IV CENTRAL BANKING IN INDIA

4.1 Recent growth literature focuses on the primacy of institutions as a determinant of economic development in that they influence the decisions regarding work, saving, investment, innovation, production and exchange. The new focus on institutions has led to an ambitious agenda of governance reforms aimed at reducing corruption, improving regulatory apparatus, making monetary and fiscal institutions independent, strengthening corporate governance, *etc.* – christened as the second generation of reforms. It is argued that the policy changes are ineffective, unless they are grounded strongly in institutional reforms. The empirical analysis, however, suffers from the difficulty that institutional quality is endogenous to income levels and that "there is much to be learned still about what improving institutional quality means on the ground" (Rodrik *et al*., 2004). It is in this context that the study of the evolution of institutions in country-specific situations is crucial.

4.2 Central banks occupy a pivotal position in the institutional fabric of an economy. As discussed in chapter III, the functions of a modern central bank are vastly different from what was expected from the early central banks founded in Europe in the seventeenth century. The evolution of central banking in the Indian context has its own specificity. The Reserve Bank of India (RBI), while discharging its statutory responsibilities, has played a crucial role in the nation building process, particularly in the development of the financial sector. In fact, institution building constitutes a distinguishing feature of central banking in India.

4.3 This chapter describes the evolution of central banking in India over the period of seventy years since the inception of the Reserve Bank in 1935. For analytical convenience, the entire period 1935-2005 is sub-divided into three broad phases: foundation phase (1935-1950), development phase (1951-1990) and reform phase (1991 onwards). The turning points – onset of economic planning in 1951 and initiation of structural reforms in the Indian economy in 1991 – had profound implications for the working of the Reserve Bank. The Reserve Bank operated in distinctly different regimes in each of these eras. During most of the formation phase it was a private bank, though formed under a statute and overseen by the then colonial government. The functions of the Bank during this phase were confined essentially to traditional central banking, *i.e.*, note issue authority and banker to the Government. During the war and post war years, its major preoccupation was facilitation of war finance, repatriation of sterling debt and planning and administration of exchange control. Upon the nationalisation of the Bank in 1949 in terms of the Reserve Bank of India (Transfer to Public Ownership) Act, 1948 and the enactment of the Banking Regulation Act, 1949, regulation and supervision of banks received the focus. On the initiative of the Reserve Bank, the Government appointed the Rural Banking Enquiry Committee in 1949 to consider important policy issues relating to the extension of banking facilities in the country. With the launching of five-year plans, the Bank's functions became more diversified in terms of Plan financing and establishment of specialised institutions to promote savings and investment in the Indian economy and meet the credit requirements of the priority sectors. Two important events during the 1960s – the devaluation of the rupee in June 1966 and nationalisation of 14 private commercial banks in July 1969 – greatly influenced the functions of the Reserve Bank in the subsequent years. Externally, the uncertainties in the global economy following the breakdown of the Bretton Woods system of stable exchange rates and the emergence of the floating regimes exacerbated by the oil shock of 1973-74 presented serious challenges for exchange rate management and gave rise to balance of payments difficulties in India as in many other developing countries. The Government re-focused on the Foreign Exchange Regulation Act (FERA), 1947 for conserving foreign exchange rather than regulating the entry of foreign capital. The FERA, 1973 was drafted incorporating the changes necessary for effective implementation of the Government policy and removing the difficulties in the working of the existing legislation. The major responsibilities devolving on the Reserve Bank during the 1970s related to regulation and management of the country's scarce foreign exchange reserves and expansion in the volume and scope of its refinance facilities for agriculture and rural development. During the 1980s, monetary policy assumed a new focus. On the whole, the development phase was characterised by a plethora of controls and regulations in the Indian economy. In the period since 1991, which witnessed a regime shift in the Indian economy, there has been a distinct re-orientation in the functions of the Reserve Bank in the light of the domestic and global developments. The reform measures in the financial sector and the initiatives taken by the Reserve Bank for developing financial markets to ensure efficient transmission of monetary policy impulses, constituted the hallmark of this phase.

4.4 The rest of the chapter is organised as follows. Sections I, II and III provide a synoptic overview on the transformation of central banking functions in India over the three phases. Section IV addresses the contemporary issues relevant to central banking in India, particularly concerning the monetary framework, while Section V sets out the concluding observations.

I. FOUNDATION PHASE (1935-1950)

4.5 The Reserve Bank was formed as a shareholders' institution in April 1935. The genesis of a central banking institution in India, however, can be traced to the eighteenth century (Box IV.1). The formation of the Reserve Bank was similar to the establishment of early central banks in Europe. The crucial difference, however, was that Reserve Bank operated under the colonial rule, whereas the central banks in the European countries were then mostly owned by national governments.

4.6 The objective of establishing the Reserve Bank, as stated in the preamble to the RBI Act 1934, was to "regulate the issue of bank notes and the keeping of the reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage". The Bank's functions as laid down in the statutes were: (a) issue of currency (b) banker to Government; and (c) banker to other banks. Except in the sphere of agriculture, the Bank was not entrusted with any great promotional role and that too on a limited scale (RBI, 1970).

4.7 The foundation phase was marked by several war and post war developments including the separation of Burma (modern Myanmar) in 1937, partition of the country in 1947 and nationalisation of the Reserve Bank, which altered the area of operations of the Bank. After the separation of Burma, the Bank acted as currency authority of that country till 1942 and as banker to the Burmese government till March 1947.

Box IV.1
The Genesis of Central Banking in India

The efforts to establish a banking institution with central bank character dates back to 1773. The Governor of Bengal under British India recommended the establishment of a General Bank in Bengal and Bihar. The Bank was set up in 1773 but it was only short-lived. In 1914, the Chamberlain Commission had included in their report a comprehensive memorandum by John Maynard Keynes (one of their members), proposing the amalgamation of the three Presidency Banks into one central bank to be called the Imperial Bank of India. In the latter stages of the First World War, the necessity of a central banking institution became more apparent and the Imperial Bank Act was passed in 1920. The amalgamation was finally effected in 1921 leading to the formation of the Imperial Bank of India. Essentially a commercial bank, the Imperial Bank performed certain central banking functions such as banker to the Government and bankers' bank, while the core central banking function of the issue of currency notes and management of foreign exchange continued to be the responsibility of the Central Government.

Meanwhile, central banking theory developed on the lines that it was unsuitable for an institution with commercial banking functions to also be the central bank in a country. In 1926, the Royal Commission on Indian Currency and Finance (Hilton Young Commission) recommended that the dichotomy of functions and division of responsibilities for control of currency and credit should be ended. The Commission suggested the establishment of a central bank to be called the Reserve Bank of India, whose separate existence was considered necessary for augmenting banking facilities throughout the country.

The Bill to establish the Reserve Bank of India was introduced in January 1927 in the Legislative Assembly, but it was dropped due to differences in views regarding ownership, constitution and composition of its Board of Directors. The White Paper on Indian Constitutional Reforms (1933) proposed the setting up of the Reserve Bank of India free from political influences. The Indian Central Banking Enquiry Committee (1931) had also strongly recommended the establishment of a Reserve Bank. These events led to the introduction of a fresh Bill in 1933. The Bill was passed in 1934 and the RBI Act came into force on January 1, 1935. The Reserve Bank was inaugurated on April 1, 1935.

Source: RBI (1970).

Upon the partition of the country in 1947, the Bank rendered central banking services to the Dominion of Pakistan until June 1948. In terms of the Pakistan Monetary System and Reserve Bank (Amendment) Order, 1948, the Bank ceased to function as the central bank for Pakistan from July 1, 1948. The Reserve Bank was nationalised on January 1, 1949 in terms of the Reserve Bank of India (Transfer to Public Ownership) Act 1948.

4.8 Each of these events had its bearing on the working of the Reserve Bank, even though it confined mainly to the traditional functions. The most active part of the Bank's operation during this period related to currency management and banker to the government. In the sphere of monetary policy, except for maintaining exchange rate stability, the management of money supply or inflation was not warranted due to the low levels of economic activities especially during the colonial era.

Currency Management

4.9 In India, paper money, in the modern sense, traces its origin to the late eighteenth century in the form of note issues of the private banks as well as semi-government banks (the Bank of Bengal, the Bank of Bombay and the Bank of Madras - the Presidency Banks). The Paper Currency Act of 1861 conferred upon the Government of India the monopoly of note issue, bringing to an end the note issues of private and Presidency banks. The statutory provisions governing the issue of coins are laid down in the Indian Coinage Act 1906. Up to March 31, 1935, the task of currency management was undertaken departmentally by the Central Government through the Controller of Currency. Upon its establishment, the Reserve Bank took over this function under Section 3 of the RBI Act, 1934. The transition of currency management from the colonial to independent India was a reasonably smooth affair. Until its own notes were ready, the Bank issued currency notes of the Government of India. The first issue of notes in the denomination of Rs.5 and Rs.10 was made by the Reserve Bank in January 1938, while notes in higher denominations (Rs.100, Rs.1,000 and Rs.10,000) were issued later during the year.

4.10 In terms of the RBI Act, the affairs of the Bank relating to note issue and general banking business are conducted through two separate Departments, *viz.*, Issue and Banking. The Issue Department is responsible for the aggregate value of the currency notes of the Reserve Bank in circulation from time to time and maintains the eligible assets for equivalent value. The mechanism of putting currency into circulation and its withdrawal from circulation (expansion and contraction of currency) is undertaken through the Banking Department.

4.11 The assets of the Issue Department, against which currency notes are issued under Section 33 of the RBI Act, consist of gold coin and bullion, foreign securities, rupee coin, Government of India rupee securities of any maturity and bills of exchange and promissory notes payable in India which are eligible for purchase by the Bank. The original Act prescribed a proportional reserve of gold and sterling (later foreign) securities against note issue, whereby, not less than 40 per cent of the total assets was to consist of gold coin and bullion and sterling (later foreign) securities, stipulating further that gold coin and gold bullion were not, at any time, to be less than Rs.40 crore. The proportional reserve system was substituted by a minimum reserve system in 1956 through the Reserve Bank of India (Amendment) Act, 1956. The minimum reserve system stipulated the foreign exchange reserves in absolute terms at Rs.400 crore and gold coins at Rs.115 crore, making the total minimum asset backing of Rs.515 crore.

4.12 The support for the currency in assets in 1935 was much higher in terms of gold coin and bullion and sterling securities. The rupee securities of the Government of India constituted 27 per cent of the total assets of the Issue Department. The small order of currency in circulation in 1935 not only indicates the smaller volume of money then required for trade but also reflects the relatively small base on which the economy rested. To some extent, it also reflected the lack of monetisation in the economy. After independence, the responsibilities of the Bank confined to a single national currency and Indian currency has no link abroad.

4.13 Issue of bank notes in British India was in fact the most important function of the Reserve Bank in the beginning. Accounting of currency chest money constituted a major part of the daily routine business of the Reserve Bank, employing about a third of the Bank's personnel. The issue of currency notes - consisting of one-rupee notes and small (subsidiary) coins issued by the Government and the notes issued by the Reserve Bank - was undertaken from the branches of the Issue Department. The Bank also maintained currency chests at the branches of the Imperial Bank of India engaged in Government treasury business and at Government treasuries and sub-treasuries. The Bank provided a measure of elasticity to the currency system through its loan and open market operations, although there was not much scope for innovation or technical improvement in currency management.

Bankers' Bank

4.14 Prior to the formation of the Reserve Bank, the Imperial Bank (established in 1921) functioned to some extent as a bankers' bank. Most other banks maintained balances with it and could receive accommodation. It also operated clearing-houses and provided remittance facilities across its branches, other banks and the public. The predominant bank financing was for foreign trade, while the share of internal trade was not significant.

4.15 The Reserve Bank's responsibility as bankers' bank was essentially two-fold. First, it acted as a source of reserves to the banking system, especially for meeting the seasonal requirements apart from serving as the lender of the last resort in times of emergency. The second responsibility was to ensure that banks were established and run on sound lines, the emphasis in those years being mainly on the protection of depositors' interest rather than on credit regulations. Regulation and supervision of the banking sector was entrusted to the Banking Department in 1945. However, the Bank did not have much power until the enactment of the Banking Companies Act in 1949 (renamed as Banking Regulation Act from March 1966). Furthermore, the Bank could not immediately begin to exercise the powers entrusted to it by the 1949 legislation due to the post-war banking crisis. Indigenous bankers on a limited scale and moneylenders had a wide scope and choice for their operations (RBI, 1985).

Banker to the Government

4.16 Before the formation of the Reserve Bank, the Imperial Bank performed many of the functions as banker to the Government. With the establishment of the Reserve Bank, the Imperial Bank ceased to be the banker to the Government, but entered into an agreement with the Reserve Bank for providing its services as the sole agent of the Reserve Bank in places where it had a branch and there was no branch of the Banking Department of the Reserve Bank. As the banker to the Central Government and to the state Governments by virtue of agreements entered into with them, the Reserve Bank provides a range of banking services for these Governments such as acceptance of money on government account payment/withdrawals of funds and collection and transfer of funds through different means. Sections 20, 21 and 21A of the RBI Act provide the statutory basis for these functions. The terms and conditions on which the Reserve Bank acts as banker to the Central and State Governments are set out in separate agreements, which the Bank entered into with these Governments. The first of such agreements was entered into in April 1935 with the Secretary of State for India, which required the Reserve Bank to transact the general banking business of the Central Government. The agreement was supplemented by exchanges of letters from time to time to cover matters such as minimum balances, provisions of temporary financial accommodation in the form of ways and means advances and modification of some of the original terms. The Reserve Bank provided temporary advances to the Government under Section 17(5) of the RBI Act to bridge mismatches in receipts and expenditures.

4.17 The Central Government obtained ways and means advances from the Imperial Bank till 1935 and from the Reserve Bank thereafter. Since 1943-44, for about a decade, the Central Government did not resort to ways and means advances in view of the large cash balances accumulated during the war years. The aftermath of economic depression and the absence of the need for higher advances also warranted a low order of credit support from the Reserve Bank to the Government. The most active part of the Bank's operation during those years as banker to Government, however, related to loan floatation of the central and provincial governments including the issue of their treasury bills. During the period 1935 to 1939, the Government of India floated one sterling loan in London and four new rupee loans, mainly to provide for the repayment of maturing obligations. The vast acquisition of the sterling by the country during the Second World War provided an opportunity for repatriation of its sterling debt and much of the initiative in this matter came from the Reserve Bank, which also implemented the repatriation. While repatriation of sterling debt began even before the war on a modest scale, it was undertaken on a large-scale during the war years – initially on a voluntary basis and since 1941, through schemes of compulsory repatriation. Other modes of repatriation included funding of Railway Annuities, requisitioning of Railways Debenture Stocks and Liquidation of Chatfield debt. Over the period 1937-38 through 1945-46, sterling debt to the tune of £323 million had been repatriated – the bulk of which (£289 million) was undertaken during 1940-43 (RBI, 1970).

Monetary Policy

4.18 Like other central banks, the core function of the Reserve Bank is to formulate and administer monetary policy to maintain the stability of the rupee. During the formative years there was, however, no formal monetary policy formulation other than that of administering the supply and demand for credit in the economy. The Bank Rate (the standard rate at which the Reserve Bank is prepared to buy or discount the bills of exchange or other commercial paper eligible for purchase under Section 49 of the RBI Act), reserve requirements and open market operations (buying and selling securities particularly to the scheduled commercial banks as part of the policy to maintain orderly coordination in the Securities Market) were the mechanisms for regulating the credit availability. The Bank Rate, as an instrument of control, was not used at all in this period, except once in November 1935 when the rate was reduced from 3.5 per cent to 3.0 per cent. The rate remained unchanged thereafter till November 1951. The Reserve Bank, however, employed the instruments of open market operations (OMOs) in a fairly substantial way. Although the Bank was vested with adequate powers to resort to the qualitative instruments, *viz.*, selective credit control, no need was felt during the initial stages of the Bank's functioning due to the existence of price stability.

4.19 During the Second World War period, the Reserve Bank preferred a policy of stable interest rates as against the prevailing wisdom of "cheap money" policy. The Bank's stance in this regard was clearly spelt out by the Governor, Sir James Taylor, in a public speech in February 1940. Excerpts from the speech:

> People are too prone to oversimplify problems. To many monetary control means cheap money, and it is often argued both in this country and elsewhere that the better the control the cheaper it should be make money. This of course is essentially fallacious. The business of the controlling authority … is to do as far as possible what freely operating markets would have done for themselves if they were not being subjected to abnormal stresses beyond their control or their ability to foresee. In the absence of control these would be reflected in violent fluctuations upwards and downwards… It is obviously advantageous to have machinery to control and iron out these fluctuations, … if one goes further and tries to use such machinery to carry out theoretical policies and do what the market if left to itself in normal circumstances… Too great a reduction in the effective rate of interest must lead to drying up the investing habit in which case the only alternative is inflation … the controlling authority has to take these factors into consideration. It has to keep money on an even keel … After all, no high degree of technique is required if the whole of monetary theory simply boils down to turning on the printing press (RBI, 1970).

4.20 The policy of stable interest rates was also reflected in the fixation of the terms of Government borrowing. The strategy of Government bond sales was varied from time to time depending on the choice between issue of a new security and re-issue of an existing loan, maturity, issue price, timing and the decision whether the loan should be kept open for a fixed period or be on tap. Broadly, the war was financed with a coupon rate of 3 per cent – the issue price in the case of longer term loans being gradually raised, taking it closer to an effective yield basis of 3 per cent.

4.21 Interestingly, Governor Taylor *(op cit)*, while considering the loan programme for 1942-43, suggested re-issue of the 3 per cent 1951-54 at par and a longer term loan of 3 per cent 1967-69 at around Rs.95, giving an effective yield of over $3^1/_3$ per cent at a time when the Government was desirous of lowering the yield basis to below 3 per cent – they were thinking in terms of a 12-year $2^1/_2$ per cent loan at Rs.98 and a 25-year 3 per cent loan at Rs.98, giving effective yields of roughly $2^3/_4$ per cent and $3^1/_8$ per cent, respectively. The Governor, "precariously concerned about the inflationary impact of such a reduction", preferred to go very slow in the matter (RBI, 1970).

4.22 In 1943, in view of the growing inflation, suggestions were made in various quarters to raise the interest rates to stimulate investment in Government bonds; but the Reserve Bank opposed this. The views of the Bank were communicated to the Government in a letter in April 1943: "The results of attempting any enhancement of interest rates at this stage are likely to be embarrassing for those who have so far subscribed to Government loans, … Apart from the fact that high interest rates increase the burden on succeeding generations, there is always the possibility of any such increase failing in its immediate effect and defeating its own purpose". Reflecting the Bank's stance that did not favour cheap money either, the letter mentioned: "The cogency of the argument for a rise in the rate of interest may, however, be recognised to this extent that in present conditions it does not seem possible to proceed further in the direction of cheapening money and that Government may content themselves with aiming at the maintenance of the present level of long term interest rates" (RBI, 1970).

II. DEVELOPMENT PHASE (1951-1990)

4.23 With the launching of five-year plans in the country, the Reserve Bank took over a number of crucial developmental and promotional roles. The First Five Year Plan emphasised the role of monetary and credit policy as an important instrument for maintaining price stability and for regulation of investment and business activity. Accordingly, the Reserve Bank was expected to play its role in promoting economic development by aligning the banking system to the needs of a planned economy. The fundamental task before the Bank was to put in place an appropriate institutional framework for mobilisation of potential savings through the promotion of financial intermediaries and creation of a broad spectrum of financial assets and effective investment of these resources through the adaptation of a credit structure that would subserve the developmental needs.

4.24 By this time, the Reserve Bank had acquired enough experience and expertise in discharging the traditional central banking functions. It had obtained fairly adequate control over the money market (RBI, 1985). Thus, organisationally, the Reserve Bank was well equipped to play its due role to promote the country's economic growth.

4.25 The planning era witnessed significant growth in the responsibilities of the Reserve Bank in the direction of new developmental and promotional activities that are normally outside the purview of a Central bank. The most critical tasks before the Bank were plan financing and institution building to promote savings and their deployment to various sections in accordance with the Plan priorities, besides maintaining a stable financial environment to develop a healthy financial infrastructure. The adoption of the Indian Constitution in 1950 and the enactment of the States Reorganisation Act in 1956, which facilitated the integration of currency and banking operations, tended to expand the ambit of the Reserve Bank's role as banker to the Government. The important events that changed the course of action of the Bank during the developmental phase included social control and the nationalisation of private commercial banks. This period was also marked by the introduction of a formal monetary policy framework emerging out of the necessity for striking a balance between the developmental functions and financial stability.

Banker to Government

4.26 A crucial developmental goal for the Reserve Bank during the plan era was to fill the resource gap of the Government in the plan process - an enlargement of the role as banker to the Government. The RBI Act was amended in 1951 by inserting a new Section 21(a), which authorised the Bank to function, by an agreement, as banker to Governments in Part 'B' states (formally princely states) and manage their public debt and loan floatation. The final integration culminated in the discontinuation of classifications of states as Part 'A' (former British India provinces) and Part 'B' following the enactment of the States Reorganization Act on November 1, 1956 (RBI, 1985).

4.27 The Reserve Bank's role in Plan financing evolved in the form of deficit financing. In January 1955, through the exchange of letters with the Central Government, the Bank agreed to replenish the latter's balances whenever they fell short of Rs.50 crore at the end of any week. This agreement in effect gave a go-ahead to an enabling provision in the RBI Act – Section 17(5), which authorised the Bank to provide to the Central and State Governments advances repayable not later than three months. These advances were matched by the issue of ad hoc treasury bills issued by the Central Government to the Reserve Bank, which were held in the Issue Department. While it was customary for a central bank to extend temporary short-term advances to the Government to cover mismatches between the latter's receipts and expenditure, the practice made routine since 1955 gave the Central Government an unlimited right to borrow from the Reserve Bank (Balachandran, 1998). Over time, the practice of replenishing the Government's balances by creation of *ad hoc* Treasury Bills attained a permanent character and an alternative source of financing government expenditure. Similarly, the State Governments also began drawing unauthorised overdraft from the Bank. As such, the Reserve Bank became a source of cheap credit not only for the Central Government, but also indirectly for the State Governments. Plan financing also necessitated heavy drawals in foreign exchange reserves held by the Reserve Bank, which in turn called for appropriate legal measures to arm the Bank to facilitate as well as counter the ill effects thereof.

The substitution of the proportional reserve system by a minimum of foreign exchange reserve system under the Reserve Bank of India (Amendment) Act, 1956 provided a more elastic method of note issue to meet the growing currency requirements. Simultaneously, the Reserve Bank acquired additional powers to vary the reserve requirements so as to regulate the impact of large public expectations on the ability of the banking system to sanction credit to trade and industry. The availability of refinance for these sections was further liberalised in January and March 1963. The period since 1960 also marked the beginning of the regulation of interest rates (lending as well as deposits) of commercial banks by the Reserve Bank.

4.28 The enactment of the Banking Companies Act, 1949 gave special authority to the Reserve Bank to supervise the operations of commercial banks so as to ensure their establishment and working on sound lines. By 1951, it had become a well-established practice for the commercial banks and cooperative banks to turn to the Reserve Bank for accommodation. As such, the Reserve Bank was in a position to pursue a credit policy that was both expansionary and regulatory, broadly in accordance with the investment priorities indicated in the Plans. In 1956, the Reserve Bank was vested with power to vary, within broad limits, the statutory reserve, which the commercial banks would maintain with it. The Bank also made efforts for credit planning, guiding the commercial banks with regard to the aggregate quantum of credit creation, season-wise and its sector-wise distribution and employing device of incentives and penalties in the rate structure. Furthermore, the Reserve Bank also instituted the mechanism for providing temporary accommodation to the banks for meeting their seasonal demand requirements of reserves through the seasonal fluctuations in credit expansion and narrowing. For this purpose, the Bank had instituted the Bill Market Scheme as early as in January 1952, enabling the banks to borrow from the Reserve Bank against the security of their advances converted into usuance bills.

Institution Building

4.29 A major task thrust upon the Bank was to put in place the necessary institutional mechanism to complement the planning efforts. This was crucial especially in the context of the weak financial system with an underdeveloped and evolving commercial banking set-up. Organised credit institutions had a negligible presence in rural India. In this backdrop, building up a sound and adequate institutional structure for rural banking and credit was paramount.

4.30 To supplement the institutional build-up, the Reserve Bank also assumed special responsibilities for augmenting the flow of rural credit. The formulation of agricultural credit policy beginning 1951 was a major landmark in the Bank's responsibilities for agricultural credit. The Bank organised a comprehensive All-India Rural Credit Survey under the direction of a Committee (Chairman: A. D. Gorwala) appointed in 1951. The recommendations of the Committee of Direction, which submitted its report in 1954, set the pace and directions for the subsequent years not only for the Bank's agricultural credit policy but also for the related polices of Central and State Governments. The Committee's recommendations led to the nationalisation of the Imperial Bank of India and the banks associated with the former princely states, restructuring of the short-term co-operative credit structure and reorganisation of the institutions specialising in longer-term lending for agricultural development (RBI, 1955 and Balachandran, 1998). The Agricultural Credit Department was established mainly with the objective of coordinating the Bank's operation with those of other institutions engaged in agricultural lending. The RBI Act was amended in 1955 to enable the Bank to create two funds - National Agricultural Credit (Long-Term-Operations) Fund and the National Agricultural Credit (Stabilisation) Fund. The Reserve Bank set up the Agricultural Refinance Corporation in 1963 for extending medium and long-term finance to agriculture. With the establishment of the National Bank for Agriculture and Rural Development (NABARD) on July 12, 1982, the focus of the Reserve Bank in regard to rural credit has been more on co-ordination. This role of the Reserve Bank in this regard expanded after 1982 with the formation of the Rural Planning and Credit Department.

4.31 In the absence of a well-developed capital market, the Reserve Bank played a proactive role in setting up a number of specialised financial institutions at the national and regional level to widen the facilities for term finance to industry and for institutionalisation of savings - a novel departure for a central bank. The examples are: the Industrial Development Bank of India (IDBI) in 1964 and the Unit Trust of India (UTI) in 1964. The UTI came into existence as an offshoot of the Bank to help mobilise small savings for industrial investment and democratise industrial share-ownership.

4.32 Apart from the initiatives to build-up an institutional base, the Reserve Bank made the provision of annual allocation from profit a fund called the National Industrial Credit (Long-Term Operations) Fund for use for development banking. The Reserve Bank also administered, as the agent of the Central Government, various credit guarantee schemes for the small-scale industries (SSI) sector, which were designed to provide protection to banks and other institutions lending to such small scale units. The Export Import Bank of India (EXIM Bank) was established in January 1982, to which the export finance functions of the IDBI were transferred. The EXIM Bank was also made eligible to loans and advances from the National Industrial Credit (Long-Term Operations) Fund operated by the Reserve Bank.

4.33 The Deposit Insurance Corporation (DIC), a wholly owned subsidiary of the Reserve Bank, commenced operations in 1962. In that year, 287 banks were registered with it as insured banks. By the end of 1967, the number of insured banks had declined to 100, largely due to the Reserve Bank's policy of reconstruction and amalgamation of small and financially weak banks so as to make the banking sector more viable. Up to 1967, the liabilities of the Corporation were invoked in the case of eleven banks [Bank of China, Calcutta (1963); Bank of Alagapuri Ltd, Alagapuri (1963); Unity Bank Ltd, Madras (1963); Metropolitan Bank Ltd, Calcutta (1964); Unnao Commercial Bank Ltd, Unnao (1964); Cochin Nayar Bank Ltd, Trichur (1964); Latin Christian Bank Ltd, Ernakulam (1964); Southern Bank Ltd, Calcutta (1964); Shree Jadeya Shankarling Bank Ltd, Bijapur (1965); National Bank of Pakistan, Calcutta (1966); Habib Bank Ltd, Bombay (1966)]. The licenses of three of these banks (*viz.*, Habib Bank, National Bank of Pakistan and Bank of China) were cancelled for reasons other than financial viability. As at the end of 1966, the amounts paid or provided for in respect of these eleven banks amounted to Rs 56.83 lakh, of which Rs 39.85 lakh was recovered by the DIC and the overall risk experience of the Corporation was 'favourable'.

4.34 A number of important developments concerning deposit insurance took place during 1967-81. The DIC Act was amended in 1968 to extend the insurance scheme to deposits with cooperative banks. This phase witnessed strong growth and consolidation of the deposit insurance fund consequent upon the expansion of bank deposits and progressive increase in the coverage of insured deposits. The Reserve Bank promoted a public limited company named Credit Guarantee Corporation in 1971. The main thrust of the credit guarantee schemes introduced by the Credit Guarantee Corporation was to encourage the commercial banks to meet the credit needs of the hitherto neglected sectors, particularly the weaker sections of the society engaged in non-industrial activities. The two organisations – the DIC and the Credit Guarantee Corporation of India Ltd – were merged in 1978, leading to formation of the Deposit Insurance and Credit Guarantee Corporation of India (DICGC) with the 'twin and cognate' objectives of giving protection to small bank depositors and providing guarantee cover to credit facilities extended to certain categories of small borrowers belonging to the weaker sections of society.

4.35 The establishment of the banking and other specialised institutions had significant implications for the working of the Reserve Bank in that it widened the spectrum of the financial sector and heightened the supervisory role of the Bank. The institutional build-up was largely complementary to the monetary policy on the following counts. First, a well-developed financial system assisted the Bank in implementing its general and selective credit policies by providing effective channels for transmitting their impulses. Second, to the extent the growth of savings and the ability of banks to mobilise the same increased, their dependence on the Reserve Bank for accommodation was reduced. Once the banking system was better able to meet the expanding demand for credit from its own resources, the traditional instruments of monetary policy could be expected to fully come into play. Third, the mobilisation of savings by the institutional agencies led to a better convergence between the demand for investible funds in the economy and their supply.

Social Control and Nationalisation

4.36 The events that were crucial in strengthening the institutional credit delivery mechanism were the policy of 'social control' launched in 1967 and the nationalisation of 14 private commercial banks in 1969, which usurped the responsibilities of the Bank in the development planning process. Social control over banks was envisaged through the "Banking Laws (Amendment) Bill, 1967", which sought to amend certain provisions of the Banking Regulation Act, 1949, the Reserve Bank of India Act, 1934 and the State Bank of India Act, 1955. The need for it was felt in the context of the major lacuna that many rural and urban areas still remained inadequate in banking, notwithstanding the considerable progress made in both functional and geographic coverage of the Indian banking system during the plan era. Also, the large industries and big and established business were found to be receiving a major portion of the credit facilities, which was detrimental to the interests of the preferred sectors such as agriculture, small scale industries and exports. Accordingly, a National Credit Council (NCC) was set up in December 1967 to assess the demand for bank credit from the various sectors of the economy, determine the priorities for the grant of loans and advances commensurate with the availability of resources and the requirements of priority sectors and to coordinate lending and investment policies of various institutional agencies to ensure the efficient use of the overall resources.

4.37 The Government of India nationalised 14 major Indian scheduled banks having deposits of Rs.50 crore and above through the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1969. The objectives of bank nationalisation went far beyond the objective of social control. The objective of the 'takeover' as illustrated in the preamble of the Act was "to control the heights of the economy and to meet progressively, and serve better, the needs of development of the economy in conformity with national policy and objectives". In essence, the nationalisation of banks aimed at accelerating the pace of expansion of commercial banks branches in rural areas and augmenting the flow of bank credit to agriculture and to the weaker sections of the society (RBI, 1985).

4.38 With nationalisation, the ownership of the banks was vested with the Central Government, while the operational aspects of banks continued to be the look out of the Reserve Bank. This paved the way to a 'centralised control and direction' over the banking system. While the main objective of nationalisation was that credit should be available to a wider range of people than before, the major task of the Reserve Bank was to ensure the compliance to its policies by the nationalised banks. This called for significant changes in the institutional arrangements and more stringent control and supervision of the banking system.

4.39 In terms of outcome, this phase of nationalisation greatly succeeded in mobilising private savings through the banks. The savings so mobilised were used for supporting public borrowing as well as for meeting hitherto neglected genuine credit needs. This success led to the nationalisation of six more private commercial banks in 1980 through the Banking Companies (Acquisition and Transfer of Undertakings) Ordinance, 1980. With the second phase of nationalisation, the public sector banks accounted for over 90 per cent of the total deposits of all scheduled commercial banks. While the Reserve Bank had not been a party to the bank nationalisation in 1969, the initiative for the second phase of nationalisation in 1980 came from the Reserve Bank, the reason being the need to supervise private banks to ensure their compliance with social control norms, given the fact that several small private banks had grown to respectable size and it was not easy to control their activities in practice (RBI, 2005a).

Credit Control

4.40 Since the 1970s, the Reserve Bank faced the twin problems of making provisions for financing economic growth and ensuring price stability in the wake of a sharp increase in money supply emanating from the rapid expansion in credit. The increased public expenditure and the coincident rise in banks deposits began to place a greater pressure on the effectiveness of monetary policy. The Reserve Bank had to adopt a balancing approach to handle this knife-edged problem and resorted to the policy of a 'controlled expansion' of credit to meet the twin objectives of making provision of credit for attaining faster rate of economic growth and ensuring price stability.

4.41 A key issue in this context was that the traditional instruments of credit control, *viz.*, the Bank Rate and OMOs were found inadequate for controlling the banks' power in expanded credit creation. The fact that the deposits of commercial banks were rising rapidly under the impact of deficit financing and the commercial banks did not have the need to approach the central bank for accommodation, the Bank Rate as an instrument of monetary policy became less effective. Moreover, in the absence of an articulate and broad-based market for government securities, the scope for OMOs as a monetary policy instrument was also relatively limited. This warranted the introduction of additional instruments of credit control.

4.42 An important requirement was the flexibility to alter the reserve requirements of the commercial banks. The amendments of the RBI Act (Section 42 prescribing the reserve requirements of scheduled banks) and the Banking Regulation Act (Section 18 dealing with the cash reserve requirements for non-scheduled banks) in 1962 provided the flexibility in this regard. Originally, under the RBI Act, scheduled banks were required to maintain with the Reserve Bank a minimum cash reserve of 5 per cent of their demand liabilities and 2 per cent of their time liabilities in India at the close of business on any day. The amendment to the RBI Act in 1956 empowered the Bank to vary the reserve requirement between 5 per cent and 20 per cent of banks' demand liabilities and between 2 per cent and 8 per cent of their time liabilities in India. The 1962 amendment fixed the reserve requirement uniformly at 3 per cent of banks' total demand and time liabilities in India (doing away the distinction between demand and time liabilities) and the cash reserve requirement could be varied between 3 per cent and 15 per cent. These legislative measures added more instruments at the disposal of the Reserve Bank to control the credit expansion of commercial banks.

4.43 Another measure was the activation of selective credit controls. The Reserve Bank introduced selective credit control for the first time in May 1956 in the context of multiplication of banks' advances. The continued loss of foreign reserves towards plan financing again forced the Bank to use an additional credit restraint measure *viz.*, 'quota-slab' system, instituted in October 1960. This was in the form of credit rationing through a price instrument. The advantage of this instrument was that it would at the same time not directly increase the cost of government borrowing or affect the gilt-edged market. Under this system, each scheduled bank was assigned a quarterly quota equal to half of the average volume of reserves, which it had to maintain under Section 42(1) of the RBI Act during each week of the preceding year. The quota slab system could be liberalised or tightened as necessary for effective quantitative check on credit expansion.

4.44 The quota-slab system, where availability of credit was the key control variable, was replaced in 1964 by a scheme of accommodation based on banks' net liquidity ratio (NLR), which was considered to be a less discretionary form of central bank control over the expansion of commercial bank credit than the quota-slab system. The NLR formula envisaged using a variant of the statutory liquidity ratio (SLR) to regulate the cost of the Bank's loans to scheduled commercial banks. The net liquidity represented the proportions of a bank's cash, balances with the Reserve Bank, current account deposits in the notified banks and investment in Government and other approved securities, less its total borrowing from the Reserve Bank, SBI and IDBI to its aggregate demand and time liabilities. The NLR normally equaled the prevailing overall liquidity ratio (SLR plus CRR).

4.45 The credit authorisation scheme (CAS) as an instrument of credit control was introduced in November 1965 to align credit policies closely with the Five Year Plan. Under the scheme, scheduled commercial banks were required to obtain the Reserve Bank's authorisation before sanctioning any fresh credit of Rs.1 crore or above to any one borrower or any fresh limit which would take the total limits engaged by the borrowers from the entire banking system to Rs.1 crore. This scheme also helped in preventing the problem of pre-emption of scarce bank reserves by a few large borrowers and enforcing a measure of financial discipline on them.

Exchange Management and Control

4.46 Mention was made in the preceding section about the role of the Reserve Bank in the repatriation of India's sterling debt during the Second World War period. While that related to the problem of "plenty", the problem relating to the external sector of the Indian economy in the subsequent years that engaged the attention of the Government and the Reserve Bank was one of dealing with the "scarcity" of foreign exchange, which assumed serious proportions during the 1970s.

4.47 Prior to the Second World War, India was a net debtor country with a large surplus in the trade account. The then British Government introduced exchange control in India using its emergency powers under the Defence of India Rules. The Foreign Exchange Regulation Act (FERA), 1947, which was enacted under the British regime as a temporary measure, was later made a permanent Act in 1957 and it remained in force up till January 1974. The limited objective of the Act was to regulate the inflow of foreign capital, in view of the concerns about substantial non-resident interests and employment of foreigners. The prevailing mood in independent India was one of preserving and consolidating freedom and not permitting once again any sort of foreign domination, political or economic. The control framework was essentially transaction-based - all transactions in foreign exchange including those between residents and non-residents were prohibited, unless specifically permitted. The Second Five Year Plan with a substantial step-up in the investment on industrialisation put a heavy strain on foreign exchange resources. Exports were not picking up while imports were surging, aggravating the balance of payments crisis.

4.48 During the period from 1950-51 until mid-December 1973, India followed an exchange rate regime in which the Rupee was linked to the pound-sterling, except for the devaluations in 1966 and 1971.

There were several uncertainties in the situation having bearing on the balance of payments. Large quantities of food-grain and essential wage goods had to be imported. This led to concerns about capital outflows, reinforced by the repeated stress on balance of payments due to droughts, wars and oil shocks. In this context and with the adoption of development planning, emphasis was placed on utilising domestic savings for domestic investment.

4.49 In this backdrop, the recommendation of the Public Accounts Committee concerning the leakage of foreign exchange through invoice manipulation (June 1971) and the Report of the Law Commission on 'Trial and Punishment of Social and Economic Offences' (April 1972) induced the Government of India to re-focus on the FERA, 1947 for conserving foreign exchange rather than regulating the entry of foreign capital. The FERA, 1973 was drafted with the objective of introducing the changes necessary for effective implementation of the Government policy and removing the difficulties in the working of the previous enactment. As a crisis-driven legislation, the FERA, 1973 naturally contained several draconian provisions. Any offence under the FERA was a criminal offence liable for imprisonment. Severe restrictions on current account transactions continued till the mid-1990s when relaxations were made in the operations of the legislation of 1973 to enable convertibility on current account.

4.50 The control framework was equally valid for the capital account, though the capital account was negligible till the 1980s. Most receipts on capital account were on Government account and through external assistance in addition to the bilateral arrangement with erstwhile USSR. In the 1980s, there were significant private capital flows through External Commercial Borrowings (ECB) and deposits from Non-Resident Indians (NRI). The position changed in the 1990s, with gradual liberalisation of the capital account.

4.51 The FERA empowered the central Government to give to the Reserve Bank such general or special directions as it thought fit and the Bank was obliged to comply with these directions in discharge of its functions under the Act. To a large extent, the exchange control related to and supplemented by the trade control administered by the Chief Controller of Imports and Exports in the Ministry of Commerce of the Government of India. Exchange controls had a wider scope *vis-à-vis* the trade controls, as it involved supervision over the settlement of financial transactions in respect of all exports and imports as also invisibles and capital transactions, whereas trade control was concerned with the physical transfer of goods (mostly confined to imports). The major functions of the Reserve Bank relating to exchange control included granting licenses to certain scheduled commercial banks to deal in foreign exchange (authorised dealers); and issuing directions to the authorised dealers and other entities (airline, shipping companies, travel agents and insurance companies) in matters concerning their operations having foreign exchange implications.

Monetary Framework and Policy Initiatives during the 1980s

4.52 The high inflation all over the world in the 1970s and the collapse of the Bretton Woods system led to a paradigm shift in monetary policy from the Keynesian to the Monetarist approach. Tracking the factors contributing to causes and sources of inflation, the developed countries began to target either inflation or monetary (or reserve) targeting. This influenced the thinking of the policy makers in the Indian context as well. The large deficits of Government and its financing by the Reserve Bank leading to a significant rise in money supply relative to output prompted a new look for evolving a broader approach in assessing the size and growth of overall money supply. The Committee to Review the Working of the Monetary System (Chairman: Sukhamoy Chakravarty) suggested that the monetary authority should embark on monetary targeting in a more formal and secured manner. The level of the monetary target needs to be determined on the basis of desired growth in output and the tolerable level of inflation. The monetary budgeting exercises undertaken hitherto provided the monetary authority with useful insights into the problems of formal monetary targeting.

4.53 The Chakravarty Committee suggested targeting the broad measure of money supply (M_3) with feedback. The Committee outlined a systematic operating procedure, in particular, the planning of the monetary and credit budget. The monetary budget was estimated using the core parameters of real growth and inflation and was followed with a consistency check with the estimated movements in the sources of money supply *viz.*, net domestic credit (net Reserve Bank credit to Government and the commercial sector), Net Foreign Assets (NFA) and Net Non-Monetary Liabilities (NNML) of the Reserve Bank. While movements in NFA and NNML are determined on the basis of past trends, the Reserve Bank credit to the Government and the commercial sector was projected in a manner consistent with the overall size of the estimated monetary budget. The Committee also suggested an independent assessment of the seasonal demand for credit and recommended Reserve Bank support in the form of refinance for the shortfall, if any. Finally, the expected level of bank credit, so estimated, was to be used for developing appropriate sectoral allocation in the light of the plan priorities. Formulation of monetary policy thus became a formal mechanism of the restructured monetary policy programme. The Reserve Bank evolved a formal framework of monetary policy by the mid-1980s with M_3 as a nominal anchor to be targeted, broadly based on the recommendations of the Chakravarty Committee.

4.54 The Working Group on Money Market (Chairman: N. Vaghul), which examined the recommendations of the Chakravarty Committee regarding the development of the money market, submitted its report in January 1987. Following the report, a number of money market instruments were introduced: 182-day Treasury Bills, inter-bank participation certificates (IBPCs), certificates of deposits (CDs) and commercial papers (CPs). The Discount and Finance House of India (DFHI) was set up in 1988 for promoting a secondary market in various money market instruments.

4.55 The process of expansion in the banking network in terms of geographical coverage and heightened controls affected the quality of banks assets and strained their profitability. In response to these developments, a number of measures were undertaken in the mid-1980s for consolidation and diversification and, to some extent, deregulation of the financial sector. The consolidation measures aimed at strengthening banks' structures, training, house-keeping, customer services, internal procedures and systems, credit management, loan recovery, staff productivity and profitability. A health code system for banks was introduced in 1985. Certain initiatives were also taken to impart greater operational flexibility to banks. These include permitting the banks to enter into the business of equipment leasing and mutual funds, doing away with the requirement of prior authorisation under the CAS, rationalisation of bank deposit and lending rates by raising coupon rates on government securities and by removing the ceiling of 10 per cent call/notice money fixed by the Indian Banks' Association (Jadhav, 2003).

III. REFORM PHASE (1991-2005)

4.56 The process of liberalisation and globalisation of the Indian economy initiated since 1991 added several new dimensions to the responsibilities of the Reserve Bank. Along with financial sector reforms, the monetary policy framework has been fine-tuned and the conventional central banking functions including those of currency management and payment and settlement systems have been revamped in tandem with the global trends and domestic expediency.

Financial Sector Reforms

4.57 During the 1980s, the financial markets were highly segmented and controlled and the interest rates in the government securities market and the credit market were tightly regulated. The banking sector remained dominated by public sector banks with a significant quantum of non-performing assets. Credit was extended to the Government by mandating the maintenance of a minimum SLR whereby the commercial banks set aside substantial portions of their liabilities to investment in government securities at below market interest rates. The state of the development of financial markets turned out to be yet another major constraint. Removal of the institutional, technological and legal obstacles for the healthy growth of financial markets for effective transmission of the policy signals formed a major agenda for the reform of the financial sector since mid-1991.

4.58 Increasing globalisation of the Indian economy necessitated integration of domestic markets with international financial markets for full realisation of the benefits of globalisation. Financial sector reforms were initiated in India in 1992 with a view to improving the efficiency in the process of financial intermediation, enhancing the effectiveness in the conduct of monetary policy and creating conditions for integration of the domestic financial sector with the global system. The first phase of reforms, guided by the recommendations of the Committee on Financial System (Narasimham Committee I), aimed at enhancing the operational flexibility and functional autonomy of the financial sector with a view to fostering efficiency, productivity and profitability. The second phase, based on the recommendations of the Committee on Banking Sector Reforms (Narasimham Committee II), focused on strengthening the foundations of the banking system and bringing about structural improvements (Mohan, 2003).

Reforms in the Banking Sector

4.59 The first phase of reforms in the financial sector focused on deregulation of the banking industry including permitting the entry of new private sector banks. Simultaneously, measures were undertaken to strengthen the institutional framework in banking, non-banking financial companies, financial institutions and the capital markets through prudential norms, capital adequacy stipulations, improvements in payments and settlement systems and strengthening of the supervisory framework. Institutional measures also included setting up of the Board for Financial Supervision for strengthening the Bank's supervisory mechanisms, recapitalisation of banks and improvements in debt recovery.

4.60 The second phase of reforms focused on the banking sector with an emphasis on the prudential norms. Prudential norms have been introduced gradually to meet international standards. Action has been initiated to increase the capital adequacy ratio; assign risk weights to Government approved securities to take care of market risks; assign risk weights to open position in forex and gold. The required level of capital adequacy after implementing the recommendations of the Narasimham Committee II warranted a substantial infusion of capital into the banking system. Similarly, internationally accepted norms of income recognition have been introduced except that income on assets is not recognised if not received within two quarters after it is past the period due (*i.e.*, due date plus thirty days). A significant decision relates to the treatment of assets guaranteed by the State Government as non-performing under certain circumstances.

Reforms in Other Segments of the Financial Sector

4.61 Measures aimed at fostering competition and establishing prudential regulation and supervision have also been introduced for the non-bank financial intermediaries. The non-banking financial companies (NBFCs), especially those involved in public deposit taking activities, the Development Finance Institutions (DFIs), specialised term-lending institutions, urban cooperative banks all have been brought under the regulation of the Reserve Bank. With the aim of regulatory convergence for entities involved in similar activities, prudential regulation and supervision norms have also been introduced for DFIs, NBFCs and cooperative banks.

4.62 The insurance business remained within the confines of public ownership until the late 1990s. Subsequent to the passage of the Insurance Regulation and Development Authority (IRDA) Act in 1999, several measures have been initiated, including allowing newer players/joint ventures to undertake insurance business on a risk-sharing/ commission basis.

4.63 A package of reform measures to liberalise, regulate and develop the capital market was introduced for improving market efficiency, increasing transparency, integration of national markets and prevention of unfair trading practices. An important step was the establishment of the Securities and Exchange Board of India (SEBI) in February 1992 as the regulator for equity markets. Since 1992, reform measures in the equity market have focused mainly on regulatory effectiveness, enhancing competitive conditions, reducing information asymmetries, developing modern technological infrastructure, mitigating transaction costs and controlling of speculation in the securities market. Another important development under the reform process has been the opening up of mutual funds to the private sector in 1992, which ended the monopoly of UTI.

4.64 The Indian capital market was opened up for foreign institutional investors (FIIs) in 1992. The Indian corporate sector has been allowed to tap international capital markets through American depository receipts (ADRs), global depository receipts (GDRs), foreign currency convertible bonds (FCCBs) and External Commercial Borrowings (ECBs). Similarly, overseas corporate bodies (OCBs) and non-resident Indians (NRIs) have been allowed to invest in Indian companies. FIIs have been permitted in all types of securities including Government securities and they enjoy full capital convertibility. Mutual funds have been allowed to open offshore funds to invest in equities abroad.

Complementary Policy Changes

4.65 Reform measures across sectors as well as within each sector (notably, monetary, fiscal and external) were planned and sequenced in such a way so as to reinforce each other. The major aspects of such complementary reform measures are set out in the following paragraphs.

Debt Market Reforms

4.66 Several important reforms have been undertaken in the sphere of government securities market. The Reserve Bank entered into a historic agreement with the Government of India in September 1994 for gradual phasing out of ad hoc treasury bills. Accordingly, the *ad hoc* treasury bills were discontinued with effect from April 1, 1997.

4.67 The management of public debt and operations of government securities market are governed by the Public Debt Act, 1944. The procedures prescribed are archaic and some of the provisions have ceased to be of relevance in the present context. A new legislation titled the Government Securities Act to repeal and replace the Public Debt Act was approved by the Union Cabinet and is awaiting Parliament clearance. However, since the Public Debt Act, 1944, is applicable for marketable loans raised by the Reserve Bank on behalf of both the Central and State Governments, the proposal requires consent of all State Governments. Upon the enactment of the new legislation, the Reserve Bank would have substantive powers to design and introduce an instrument of transfer suited to the electronic environment. As a debt manager, the Reserve Bank has the obligation of minimising the cost of borrowing to the Government. Normally, with an upward sloping yield curve, longer the maturity of the security, higher is the cost; thus there is a trade-off between tenor of borrowing and its cost (Mohan 2004a).

4.68 Interest rates on Government paper have been made market related and the maturity periods changed to reflect market preferences. Since April 1992, the Central Government borrowing programme has been conducted largely through auctions enabling market based price discovery. As a result of the institutions of market related interest rates on Government borrowing, OMOs, hitherto ineffective, gained considerable momentum. There has been a gradual shift in emphasis from direct to indirect instruments of policy - OMOs and repos have been actively used to influence the level of reserves available with banks. To augment the effectiveness of this instrument, greater efforts are being made to widen and deepen the money, foreign exchange and gilts markets and strengthen the banking system.

4.69 Liquidity management is undertaken by injecting and absorbing liquidity through a liquidity adjustment facility (LAF). Initially, under an interim adjustment facility introduced in 1999, injection of liquidity took the form of export refinance to commercial banks, collateralised lending facility (CLF) and additional collateralised lending facility (ACLF) to scheduled commercial banks and liquidity support at two levels, *i.e.*, level 1 and level 2 to Primary Dealers (PDs) by way of lending against the collateral of treasury bills and government securities. CLF and Level 1 were provided at the Bank Rate and ACLF and level II at Bank Rate plus 2 per cent. Following the recommendations of the Narasimham Committee II, Stage I and Step I of Stage II of a full-fledged LAF were implemented effective June 5, 2000 and May 5, 2001 respectively.

4.70 Collateralised borrowing and lending obligations (CBLOs) were operationalised as a money market instrument through the Clearing Corporation of India Limited (CCIL) on January 20, 2003. With a view to developing the market for this instrument, the Reserve Bank introduced automated value-free transfer of securities between market participants and the CCIL during 2004-05. A repo market outside the LAF has been assiduously developed by the Reserve Bank to provide an avenue for bank and non-bank participants to trade funds after the conversion of the call/notice money market into a pure inter-bank market. In order to broaden the market, non-scheduled urban cooperative banks (UCBs) and listed companies with gilt accounts with scheduled commercial banks were allowed, subject to eligibility criteria and safeguards, to participate in the repo market outside the Reserve Bank. The minimum maturity period of CDs was reduced from 15 days to 7 days effective April 29, 2005 to align it with the minimum maturity of CPs and fixed deposits with banks. With the initiation of the process of financial liberalisation along the 1990s, financial markets have become progressively integrated as evident from the closer alignment of interest rates. Market integration has also implied that the interest rate channel of monetary transmission has gained some strength in recent years.

External Sector Reforms

4.71 The broad approach to external sector reforms was laid out in the Report of the High Level Committee on Balance of Payments (Chairman: C. Rangarajan). The Committee recommended, *inter alia*, the introduction of a market-determined exchange rate regime within limits; liberalisation of current account transactions leading to current account convertibility; compositional shift in capital flows away from debt to non-debt creating flows; strict regulation of external commercial borrowings, especially short-term debt; discouraging volatile elements of flows from non-resident Indians; full freedom for outflows associated with inflows (*i.e.*, principal, interest, dividend, profit and sale proceeds) and gradual liberalisation of other outflows; and the dissociation of the Government in the intermediation of flow of external assistance.

4.72 The developments in the subsequent years generally followed these recommendations. The Liberalised Exchange Rate Management System (LERMS) involving a dual exchange rate mechanism was instituted in March 1992 along with other measures of liberalisation in the areas of trade, industry and foreign investment. The dual exchange rate system was essentially a transitional phase, culminating in the unified exchange rate system effective from March 1, 1993. This brought about the era of market determined exchange rate regime of the rupee. It also marked an important step in the progress towards current account convertibility, which was finally achieved in August 1994 when India accepted Article VIII of the Articles of Agreement of the International Monetary Fund.

4.73 As a follow-up measure for the development of the foreign exchange market in India, an Expert Group (Chairman: O. P. Sodhani) was appointed in November 1994, which submitted its report in June 1995. This Group made several recommendations to develop, deepen and widen the forex market, ensure risk management, foster efficiency in the market by removing restrictions, introducing new products and tightening internal controls. Many of the subsequent actions were based on this Report.

4.74 In 1997, the Committee on Capital Account Convertibility (CAC) [Chairman: S. S. Tarapore], constituted by the Reserve Bank, indicated the road map for CAC – three crucial preconditions being, fiscal consolidation, a mandated inflation target and strengthening of the financial system – and recommended a number of liberalisation measures including change in the legislative framework governing foreign exchange transactions. The liberalisation measures related to foreign direct investment, portfolio investment, Indian overseas investment in joint ventures/wholly owned subsidiaries, project exports, opening of Indian corporate offices abroad, raising of exchange earners' foreign currency (EEFC) entitlement to 50 per cent, forfaiting, allowing acceptance credit for exports and allowing FIIs to cover forward a part of their exposures in the debt and the equity markets.

4.75 The FERA, 1973 was repealed and replaced by a new legislation - Foreign Exchange Management Act (FEMA), 1999 - with effect from June 2000. The objective of the new legislation as stated in the preamble to the Act was to facilitate external trade and payments and promote the orderly development and maintenance of the foreign exchange market in India – a shift in the approach from "conservation of foreign exchange resources of the country and the proper utilisation thereof " under the old Act. The shift in the policy approach entailed significant implications for the operations of the Reserve Bank (Box IV.2). Under the new system, all current account payments except those notified by the government are eligible for appropriate foreign currency in respect of genuine transactions from the authorised dealers without any

Box IV.2
Foreign Exchange Management Act, 1999

The reforms in industrial and trade policies initiated in the early 1990s, consistent with the changing international economic and trade relations, gave rise to the need for a more conducive climate for increased inflow of foreign investment and capital to accelerate the pace of industrial growth and export promotion. A comprehensive new legislation – the Foreign Exchange Management Act - was enacted in 1999, which in fact provided a *de jure* status to the shift in the external sector policies that began in 1990-91. More importantly, the FEMA diluted the rigorous enforcement provisions - unlike in FERA, the prosecution has to prove the guilt of the accused person. Further, FEMA provided for only monetary penalty for contraventions. Contravention of FEMA provisions are dealt with under civil procedures, for which separate administrative mechanisms in the form of Compounding Rules, Adjudicating Authority, Special Director (Appeals) and Appellate Tribunal have been established. Furthermore, for each process of law a timeframe has been provided in the Act.

The concept of compounding is another distinguishing feature of the FEMA. Under the FERA, all violations were subject to separate investigation and adjudication of the Directorate of Enforcement. The FEMA provides an opportunity of seeking compounding of contraventions, in terms of which a contravener has a *suo moto* opportunity of making an application to the compounding authority seeking the contravention to be compounded. The compounding authority is required to dispose of the application within 180 days.

The Government of India, in one of the recent Notifications, has designated the Reserve Bank as the compounding authority for all contraventions under the FEMA, except for those involving *hawala* transactions for which the Directorate of Enforcement would be the compounding authority. The new procedure would provide quick and hassle-free disposal of the cases involving contravention(s) of FEMA.

restrictions. The surrender requirements in respect of exports of goods and services continue to operate. The Reserve Bank would, however, have the necessary regulatory jurisdiction over capital account transactions.

4.76 The Reserve Bank has delegated considerable powers to the authorised dealers to release foreign exchange for a variety of purposes and has been focusing on the development of the foreign exchange market. In order to deepen the foreign exchange market, a large number of products have been introduced and the entry of newer players has been allowed. Additional hedging instruments, such as, foreign currency-rupee options have been introduced and authorised dealers have been permitted to use innovative products like cross-currency options, interest rate and currency swaps, caps/collars and forward rate agreements (FRAs) in the international forex market.

Changes in Monetary Policy Framework

4.77 Globally, the period since the 1990s has been characterised by certain striking similarities in the tools that monetary authorities employ to assess macroeconomic developments, the choice of instruments and the operating procedures. There is a greater activism in liquidity management and a focus on the short-end of the market spectrum engendered by the growing integration of financial markets domestically and internationally. There is greater coordination between central banks, fiscal authorities and regulatory bodies governing financial markets. There is also a greater sophistication in the conduct of monetary policy and central bankers are constantly engaged in refining their technical and managerial skills to deal with the complexities of financial markets. Broadly in line with the global trends, the emphasis of monetary policy formulation in India has been on progressive deregulation of the financial sector, providing an impetus to market development and paving the way for increased use of indirect instruments of monetary control.

Deregulation of Interest Rates

4.78 The process of simplification in the administered interest rate structure began in September 1990 with the reduction in the number of slabs for which lending rates were prescribed. In a major move, the minimum lending rate was abolished and the lending rates were freed in October 1994 for credit limits of over Rs.2 lakh. As a consequence of deregulation and simplification of interest rates, banks now enjoy ample flexibility in deciding their deposit and lending rates. At present, except for the prescribed ceilings for the interest rates on export credit and small loans up to Rs.2 lakh, all other lending rates have been deregulated. On the deposits side, only savings deposit rates and NRI deposit rates are prescribed by the Reserve Bank. As per the current practice, banks set their lending rates with reference to a pre-announced benchmark prime lending rate (BPLR) by taking into account the risk premia and/or term premia. The BPLR is decided by taking into account various factors, such as, actual cost of funds, operating expenses, minimum margin to cover the regulatory requirements of provisioning/capital charge and profit margin. The BPLR also serves as the ceiling rate for small loans up to Rs.2 lakhs.

Reactivation of Bank Rate

4.79 The Bank Rate was reactivated in April 1997 as a reference rate and as a signalling device to reflect the stance of monetary policy. The interest rates on different types of accommodation from the Reserve Bank including refinance are linked to the Bank Rate. The activation of the Bank Rate endowed the Reserve Bank with an additional instrument.

New Monetary Aggregates

4.80 A Working Group on Money Supply: Analytics and Methodology of Compilation (Chairman: Dr. Y. V. Reddy) set up in December 1997 to re-examine the analytical aspects of monetary survey in the context of the emerging dynamics in the nature, quality and dimension of the money stock submitted its report in June 1998. Major recommendations of the working group included: comprehensive analytical surveys of the Reserve Bank, commercial and co-operative banks and the organised financial sector at regular intervals; compilation of four monetary aggregates [M_0 (monetary base), M_1 (narrow money), M_2 and M_3 (broad money)]; introduction of three liquidiy aggregates (L_1, L_2 and L_3); broadening of the definition of credit by including items not reflected in the conventional bank credit; redefining the NFAs of the banking system to comprise banks' holdings of foreign currency assets net of (a) their holdings of FCNR(B) deposits and (b) foreign currency borrowings.

The Policy Focus – Shift to the Multiple Indicators Approach

4.81 Under the "flexible monetary targeting approach" that India followed since the mid-1980s, growth in broad money (M_3) was projected in a manner consistent with expected GDP growth and a tolerable level of inflation. The M_3 growth thus worked as the nominal anchor for policy. Reserve Money (RM) was used as the operating target and bank reserves as the operating instrument. As deregulation enhanced the role of market forces in the determination of interest rates and the exchange rate, the monetary targeting framework came under stress due to increasing liquidity mainly on account of capital inflows. There was also increasing evidence of changes in the underlying transmission mechanism of monetary policy with interest rates and the exchange rate gaining importance *vis-à-vis* quantity variables. These developments warranted reviews in the monetary policy framework and the Reserve Bank switched over to a more broad-based "multiple indicators approach" since 1998-99. Under this approach, policy perspectives are obtained from interest rates or the rates of return in different markets (money, capital and government securities), high frequency data on currency and credit extended by banks and financial institutions, fiscal situation, trade and capital flows, inflation rate, exchange rate, refinancing and transactions in foreign exchange and output data.

4.82 A number of institutional arrangements have been put into place to monitor the multiple indicators. The Financial Markets Committee monitors the development in financial markets on a daily basis. The Committee reviews the developments in money rates, foreign exchange, spot and forward rates, movements in volume of funds both in money and forex markets, yield rates and volumes in government securities market and other developments in money and forex markets and banking and other market indicators. The Committee makes a quick assessment of the liquidity conditions and recommends strategies for intervention in money and security markets.

4.83 The informal monetary policy strategy meetings review monetary and liquidity conditions and related indicators and discuss policy strategies, based on the findings of technical studies on relevant issues and review the follow up actions on the recommendation of various committees relating to monetary policy. The Resource Management Discussions with banks focus on reviewing and obtaining projection of banks' major sources and uses of funds, collecting qualitative information on the goals perceived and the strategies proposed to be adopted by the banks in achieving these goals, obtaining feedback on the policy announcements and suggestions on future course of policy and seeking banks' perception on liquidity and market conditions. The Technical Advisory Committee on Money and Government Securities and Forex Markets advises the Bank, on an ongoing basis, on development of the money and government securities markets. The views and decisions taken are crystallised into policy actions to achieve the desired objectives of monetary policy.

Short-term Liquidity Management

4.84 As reliance on direct instruments of monetary policy declined, liquidity management in the system could be increasingly undertaken through OMOs in the form of outright purchases/sales of government securities and daily repo and reverse repo operations. The OMOs are supplemented by access to Reserve Bank's standing facilities and direct interest rate signals through changes in the bank rate/repo rate. Short-term liquidity management is aided by conduct of repos on a regular basis. The nomenclature of repo and reverse repo was interchanged in conformity with the international usages (repos/reverse repos denote injection/absorption of liquidity by the Reserve Bank) with effect from October 29, 2004.

4.85 During the period between December 1992 and March 1995, the Reserve Bank undertook repos initially for one, two or three days covering five days in a weekly cycle, which was later replaced by a 14-day cycle covering the reserve make-up period. The repos were discontinued after March 1995 due to a lack of demand under tight liquidity conditions and resumed in early 1997. Repos of 3-4 days cycle were re-introduced, as shorter period repos provide greater maneuverability to the Reserve Bank in deciding the quantum of liquidity to be absorbed, depending upon the supply and demand conditions. The repo rates, apart from reflecting liquidity conditions, provide a floor for the overnight call money rates. In the event of tight liquidity conditions, the Reserve Bank's liquidity support to primary dealers enables it to directly intervene in the market, thereby moderating pressures on the overnight call money rates. The LAF has emerged as the principal operating instrument of monetary policy, enabling the Reserve Bank to modulate short-term liquidity under varied financial market conditions. The LAF operates through daily repo and reverse repo auctions that set a corridor for the short-term interest rates consistent with the policy objectives. In order to fine-tune the management of liquidity and in response to suggestions from market participants, the Reserve Bank has introduced from November 28, 2005 a second liquidity adjustment facility (SLAF). Thus, at present, repos and reverse repos are being conducted twice a day. Although there is no formal targeting of overnight interest rates, the LAF has enabled the Reserve Bank to de-emphasise targeting of bank reserves and focus increasingly on interest rates. This also has helped reducing the CRR without engendering liquidity pressure.

Monetary Management under Capital Inflows

4.86 Following the adoption of structural reforms and external sector liberalisation in the early 1990s, the Indian economy experienced surges of capital flows. While the capital inflows eased the external financing constraint, they also posed dilemmas for the conduct of the monetary policy. Under the circumstances, the objectives of containing exchange rate volatility and the maintenance of orderly conditions in the forex markets become difficult to achieve. More particularly, if capital inflows outstrip the demand for foreign exchange, the appreciation of the domestic currency often necessitates interventions by the central bank to drain off the excess supply of foreign currency. In doing so, the accretion to official reserves implies an immediate expansion in primary money supply with attendant consequences for maintaining price stability.

4.87 Apart from the LAF, which is essentially an instrument of day-to-day liquidity management, sterilisation operations are conducted through several other means. Under the Reserve Bank of India Act, 1934, the Reserve Bank is not allowed to borrow beyond its paid-up capital of Rs.5 crore without collateral. In the past, the Reserve Bank had augmented its ability to carry out OMOs by converting non-marketable special securities (mainly funded from *ad hoc* treasury bills) into marketable paper. With the full conversion of the entire stock of such paper in September 2003, the Reserve Bank was unable to resort to such operations. The Reserve Bank cannot issue its own paper under the extant provisions of the Reserve Bank of India Act, 1934 and such an option has generally not been favoured in India. In addition, central bank bills/bonds would impose the entire cost of sterilisation on the Reserve Bank's balance sheet. Besides, the existence of two sets of risk-free paper – gilts and central bank securities – tends to fragment the market. Finally, as the Government cannot statutorily receive interest on surplus balances with the Reserve Bank, its surpluses are 'invested' in its own securities held by the Reserve Bank to avoid costs for the Government in terms of idle funds. This arrangement, however, diminishes the availability of the stock of Government securities for sterilisation operations and overall liquidity management.

4.88 The Market Stabilisation Scheme (MSS) was introduced in April 2004 to provide the Reserve Bank with an additional instrument of liquidity management and to relieve the LAF from the burden of sterilisation operations. The MSS is an arrangement between the Government of India and the Reserve Bank to mop up the excess liquidity generated on account of the accretion of the foreign exchange assets of the Bank to neutralise the monetary impact of capital flows. Under the scheme, the Reserve Bank issues treasury bills/dated Government securities by way of auctions and the cost of sterilisation is borne by the Government.

Shifts in Basic Functions

Currency Management

4.89 Currency management is currently passing through an interesting phase. A number of significant steps have been taken in this sphere, which include: building up of the capacity of note printing presses, reforms in the operations of the Issue Department including in the note distribution network, introduction of new security features and a shift towards higher denomination notes in circulation.

4.90 The period in the 1990s was marked by a supply constraint as the capacity of the note printing presses fell far short of the demand for fresh notes. It was only in the last year of the decade that adequate capacity was built up with the setting up of two printing presses of the Bharatiya Reserve Bank Note Mudran Private Ltd (BRBNMPL), a wholly owned subsidiary of the Reserve Bank, at Mysore (Karnataka) and Salboni (West Bengal), which became fully operational in 1999 and 2000 respectively. Equipped with modern facilities for printing, process control, accounting and quality check in a secure environment, these are capable of printing notes in all denominations. The combined capacity of the presses is 19.8 billion pieces per year on a 3-shift basis. The BRBNMPL presses are one of the first bank note presses in the world to be awarded the ISO 9001:2000 certification by M/s Rheinsich Westfalischer, TUV, Germany in March 2001.

4.91 The operationalisation of the printing presses of BRBNMPL enabled the Reserve Bank to embark on the "Clean Note Policy" in 1999. The objective of the Clean Note Policy is to withdraw non-issuable notes well in time and put fresh notes in circulation in their place. This exercise is dependent on the capacity of the Bank to cope with the need to process and dispose of the notes so withdrawn. While movement of soiled notes from currency chests to Issue Offices could be expedited by several methods, the real issue was the manner in which the processing capacity in the Issue Offices could be augmented so as to match the huge flow of notes from the chests. In view of the limitation to expansion of capacity manually, it became imperative to supplement the effort of manual processing by mechanical processing. The Bank adopted mechanisation of the note processing activity in a big way with installation of 48 Currency Verification and Processing Systems (CVPS) and 27 Shredding and Briquetting System (SBS) in 18 Issue Offices. The CVPS are high-speed fully automatic machines designed to sort currency notes into fit and unfit categories capable of processing 50,000-60,000 pieces of soiled notes per hour. The fit notes are counted and banded to make packets of 100 pieces each while the unfit notes pass on automatically to the on-line shredding unit where they are shredded into very small pieces. The shredded pieces are then sucked into the briquetting unit of the SBS where these are converted under high air pressure into compact briquettes and disposed of in an environment-friendly manner. A beginning has been made in the direction of mechanisation of cash handling activity by the commercial banks as well. As a first step for easing the pressure on the distribution channels, coin distribution has been outsourced to private transport operators and the practice of Reserve Bank staff and police personnel accompanying coin remittances has been done away with.

4.92 The security features of banknotes are reviewed and updated from time to time, taking advantage of the research and technology in the field. The approach has been to improve the security features on the existing design so as to combat counterfeiting and to incorporate a mixture of security features on a completely new series of notes. With the advancement of reprographic techniques, traditional security features were deemed inadequate. A new series of notes stylised as the ‘Mahatma Gandhi Series’ was introduced in 1996. A changed watermark, windowed security thread, latent image and intaglio features for the visually handicapped are amongst the new features. In tune with the international trends in security features, the Reserve Bank has now come out with banknotes of 2005 series with machine-readable security features. In view of the greater risk perception in higher denomination banknotes, the banknotes of Rs 100, Rs 500 and Rs 1000 have been strengthened with more security features. It is noteworthy that all notes issued in any design by the Reserve Bank continue to be legal tender, although, over a period of time, notes in a particular design may not be seen any more because of lack of fresh issues in that design.

4.93 In tandem with the technological innovations, the Reserve Bank has taken up the task of putting in place an Integrated Computerised Currency Operations and Management System (ICCOMS) with a view to ushering in greater operational efficiency, improved customer service and providing decision support tools for policy making in the area of currency management. The project involves computerisation and networking of the currency chests with the Reserve Bank’s Offices to facilitate prompt, efficient and error-free reporting and accounting of the currency chest transactions in a secure manner. The system will provide a uniform computing platform across all the Regional Offices for transaction processing, accounting and management information systems relating to currency.

4.94 The circulation of currency in India has increased phenomenally (both in volume and value terms). At the time of establishment of the Reserve Bank in 1935, the volume of notes in circulation stood approximately at 100 million pieces. As on March 31, 2005, the notes in circulation had risen to 36,985 million pieces (Rs.3,61,229 crore in value terms). As part of management of the demand for currency, it has been the endeavour of the Reserve Bank to contain the volume of notes in circulation by coinisation of lower denomination notes and a conscious shift towards higher denomination notes in circulation.

4.95 The Reserve Bank continues to conduct its currency management operations with a view to ensuring the optimal customer service through an adequate supply of good quality and secure notes and coins in the country. Clean notes and intensified anti-counterfeiting measures remains a concurrent objective, alongside continuous up-gradation of the security features. With the modernisation of infrastructure, diffusion of IT initiatives in computerisation of bank branch operations and the advances in the communication facilities are expected to bring about further improvements in customer satisfaction and create the necessary environment for ongoing improvements in currency management.

Payment and Settlement Systems

4.96 Payment and settlement systems feature prominently as the backbone of economic activity in any modern society. One of the characteristic features of the Indian economy is the widespread use of cash in the settlement of most of the financial transactions. While this has been the trend for several years, it is noteworthy that India had pioneered the use of non-cash based payment systems long ago, which not only stood the test of time but had also established themselves as strong instruments for the conduct of trade and business (Box IV.3). With the gathering

Box IV.3

Evolution of Payment and Settlement Systems in India

The earliest payment instruments known to have been used in India were coins, which were either punch-marked or cast in silver and copper. While coins represented a physical equivalent, credit systems involving bills of exchange facilitated inter-spatial transfers. The most important form of credit instruments that evolved in India was termed as *Hundis.* Their use was most widespread in the twelfth century and has continued till today. *Hundis* were either used as remittance instruments (to transfer funds from one place to another) or credit instruments (to borrow money [IOUs]) or for trade transactions (as bills of exchange).

With the steady growth in volumes of trade and commerce and the growing confidence of the public in the usage of cheques *etc.*, transactions through these payment instruments grew rapidly. Bank employees had to frequently walk to other banks, collect cheques and drafts, present them to drawee banks and collect cash over the counter, which had the danger of loss in transit. Moreover, such methods could only serve the purpose of limited volumes of instruments. With the development of the banking system and a higher turnover in the volume of cheques, the need for an organised cheque clearing system emerged. Clearing associations were formed in the Presidency towns and the final settlement between member banks was effected by means of cheques drawn on the Presidency Banks. With the setting up of the Imperial Bank in 1921, settlement was done through cheques drawn on that bank.

In a country marked by the overwhelming usage of cash as a means for settlement of payments, the switch over to non-cash based modes has been a gradual but definitive trend. The most significant one has been the use of non-cash paper based systems (cheque-based) in which banks play a pivotal role. In order to ensure that cheques issued get transformed into cash, the process of settlement of these cheques which were exchanged between the bank whose customer had deposited the cheque and the bank on which the cheque was drawn on, commenced. The development of the banking system and higher turnover in the volume of cheques gave rise to the need for an organised cheque clearing process. Clearing associations were formed by banks in the Presidency towns and the final settlement between member banks was effected by means of cheques drawn upon the Presidency Banks.

The Calcutta Clearing Banks' Association, which was the largest bankers' association at that time, adopted clearing-house rules in 1938. The association had twenty-five large banks as members and eight sub-members. However, the association did not cover many banks functioning in Calcutta. The cheques, drafts *etc.* of such non-clearing banks were collected by the clearing banks on payment of charges. This affected their business adversely, as the public was not likely to maintain accounts with banks whose cheques suffered a serious handicap of market acceptability. To overcome this problem, these banks formed themselves into a group called the Metropolitan Banking Association with fifty members, which conducted the Metropolitan Clearing House, in 1939. This association reached an understanding with the Calcutta Clearing House in 1940. In addition, two other clearings were conducted in Calcutta - the Pioneer Clearing and the Walks Clearing. The Bombay Clearing House was the only association to conduct clearings in Bombay. It had no parallel systems/ institutions comparable to the Metropolitan Clearing House of Calcutta. The uniform procedures and charges for collection of non-clearing banks' cheques, drafts, dividend warrants *etc.* were adopted by the Bombay Clearing House in 1941-42.

After the setting up of Reserve Bank in 1935, the Clearing Houses in the Presidency towns were taken over by the Reserve Bank. The Reserve Bank, by virtue of extending the facility of maintaining the current accounts of banks, could facilitate the settlement arrived out of the clearing process. Thus began the early processes of clearing facilities extended by the Central bank. With the extension of current account facilities for banks at the various locations where the Reserve Bank had its offices, the management of clearing-houses at these locations also came under the purview of the Reserve Bank.

The Reserve Bank continued to extend clearing-house functions for almost five decades as a customary function. In view of the regulatory role played by the Reserve Bank and since the members of the clearing houses were commercial banks regulated by the Central bank, the Reserve Bank also took upon itself the role of regulating the clearing functions. Some of the initiatives in this regard included the formulation of Uniform Regulations and Rules for Bankers' Clearing Houses and the monitoring of payment flows through the larger clearing-houses.

Source: Reserve Bank of India (1998).

pace of globalisation and advances in technology, the importance of safe, sound, secure and efficient payment and settlement systems is recognised by the banks, the world over. It is in this context that the Core Principles for Systemically Important Payment Systems of the Bank for International Settlements (BIS) assumes significance.

4.97 Recognising the importance of payment and settlement systems, the Reserve Bank had taken upon itself the task of setting up a safe, efficient and robust payment and settlement system for the country for more than a decade now. Since clearing operations were at the heart of efficient payment and settlement systems, the thrust area was on such systems. One of the key driving factors in the reforms aimed at improving the existing systems was technology. With the technological developments, which have had a significant impact on the banking sector, the pace in reforms was accelerated with the fillip provided by technology for use by modern payment and settlement systems. In the recent past, the Reserve Bank has been placing emphasis on reforms in the area of payment and settlement systems. The efforts of the Reserve Bank have been to ensure full compliance to the core principles of BIS (mentioned above) and one of the moves aimed at reducing risks – especially settlement and systemic risks – has been the introduction of the Real Time Gross Settlement (RTGS) system.

4.98 Prime among the concerns of the Reserve Bank are the factors relating to risk management and risk reduction, with specific reference to systemic risks (which are risks capable of having a negative impact on the entire group of participants in any payment and settlement system). It was with this objective that the RTGS system was planned, which has now become a reality. The system, in its present form, would take care of all inter-bank transactions and other features would be added on soon. Banks have risen to the occasion in ushering in a system, which uses the latest technology and relies, to a large extent, on network-based information flows.

4.99 In view of the positive response of the financial sector to the initiatives of the Reserve Bank and the banking sector also coming of age, the Reserve Bank has now taken the policy perspective of migrating away from the actual management of retail payment and settlement systems. Thus, for a few years now, the task of setting up new MICR based cheque processing centres has been delegated to the commercial banks. This approach has yielded good results and the Reserve Bank now envisions the normal processing functions to be managed and operated by professional organisations, which could be constituted through participation from banks. This would be applicable to the clearing houses as well, which will perform the clearing activities, but the settlement function will continue to rest with the Reserve Bank, which would ensure that the settlement is done in Central Bank money, as required in terms of the Core Principles of the BIS *(op cit)*. With this, the Reserve Bank will continue to have regulatory oversight over such functions without actually acting as the service provider. The exception to this would be the RTGS, which, on account of its systemic importance, is retained by central banks the world over. The RTGS, which provides for funds transfer across participants in electronic mode with reduced risk, will be operated by the Reserve Bank. This system, apart from ensuring systemic efficiency, would also be attuned to the canons of the monetary policy.

Information Technology

4.100 Information technology (IT) has transformed the functioning of businesses, the world over. It has bridged the gaps in terms of the reach and the coverage of systems and enabled better decision-making based on latest and accurate information, reduced costs and overall improvement in efficiency. In the Indian context, the financial sector, especially the banking sector, has been a major beneficiary from the inroads made by IT. Many new processes, products and services offered by banks and other financial intermediaries are now IT-centred. Effective integration of technology with sound business practices requires business process re-engineering and banks in India need to follow up on the beginnings made in this regard. Newer delivery channels to customers – Automated Teller Machines (ATMs), and the networking of ATMs in the form of Shared Payment Networks, Internet Banking - and implementation of Core Banking solutions by most banks are some examples.

4.101 The Reserve Bank has played a proactive role in the implementation of IT in the banking sector. IT based initiatives would focus on meeting the three pronged objective of better house keeping, improved customer service and overall systemic efficiency. Within the Reserve Bank, initial efforts in the 1980s aimed at mechanisation of activities were expanded during the 1990s into computerisation of critical areas of operation. The Reserve Bank has come out with a Financial Sector Technology Vision Document outlining the approach to be followed for IT implementation for the medium term period of about three years. This document will help banks in finalising their IT plans in tandem with the overall approach for the banking sector, as envisioned by the Reserve Bank.

4.102 In recent years, there has been a renewed thrust on putting in place comprehensive systems following the Generic Architecture within the Reserve Bank and providing solutions to enhance the efficiency of the payment and settlement systems in India. Priority is being attached to the strengthening of the institutional framework for the regulation and supervision of payment and settlement systems. As a part of this initiative, the Reserve Bank has constituted the Board for Regulation and Supervision of Payment and Settlement Systems (BPSS) as a Committee of its Central Board. The functions and powers of BPSS include policy formulation relating to the regulation and supervision of all types of payment and settlement systems, setting standards for existing and future systems, authorisation of the payment and settlement systems and determination of criteria for membership to these systems. A new department called the Department of Payment and Settlement System (DPSS) has also been constituted in the Reserve Bank. The National Payments Council, functioning since 1999, received recognition of a Technical Advisory Committee to the BPSS. The direction provided in the Vision Document would provide a road map for streamlining and refining the payment systems in the medium term.

Regulation and Supervision

4.103 Regulation and supervision of the financial system has received renewed focus in recent years in the context of the phenomenal expansion of the financial sector, technology-enabled innovations in financial products and deepening of global integration. The strategic importance of the banks in the financial system make it imperative for the central bank – historically, the lender of the last resort and the supervisor of the banking system - to pursue financial stability as an important macroeconomic objective, although, in India, there are separate institutions (*viz.*, the SEBI and the IRDA) to oversee the functioning of individual segments of the financial system. A number of initiatives have been taken by the Reserve Bank in reorienting the supervisory and regulatory framework and aligning it with the international best practices, while providing sufficient flexibility to the financial institutions to respond to the growing competition and taking advantage of the business opportunities unfolded by technological advancements.

4.104 The Narasimham Committee II made a range of recommendations for improving the vigour of the banking system (capital adequacy, asset quality, non-performing assets, *etc.*) as also for strengthening the supervisory systems. The Committee observed that the issue of ‘autonomous status’ for the Board for Financial Supervision (BFS) of the Reserve Bank should be considered to segregate the regulatory and supervisory functions of the apex bank. The Committee made specific recommendations to restructure the BFS and to set up a separate Board for Financial Regulation and Supervision (BFRS). The Committee also recommended that the regulatory and supervisory authorities should take note of the developments taking place elsewhere in the area of devising effective regulatory norms and to apply them in India taking into account the special characteristics but not in any way diluting the rigor of the norms so that the prescriptions match the best practices abroad. The committee also highlighted the need for a review of banking sector laws, such as, the RBI Act, the Banking Regulation Act, the Nationalisation Act and the State Bank of India Act. The recommendations made by the Committee are being progressively implemented.

4.105 Following the recommendations of the Narasimham Committee II and more recently in the context of the Basel II Accord, the Reserve Bank has taken several measures to strengthen its regulatory and supervisory framework with a view to ensuring a sound, efficient and vibrant financial system in the country. The measures to contain the level of non-performing assets (NPAs) include the setting up of Debt Recovery Tribunals for expeditious adjudication and recovery of debts due to banks and financial institutions, Lok Adalats (people’s courts) and Asset Reconstruction Companies and Corporate Debt Restructuring (CDR) mechanisms. In order to ensure the functioning of institutions and markets on the basis of informed decisions, the Reserve Bank has issued guidelines to banks to enhance the level of transparency and disclosures with regard to their financial position (RBI, 2005).

4.106 In recent years, central banks are increasingly focusing their attention not only on individual banks but also on the issues of financial stability. Banks are subjected to more intense regulation as compared to the non-financial firms, in view of the special characteristics of banks. Banks are much more leveraged than the other firms due to their capacity to garner public deposits. The asset-liability structure of banks is different from other financial firms. The deposits, which constitute a major part of the liability of banks, are repayable on demand, unsecured and their principal amount does not change in value whereas the loans of a bank are illiquid and there can be erosion in the value of loans and of other assets.

4.107 Bank regulation is increasingly getting risk-based with the realisation that the traditional supervisory practices were out of step with the sophisticated risk management techniques. The International Convergence of Capital Measurement and Capital Standards: A Revised Framework (popularly known as Basel II) has brought regulation and risk management to the center stage. Basel II rests on three pillars: minimum capital requirements, supervisory review process and market discipline. India has decided that all the commercial banks would have to be Basel II compliant by adopting, at a minimum, the Standardised Approach for credit risk and Basic Indicator Approach for operational risk under Pillar 1, with effect from March 31, 2007. As regards the supervisory review process (Pillar 2), the role of supervisors is to evaluate whether or not the banks are assessing their capital requirements properly in relation to their risks and if necessary the supervisors may intervene to mandate a higher capital requirement. As regards Pillar 3, the Reserve Bank has been advising banks to make disclosures in order to enhance market discipline.

4.108 The implementation of Basel II will initially require more capital for banks in India due to the fact that operational risk is not captured under Basel I and the capital charge for market risk was not prescribed until recently. As commercial banks are scheduled to start implementing Basel II with effect from end-March 2007, the Reserve Bank will focus on supervisory capacity-building measures to identify the gaps and to assess as well as quantify the extent of additional capital, which may have to be maintained by such banks. Finally, while recognising the importance of consolidation, competition and risk management to the future of banking, the Reserve Bank will continue to lay stress on corporate governance and financial inclusion.

IV. CONTEMPORARY ISSUES

4.109 The narrative in the preceding three sections revealed significant expansion as well as transformation in the central banking functions in India over the period since 1935. The initiatives that the Reserve Bank undertook in developing financial institutions and markets reflect the structural features of the economy, in particular, the financial sector, as also the Bank's response to the unfolding of circumstances. Nonetheless, monetary policy remains the central preoccupation of the Reserve Bank as that of any other central bank. A number of issues – transparency, policy focus and central bank autonomy – have been the subject matters of intense debate, especially in the context of adoption of international best practices. A related question is whether the pursuit of financial stability as an explicit objective reduces the maneuverability of monetary policy (Nachane, 2005). It deserves a mention that these issues are inter-related. Transparency goes along with central bank independence - if the monetary policy decisions are to be taken independently then the public at large and the legislature in particular needs to be explained the rationale. The announcement of explicit policy objectives is a crucial ingredient of transparency in monetary policy formulation and the operational autonomy of the Reserve Bank is seen as a pre-requisite in the move towards ensuring transparency.

4.110 A comparison of the monetary framework in India in a global setting would be in order. In the Indian context, discretion gets a higher score than the specific short and medium-term policy focus objectives (exchange rate focus, money focus or inflation focus). Central bank independence gets a higher score *vis-à-vis* accountability and transparency. The emphasis on independence, in fact, finds the top rank in the monetary framework of central banks in most countries, although accountability to Government scores over independence in a number of developing economies. Financial stability issues get a high score in India, which is comparable to the crisis-affected Asian economies (Indonesia, Korea, Malaysia and Thailand). In the case of policy analysis, India's focus lies in the money and banking sectors. In the spheres of the analysis of inflation expectation and the use of models and forecasts, India's position is unenviable (Table 4.1).

Transparency in Monetary Policy Formulation

4.111 The traditional approach to central banking policy formulation characterised by "secrecy" or "unanticipated monetary policy" was relevant in a tightly regulated system where the financial markets looked to the central banks for direction and central banks were regarded as an arm of the government;

Table 4.1: Summary Scores for Monetary Framework Characteristics in Select Countries

(Percent of maximum)

Country	Short and medium term policy focus on particular objectives				Institutional Characteristics			Use and importance of various forms of monetary analysis			Structural Characteristics
	Exchange rate focus	Money focus	Inflation focus	Discretion*	Indepen-dence	Accountab-ility of Central Bank to Government	Policy Explana-tions	Inflation Expecta-tions	Analysis using models and forecasts	Importance of analysis of money and banking sector	Importance of Financial Stability Issues in setting instruments
1	2	3	4	5	6	7	8	9	10	11	12
Bangladesh	31	75	44	63	56	83	39	25	6	56	17
China	25	88	31	41	68	100	63	83	72	78	33
India	6	50	44	75	83	67	75	0	11	89	67
Indonesia	6	63	50	66	56	83	83	50	100	89	83
Malaysia	38	0	44	75	85	83	71	67	17	56	67
Sri Lanka	6	19	19	94	54	58	48	17	11	56	33
Thailand	6	6	31	75	82	50	67	0	83	67	83
Germany	13	88	19	28	96	17	70	50	56	56	33
Japan	0	0	50	50	93	…	89	75	72	78	50
Korea	6	75	63	59	73	83	88	17	78	100	58
Sweden	13	0	100	6	97	83	95	100	78	33	42
Switzerland	19	75	19	44	90	17	86	33	50	56	8
UK	0	0	100	0	77	100	94	100	94	56	16
USA	0	25	19	84	92	83	95	83	89	33	33

* Discretion depends only on the scores for exchange rate targeting, money targeting and inflation targeting. Discretion is calculated as twice the maximum of these scores minus the sum of the other two. It is converted to an index between zero and 100, where a high score implies more discretion.

Source: Fry *et al* (2000).

central banks were not accountable to the public. In the context of free-enterprise markets, it is increasingly being recognised that financial institutions would be able to take rational decisions if they have the complete background to the policies. Thus, transparency is being viewed not only an aspect of good governance but a pre-requisite to the soundness of financial institutions. With the increasing convergence of views in this regard, the IMF recommended to the member countries to adopt a Code of Good Practices on Transparency in Monetary and Financial Policies (September 1999). Effective transparency, as per the IMF Code, requires more than just the release of adequate information on monetary and financial policies – it involves clarity of roles, responsibilities and objectives of central banks and an insight into the analytical underpinning of its policy action.

4.112 Against this backdrop, the Reserve Bank constituted a Standing Committee on International Financial Standards and Codes and a number of Advisory Groups to examine the specific aspects. The Advisory Group on Transparency in Monetary and Financial Policies (Chairman: M. Narasimham) made a critical evaluation of the existing state of transparency of monetary and financial policies in India, identifying the areas where improvements were required. With a view to moving towards a more transparent system, the Advisory Group considered it best "to veer towards prescribing to the Reserve Bank a single objective while the government could have for itself a clearly set out hierarchy of objectives for which it could use its other instruments of policy". Considering the fact that transparency is intricately related to the legislative framework, it highlighted the need for an amendment of the RBI Act to give a sharper focus to the objectives of monetary policy and to provide, through legislative amendments, "reasonable security of tenure" to the Top Management of the Bank. The recommendations of the Advisory Group include: separation of debt management and monetary policy functions so as to provide the Reserve Bank the "headroom" to operate monetary policy; setting up of a Monetary Policy Committee (MPC) as a Committee of the RBI Central Board; and assigning to the Reserve Bank a single objective for monetary policy, *viz.*, the inflation rate and then giving unrestricted instrument freedom to the Bank.

4.113 In Section III mention has been made about the measures undertaken by the Reserve Bank in evolving and adopting international best practices. It may be added that the Reserve Bank has been adopting a consultative approach - setting up working groups and committees with a wider participation of academicians and experts from the market to deliberate on various policy issues. The draft reports are generally placed in public domain for inputs, in particular, from industry associations and self-regulatory bodies. In conformity with international best practices and with a view to strengthening the consultative process in monetary policy formulation, the Reserve Bank set up in July 2005 a Technical Advisory Committee on Monetary Policy (TACMP) with external experts in the areas of monetary economics, central banking, financial markets and public finance. The Committee would meet at least once in a quarter to review the macroeconomic and monetary developments and advise the Reserve Bank on the stance of monetary policy. The views of the TACMP would be discussed in the following meeting of the Committee of the Central Board of the Reserve Bank. In the direction of separation of debt management from monetary policy formulation, two aspects – the initiatives taken by the Reserve Bank to strengthen the government debt market (elaborated in Section III) and the setting up of a separate department named Financial Market Department in the Reserve Bank in July 2005 – merit mention.

Rules Versus Discretion

4.114 In the sphere of monetary management, a crucial issue relates to policy focus, *i.e.*, the announcement of specific short and medium-term policy focus objectives. Since the 1990s, explicit targets are being widely used and a number of countries have adopted inflation targeting (Fry *et al*, 2000). In India, however, as mentioned earlier, the “multiple indicator approach” is being pursued. On this, the Advisory Group on Transparency in Monetary and Financial Policies (*op cit*) observed: “There is great comfort in a multiple objective approach in that precision is not required in defining the objectives and the Reserve Bank in turn does not have much accountability as it juggles with the almost impossible task of fulfilling contradictory objectives and as such accountability is blurred” (RBI, 2000).

4.115 Is the emphasis on discretion or the multiple indicators approach *vis-à-vis* the global convergence towards a single objective misplaced? From a historical perspective, the monetary policy stance in India has been guided by the specific circumstances, at times deviating from the prevailing wisdom (Section I). In the present case, the emphasis on discretion reflects several factors. At an abstract level, the preference of central banks to exercise discretion in the use of policy instruments is based on the following argument. The continuous flow of new information and the process of expectation formation adding to the base level information about the current state of the economy might make the application of the rigid rules – based on historical information or abstract hypotheses – ineffective in addressing the unfolding problems (Vasudevan, 2003). There are also several practical difficulties in pursuing a single objective such as the explicit inflation target. Structural factors and supply shocks – both from within the economy and outside – render inflation dependent on monetary and non-monetary factors. A fully dependable measure of inflation for targeting purposes needs to be developed. Given the institutional features (the persistence of fiscal dominance), the debt management function gets inextricably linked with the monetary management function while steering the interest rates. In the absence of fully integrated financial markets, the effectiveness of the transmission channel of policy is yet to be established. Under these circumstances, it is necessary to carefully measure and balance the possible outcomes, taking into account the movements in a variety of monetary and other indicators.

Central Bank Independence

4.116 The debate on central bank independence in India is as old as the institution itself. At the time of the establishment of the Reserve Bank, public opinion in India was strongly in favour of an independent central bank. The “London Committee” (which was appointed to draft the Reserve Bank of India Bill, 1933) took the view that the Reserve Bank should be free from any political influence and considered private share holding as the best course to attain this objective. Whereas in those days it was essentially a question of ownership of the Reserve Bank, the contemporary debate on central bank autonomy generally focuses on the operational aspects - the fiscal dominance or what is described as the use of monetary policy as a ‘handmaiden’ to fiscal policy (Nachane, 2005); and the legislative provisions that constrain the operational flexibility of the Reserve Bank (RBI, 2000).

4.117 In the development phase, the growing borrowing programmes of the Government and its

Box IV.4
The Reserve Bank of India (Amendment) Bill, 2005

The Union Finance Minister in his budget speech in February 2000 had observed that the fast changing world of modern finance had made it imperative to accord greater operational flexibility to the Reserve Bank in conducting monetary policy and regulation of the financial system and that he intended to bring to the Parliament proposals for amending the relevant legislation. The Reserve Bank of India (Amendment) Bill, 2005, as introduced in the Lok Sabha, aims at bestowing the enabling powers on the Reserve Bank to use a larger variety of financial instruments than hitherto and more flexibility to set the cash reserve ratio. The major provisions of the RBI (Amendment) Bill 2005 are as follows.

The Bill proposes to permit dealing in derivatives, and, with the approval of the Central Board, in any other financial instrument, by inserting a clause (6A) to Section 17. It seeks to specify the underlyings in respect of which derivates may be dealt in by Reserve Bank so that the powers of Reserve Bank to deal in derivatives are not restricted as in the case of derivatives over which it has regulatory powers.

In order to clear ambiguities in the use of repos and reverse repos for liquidity management by the Reserve Bank, it is proposed to specifically authorise the Bank to lend or borrow securities, whether of Central Government, State governments, or any local authority or foreign securities. It is proposed to add clause (12AA) permitting the 'lending or borrowing of securities of the Central Government or a State Government or of such local authorities as may be specified in this behalf by the Central Government or foreign securities;' and clause (12AB) dealing in repo or reverse repo.

The Bill proposes to introduce a new chapter IIID, containing the definitions of the concepts (derivatives, repo and reverse repo) and the powers of the Reserve Bank to regulate the Money Market. In order to provide greater operational flexibility to the Reserve Bank, the Bill proposes to remove the minimum and maximum limits of the cash reserve ratio (CRR) under Section 42 of the RBI Act. Further, it is proposed to remove the provision for payment of interest to banks on the excess CRR maintained, as it reduces the effectiveness of CRR as a monetary policy tool.

monetisation by the Reserve Bank - gave rise to questions regarding the relative roles of the fiscal policy and the monetary policy. Monetary policy, particularly in the 1980s, had to address itself to the task of neutralising the inflationary impact of rising fiscal deficits. The Chakravarty Committee strongly advocated a system of monetary targeting that would bind the Government and the Reserve Bank to a mutually agreed level of net Reserve Bank credit to the Government. The case for according greater operational flexibility to the Reserve Bank in the conduct of monetary policy and regulation of the financial system has become stronger since the 1990s, especially in the context of increasing global integration of the Indian economy. Rangarajan (1993) defined the independence of central banks as "the institutional arrangements for the conduct of monetary policy" and condemned the practice of automatic monetisation of the Government's fiscal deficit through the issue of *ad hoc* treasury bills as the principal factor impinging on the effective conduct of monetary policy in the Indian context.

4.118 The phasing out of *ad hoc* Treasury Bills and the enactment of Fiscal Responsibility and Budget Management (FRBM) legislation are two important milestones in providing safeguards to monetary policy from the consequences of fiscal expansion and ensuring better monetary-fiscal co-ordination. The FRBM Act 2003, which became effective from July 5, 2004, mandates the Central Government to eliminate the revenue deficit by March 2009 and reduce fiscal deficit to an amount equivalent to 3 per cent of GDP by March 2008. The proposed legislation to amend the RBI Act seeks to provide more operational flexibility to the Reserve Bank in conducting monetary policy, guiding the development of the financial sector and securing the stability of the financial sector (Box IV.4).

V. CONCLUSIONS

4.119 In the context of growing research interest on institutions as a determinant of economic development, this chapter provided a brief narrative on the evolution of central banking in India since 1935 when the Reserve Bank of India was established. The Reserve Bank was founded on the pattern of European central banks; but the evolution of its functions has undergone radical transformations from traditional central banking in the formative years to that of building institutional infrastructure during the development phase and ensuring financial sector soundness in the reform phase.

4.120 With the onset of economic planning and along with the structural transformation of the Indian economy, the functions of the Reserve Bank expanded manifold. As the central bank of a developing county emancipated from centuries old colonial rule, the

Reserve Bank had to take a proactive role in the nation building process in filling the resource gaps of the Governments in Plan financing and in creating necessary financial infrastructure. As a 'mother-of-institutions', the Reserve Bank played a crucial role in the development of the financial sector in India. In the initial years, the emphasis was on putting in place the institutional machinery to support developmental planning, whereas in the reform era, the focus has been on developing and nurturing the financial markets.

4.121 Global developments (such as, the Second World War, breakdown of the Bretton Woods system) did influence the functioning of the Reserve Bank; but the major milestones in the evolution of central banking in India emerged out of the critical role devolved on the Bank. The monetary policy framework in India has undergone shifts along with the global evolution in the art of central banking. In fact, India was the forerunner among developing countries to adopt monetary targeting in 1985. The transformations in the monetary framework since the 1990s – notably, the shift from direct to indirect instruments of control – have been in line with the global trends, while concerns regarding financial stability have been paramount in monetary management in India, as in other economies (Jadhav, 2005). The Reserve Bank has chosen a consultative approach in policy formulation and a number of institutional arrangements have been put in place. On the issue of integrating Indian financial markets with the global financial system, however, India has chosen to proceed cautiously and in a gradual manner, adjusting the pace of liberalisation with the underlying macroeconomic developments, the state of readiness of the domestic financial system and the dynamics of international financial markets. The Reserve Bank has taken a number of initiatives to strengthen the supervisory and regulatory framework, while simultaneously providing sufficient flexibility to the financial institutions to respond to the growing competition and take advantage of the business opportunities unfolded by technological advancements. While pursuing the reforms, the Reserve Bank has also made conscious efforts to improve systemic efficiency by appropriately re-orienting the traditional functions including currency management and regulation of payments and settlement systems. All these initiatives have strengthened the financial sector in India, enabling it to adapt to the emerging environment and this is reinforced in the change in the perception of the world community towards India as an upcoming economic powerhouse.