has witnessed a major revolution with the penetration of internet banking. Over the past two decades, banks have witnessed an unprecedented level of digitization and digital disruptions. RBI has taken various initiatives towards the payment ecosystems with continued emphasis on safety, security, efficiency, innovation, competition, customer protection, and financial inclusion (RBI, 2021). Banks are offering an array of digital financial services such as electronic fund transfers, ATMs, debit and credit cards, POS terminals, internet banking, and mobile banking.

After financial sector reforms in India, modernization and computerization of payment and settlement systems for banks was given priority with technology being the driving force. RBI played a central role in digital reforms. The reform measures in the payment and settlement systems were initiated in a phased manner. This began in 1995 with the setting up of an Electronic Funds Transfer (EFT) System, introduction of Electronic Clearing Services (ECS) for repetitive or low value transactions, extension of MICR clearing to non-metropolitan centres, and promotion of credit card culture. In 1999, RBI constituted the National Payment Council that formulated the broad framework for designing and developing an integrated, state-of-the-art, robust payments and settlement systems for the country. In the payment systems vision document (2001-04); RBI prepared a roadmap for consolidation, development and integration of payment systems in India (RBI, 2001c). As a replacement to paper-based inter-bank clearing system, National Electronic Fund Transfer (NEFT) and Real Time Gross Settlement (RTGS) were introduced to electronically transfer funds from any bank branch in the country. Implementation of round-the-clock RTGS within a short timeline was a momentous milestone in the journey of digitalization of banks.

Table 3.4 presents the data for growth of digital payment and settlement systems[5] in India between the period 2000-2018.

Table: 3.4 Growth of Digital Payment and Settlement Systems in India

Years	Value of Transaction (in Bn)					Number of		Value of Transaction (in Bn)		
	ECS	EFT / NEFT	RTGS	Credit Card	Debit Card	ATMs	POS	IMPS	NACH	UPI
2000	36.4	1.4	-	-	-	-	-	-	-	-
2003	125	148	19.6	177	48.7	17,642	-	-	-	-
2006	1,087	774	1,84,811	414	81.7	28,704	-	-	-	-
2007	8,312	1,403	2,73,183	580	125	36,314	-	-	-	-
2010	2,500	9,400	3,94,500	800	400	78,386	6,10,156	-	-	-
2013	3,760	43,786	6,34,252	1,540	955	1,66,894	10,88,708	96	215	-
2016	183	1,20,040	9,81,904	3,284	3,299	2,08,477	27,76,949	4,116	7,916	69
2018	258	2,27,736	13,56,882	6,033	5,935	2,06,202	40,68,954	15,903	14,762	8,770

Note: All data reported in above table are as on 31st March. *'-' stands for Not Available*

In the year 2000, the value of transactions through NEFT was Rs. 1.4 billion that increased to over Rs. 2,27,700 billion in 2018. Similarly, the amount transacted through RTGS surged from Rs. 19.6 billion in 2003 to a whopping Rs. 13,56,882 billion in 2018. Card culture was promoted by RBI in the early 2000s. An increasing trend in usage of credit and debit cards was observed from 2003 onwards. SCBs reported a CAGR of 35 percent and 25 percent in the value of transactions using credit card and debit card respectively, for the period between 2003 and 2018.

RBI encouraged banks to set up ATMs as extended delivery channels. In 2003, the number of ATMs stood at 17,642 which increased to over 2,00,000 by 2018. Banks launched Point of Sale (POS) terminals at the physical store and at virtual sales points in 2010. It was an easy, quick and convenient mode of making payment. A steep rise was observed in POS terminals from over 6,10,000 in 2010 to more than 40,68,000 in 2018.

Immediate Payment Service (IMPS) was also introduced in 2010. It offered inter-bank fund transfer using mobile phones. IMPS services were available non-stop throughout the year including bank holidays. Transactions through IMPS multiplied rapidly, recording a CAGR of 134% in the value of transactions between 2013 and 2018. The National Automated Clearing House (NACH) was operationalized in 2012. It aimed at replacing the multiple existing ECS systems and providing an alternative for bulk fund transfer. Between the period 2013 and 2018, the value of transactions made through NACH increased from Rs. 215 billion to over Rs. 14,700 billion, while the amount transacted through ECS declined from Rs. 3,760 billion to Rs. 258 billion.

To boost the digitalization process, RBI approved the National Payment Corporation of India (NPCI) to launch Unified Payments Interface (UPI) in April 2016. Also, demonetization of currency notes was announced by the government on 8th November 2016. This created havoc in the economy but also paved way for expansion of the digital India drive towards a cashless economy. Cash scarcity compelled people to shift to more accessible electronic modes of payment (Bhatnagar, 2017). In the short span of three years between 2016 and 2018, the amount transacted through UPI escalated from mere Rs. 69 billion to Rs. 8,770 billion.

The digital initiatives have enhanced digital payment experience of consumers, while ensuring improved transaction efficiency and adequate security measures. Further, the Reserve Bank needs to promote innovation to strengthen the payments ecosystem, improve awareness, and establish sustainable ICT infrastructure to support resilience, reliability, security, integrity and cost efficiency in the banking sector (RBI, 2021).

Although reform measures in payment and settlement systems in India were initiated in 1995, real momentum in the digitalization process was realized only after the turn of the century. The growth in digital payment systems in the country has laid the foundation for progression of the Indian banking industry and positioned India’s banks to supersede their global competitors with innovative models and strategies. At this juncture, it is important to examine the progress of SCBs in India after 2000s. Table 3.5 traces the progress of SCBs in India over the digitalization phase from 2000 to 2018.

Table: 3.5 Progress of SCBs in India: Digitalization Phase

Variables	2000	2006	2010	2015	2018
Number of Scheduled Commercial Banks	297	213	160	147	143
• *SBI & Associates**	*8*	*8*	*7*	*6*	*1*
• *Nationalized Banks*	*19*	*20*	*20*	*21*	*20*
• *Private Sector Banks*	*32*	*25*	*21*	*20*	*21*
• *Foreign Banks*	*42*	*27*	*30*	*44*	*45*
• *Regional Rural Banks*	*196*	*133*	*82*	*56*	*56*
Number of Bank Branches	65,919	69,471	85,393	1,25,672	1,52,275
Population Served per Bank Branch (in '000)	15	16	13.8	10.3	8.7
Deposits of SCBs in India (Rs. Cr.)	9,89,141	24,09,049	44,92,826	88,98,901	1,25,73,772
Credit of SCBs in India (Rs. Cr.)	5,29,272	15,07,077	32,44,788	64,99,829	97,71,722
Deposits per Bank Branch (Rs. Lakhs)	1,501	3,036	5,261	7,081	8,257
Credit per Bank Branch (Rs. Lakhs)	803	2,169	3,800	5,172	6,417
Deposits of SCBs as % of National Income#	58.9	73.8	87.0	80.0	74.68
Credit-Deposit ratio (%)	53.5	71.5	72.2	73.0	75.34
Number of Employees	9,01,288	8,99,407	10,50,885	13,00,934	14,54,955

*Associate banks of SBI were merged with SBI in 2017 #Measured at current prices

The important highlights from Table 3.5 are:

- Between 2000 and 2018, the number of SCBs declined from 297 to 143 banks. This was on account of mergers of regional rural banks (RRBs) [6]. Majority of RRBs had an abysmal performance and suffered huge losses, which led to a fall in their number from 196 to 56 during this phase.

- SCBs had 65,919 bank branches in 2000, that more than doubled by 2018. With expansion in bank branches, the burden of population served per bank branch reduced from 15,000 to 8,700 over this period. SCBs were giving employment to over 9,01,000 people in 2000 which increased to 14,54,955 employee strength by 2018.

- Rapid growth and extension of online banking services facilitated SCBs with their aggregate business accelerating during the digitalization phase. Deposits of SCBs increased from over Rs. 9,89,100 crores in 2000 to around Rs. 1,25,73,770 crores in 2018, while credit advanced by SCBs multiplied eighteen times from Rs. 5,29,272 crores between 2000 and 2018. The credit-deposit ratio also increased from 53.5% to 75.3% during this period. Deposits as a percentage of national income increased considerably from 58.9% to 74.7% between 2000-2018.

The digital drive in the banking sector paralleled with business growth and development set the Indian banking industry in motion. The industry witnessed growth in credit-deposit ratio, increase in the ratio of deposits to national income, and significant improvement in employment opportunities by SCBs.

The commercial banking sector in India has leapfrogged the expectations of many world economies in the last five decades. Banks have adapted well to the ever-changing banking landscape and overcome challenges like bank nationalization, technology upgradation, sectoral reforms, and the ubiquitous digitalization trend. Banks today are strong and can address the needs of customers. Bank branch network has spread geographically and penetrated in urban and rural areas. The business generated by SCBs in terms of deposits and credit advanced has expanded considerably, and the share of SCBs in priority sector advances has also increased substantially. The last two decades have been dotted by major disruptions with digitalization and fintech adoption in the Indian banking industry. According to policy makers, the Indian banking industry is well capitalized and strong enough to withstand any unforeseen changes.

3.4 Conclusion

Ever since the independence of the country, the Indian banking industry has been exposed to revolutionary changes. The industry has extended its umbrella of services to all segments of society through traditional as well as modern means of banking. Growth in banking industry has been inclusive of growth and development in the economy and the financial sector. Post-independence, the progression of Indian banking has been phenomenal, at times surpassing even the global competitors.

The Indian banking industry has traversed a long journey and witnessed important landmarks after the country's independence. This timeline of more than seven decades has been examined over four milestones to review the specific events that have been shaping the banking industry, which are: *Post Independence (1947 to 1968), Post Nationalization (1969 to 1992), Post Reforms (1993 to 2006), and Post Global Crisis (2007 onwards).*

Several regulatory changes were introduced in the banking industry beginning with the enactment of Banking Regulation Act in 1949. The act was institutionalized with an objective to fulfil social developmental goals and to reform the working of commercial banks. The process of bank nationalization in 1969 and 1980 brought 20 commercial banks in the ambit of the public sector, which led to an increase in dominance of government-owned banks with 90 percent share in total deposits of the banking sector. Despite the benefits of nationalization, these banks faced issues relating to falling profitability and rising bad loans. The nationalized banks were highly regulated and controlled by the government, that restricted their functional and operational autonomy. The banking sector reforms of 1993 steered a liberalized and deregulated era in the Indian banking industry. Measures were taken to strengthen the banking sector by instituting financial reforms. Several improvements were initiated by way of reduction in pre-emptive rates, deregulation of interest rates, implementation of prudential norms, and grant of functional autonomy to public sector banks. Competition in banking industry was intensified by allowing entry of new banks in the sector. The new generation banks encouraged healthy competition, use of advanced technology, banking automation, and adoption of advanced banking practices in the banking industry. The reform measures brought improvement in the financial health of the sector but the impact of reforms was realized by the end of the decade. The banking sector became aggressive, competitive, and recorded unprecedented growth.

By 2007 end, economic and financial crisis surfaced the world economy. The crisis exposed the vulnerability of financial systems across the globe. Although it had a slowdown effect on the Indian economy, the banking sector exhibited incredible resilience and remained mostly shielded from the adverse impacts of crisis. However, credit growth slackened, resulting in fall in interest income and profitability of banks. Public sector banks were the worst hit and exhibited a drastic fall in their financial performance. To counter these problems, the government and RBI took prompt actions by way of monetary policy relaxation and fiscal stimulus to reduce interest rates and boost domestic demand. Over the past decade, banks have evolved phenomenally taking a significant leap into the world of new age banking.

The study has also mapped the growth and progress of scheduled commercial banks in India since the time of nationalization of banks. The overall period of five decades from 1969 to 2018 has been divided into shorter time periods or phases: *1969 to 1985 as 'Nationalization Phase'; 1987 to 1997 as 'Technology Upgradation Phase'; 1993 to 2005 as 'Deregulation Phase'; and 2000 to 2018 as 'Digitalization Phase'*. The study has evaluated the progress made by scheduled commercial banks over these distinct phases on the basis of progress indicators.

Bank nationalization resulted in higher number of SCBs in India, increase in rural reach of banks through rapid branch expansion and extension in credit to priority sectors. By the end of the technology upgradation phase, government banks were well-equipped with AELPMs, computers, and adequately trained bank staff for computer application in banking services. The period from 1993 to 2005 was one of liberalization and deregulation in the banking sector. The banking reform measures led to reduction in CRR and SLR, increase in priority sector advances, rapid expansion in deposits and credit of SCBs, rise in credit-deposit ratio, and significant improvement in deposits of SCBs as a percentage of national income. The period after 2000s is observed as a phase of universal digitization in the Indian economy. To meet the demands of a new digital system, RBI took serious efforts to build a robust and secure payment and settlement systems in India. Demonetization initiative by the government was a progressive move that paved way for expansion of the digital India drive and shift towards a cashless economy. There was greater focus on electronic transactions with increasing use of credit and debit cards, net banking, and other online payment systems. By the end of the digitalization phase, there were more than 2,00,000 ATMs in the country, the amount transacted through RTGS was over Rs. 13,56,800 billion, the total value of transactions using credit and debit cards was around Rs. 12,000 billion, and more than 40,68,000 POS terminals were installed. Digitalization in the banking sector had a multiplying effect on banking activities and banking business. The industry witnessed expansion in credit-deposit ratio and in the ratio of total deposits to national income.

Over the past five decades of bank nationalization, SCBs have progressed in leaps and bounds. Bank branch network has spread geographically. Banks have penetrated rural areas and are participating in the process of broadening and deepening of financial inclusion in the country. The business generated by SCBs in terms of deposits and credit advanced has expanded considerably, signifying people’s choice for an organized system of banking. SCBs record a CAGR of 11% in total banking business. The share of SCBs in priority sector advances has increased, indicating their willingness towards serving the needs of this socially important segment. The first two decades of this new millennium have been dotted by major disruptions in the industry with digitalization and fintech adoption initiatives revolutionizing the entire banking space. These technologies have opened new possibilities for Indian banks with a competitive advantage in the global market.

Notes

1. In response to the recommendation of Narasimham Committee with regard to adoption of international practices for bank supervision, a working group was constituted by RBI to review the Indian banking system vis-à-vis the international standards. The committee was established in the year 1995 under the chairmanship of Shri S. Padmanabhan. A three-tier supervisory approach was engaged to supervise on-site operations, off-site monitoring, and a periodical external audit based on capital adequacy, asset quality, management, earnings, liquidity, and system and controls (CAMELS) (RBI, 1995).

2. Under the Lead Bank Scheme (LBS), Lead Banks were assigned the role of catalytic agent for economic development through the expansion of bank branches and diversification of credit throughout the country based on area approach.

3. Till 1980, priority sector included agriculture, small-scale industry, road and water transport operators, retail trade and small business, professionals and self-employed, education, and industrial estates. But after June 1981, indirect finance to other priority sectors, pure consumption loans, and housing loans to weaker sections and schedule caste/scheduled tribe were also included in priority sector (RBI, 1981).

4. Resurgent India Bonds (RIBs) targeted Non-Resident Indians (NRIs) and Overseas Corporate Bodies (OCBs) to raise funds with an objective of investing in infrastructural activities in the country. State Bank of India floated RIBs with the expectation of raising Rs. 15 crores from NRIs and OCBs.

5. Data for RTGS, Credit card, Debit card, and ATMs are available from 2003. Data for number of POS terminals is available from 2010. Data for value of transaction through IMPS and NACH are available from 2013, and that for UPI is available from the year 2016.

6. On the recommendations of the Khusrau Committee and Narasimham Committee, the process of consolidation and amalgamation of RRBs started in the year 2005.

References

1. Bhatnagar, H. (2017), 'Demonetization to Digitalization: A Step Toward Progress', Management and Economics Research Journal, Vol. 03, pp, 11-15.
2. Kamesam, V. (2003), 'Indian Economic Scenario – Yesterday-Today-Tomorrow', Inaugural Address at a Seminar on Banking-Agriculture-Industry-IT – New Hopes-New Challenges, Hyderabad, 16th September, 2003.
3. Mohan, R. (2004), 'Financial Sector Reforms in India: Policies and Performance Analysis', Reserve Bank of India Bulletin, October.
4. RBI (1955), 'Trend and Progress of Banking in India', Reserve Bank of India, Mumbai.
5. RBI (1969), 'Trend and Progress of Banking in India', Reserve Bank of India, Mumbai.
6. RBI (1981), 'Report on Trend and Progress of Banking in India', Reserve Bank of India, Mumbai.
7. RBI (1984), 'Report on Trend and Progress of Banking in India', Reserve Bank of India, Mumbai.
8. RBI (1995), 'Report of Working Group to Review the System of On-site Supervision over Banks', Reserve Bank of India, Mumbai.
9. RBI (1996), 'Report on Trend and Progress of Banking in India', Reserve Bank of India, Mumbai.
10. RBI (1998), 'Payment and Settlement in India – Committees on Computerisation', Reserve Bank of India, Mumbai.
11. RBI (2001a), 'Committee on Banking Sector Reforms (Narasimham Committee II) - Action taken on the recommendations', Reserve Bank of India, Mumbai.
12. RBI (2001b), 'Report on Internet Banking', Reserve Bank of India, Mumbai.
13. RBI (2001c), 'Payment System in India – Vision 2001-04', Reserve Bank of India, Mumbai.
14. RBI (2008), 'Report on Currency and Finance', Reserve Bank of India, Mumbai.
15. RBI (2013), 'The Reserve Bank of India – History 1981-1997', Reserve Bank of India, Vol. 04, Mumbai.
16. RBI (2021), 'Reserve Bank of India Annual Report', Reserve Bank of India, Mumbai.
17. Sinha, A. (2012), 'Changing Contours of Global Crisis – Impact on Indian Economy', Reserve Bank of India Bulletin, April.
18. Thorat, U. (2009), 'Learning from Crises', Reserve Bank of India Bulletin, November.