3

Monetary Management

Introduction

The conduct of monetary policy underwent significant changes during the years 1997–98 to 2007–08. Changes occurred in objectives, instruments, monitoring of economic indicators and the process of policymaking, including legal procedures. The present chapter will describe these changes. The rest of the chapter is divided into seven sections. Six of these deal with, in that order, the shift from monetary targeting to multiple indicators approach to monetary management, the liquidity adjustment facility (LAF), the Market Stabilisation Scheme (MSS), implications of the new regime for the Bank Rate, pricing of bank credit, and changes in process and legal procedures.

A brief account of the main areas of change may be useful, to begin with, to set the stage for a more detailed narrative the rest of the chapter will present.

An Overview

Objectives of Monetary Policy

Monetary policy traditionally served two objectives: keeping inflation under control and ensuring adequate flow of credit to the economy. During the reference period, these two remained the main aims. The relative emphasis, as usual, could shift from one to the other, depending on market conditions. From the late 1990s, a third objective was added. The change came mainly in response to developments in the external sector. This was to achieve financial stability by maintaining orderly conditions in financial markets (money, government securities and foreign exchange markets) and sustaining the health of the banking system in the face of increasing exposure to foreign currency inflows and external shocks.[1]

Instruments

The instruments of monetary management changed during the reference period. Until 1997, regulation of bank credit via direct and indirect means, mainly interest rate regulation, was the most important instrument. Monetary management was earlier carried out through open market operations (OMOs) in the form of outright purchase or sale of government securities, regulation of the reserve ratio (or cash reserve ratio, CRR) and the statutory liquidity ratio (SLR), or mandatory holding of government securities by banks. The CRR was the major instrument for absorbing liquidity in the period before India's economic liberalisation began and was usually set at a relatively high level. In addition, various refinance facilities helped the Reserve Bank ration out liquidity among banks for short periods.

These elements were not completely given up during the reference period, but there was a shift away from administered interest rates towards market-driven interest rates, deregulation of credit supply, and market-based auctions for government borrowing programmes, and along with all this, greater transparency and consultation with market participants and economists. The shift followed the trajectory of reform set out in the report of the Committee on the Financial System (1991),[2] famously known as the Narasimham Committee I. In April and October 1997, the CRR and SLR were drastically reduced, and banks' boards were empowered to take decisions on interest rates and provided with greater operational flexibility.[3] At the same time, the automatic monetisation of government deficits came to an end.[4]

The decisive change that made the deregulation possible took place in the sphere of liquidity management, in the shape of a LAF. The LAF allows sale and purchase operations in government securities carrying a repurchase agreement clause (or repo).[5] It operates through daily repo and reverse repo auctions, which set a 'corridor' for short-term interest rates. It allows the central bank to modulate short-term liquidity daily and to de-emphasise the targeting of bank reserves, make interests rates free of administrative control, and focus on stabilising interest rates instead, while at the same time allowing banks more freedom of operation.

The LAF was introduced in 2000. The time span of this volume saw it being established, reviewed and fine-tuned. OMOs, including and especially repo operations, emerged as the principal instrument of liquidity management. In place of the Bank Rate, the repo rate evolved gradually into a signal to reflect conditions of the money market. This change, as we shall see, gave rise to extensive discussion on what, if any, role the Bank Rate should perform.

The desire to phase out all sector-specific systems of liquidity injection in favour of only market-based repo/reverse repo operations had been expressed before and was operationalised between 1997 and 2007. But there were a few exceptions. Since the export sector was considered a priority, export refinance facility (ERF) was continued. Furthermore, since primary dealers (PDs), given their new role and limited access to resources, wanted assured liquidity support, some collateralised support was extended to them.

The MSS was yet another innovation introduced in 2004 to handle the sterilisation of the liquidity impact of a surge in foreign exchange inflows during the latter part of the reference period.

On the pricing of bank credit, banks were given freedom to fix their own prime lending rates (PLRs) as early as 1994. The position was continually reviewed and refined during the reference period.

Monitoring Economic Activity

There was a change in the mode of monitoring economic activity and assessing the need for intervention. Traditionally, central banks tried to influence output and prices by controlling a variable that had a stable and predictable relationship with output and prices. The Reserve Bank was using M3 (broad money) as the intermediate target until 1997.[6] With the movement towards market operations and away from direct regulation, policy statements started focusing increasingly upon movements in financial market rates and liquidity conditions before drawing appropriate policy stances in relation to policy rate and liquidity management. In this way, the rule of 'monetary targeting' gave way to a 'multiple indicators approach' in managing liquidity in the economy. In the new regime, a range of monetary and financial market indicators, such as credit, interest rates, exchange rates and prices, began being monitored.

Process

Finally, the process of policymaking went through deep changes. The Reserve Bank redefined its relations with the market by creating frequent occasions for consultation with market participants, many of them relatively new, increasing the frequency of policy announcements, and involved external experts and economists into the consultation process. The Bank also redefined its relations with the government and the legal remits of its own operations. In the long run, the reform in the conduct of monetary management stayed its course because it was aided by three legislative actions – the Fiscal Responsibility and Budget Management (FRBM) Act, 2003, amendments to the Reserve Bank of India (RBI) Act, 2006, and the Banking Regulation Act, 2007. The Reserve Bank played a key role in spearheading these reforms and setting out the design of new laws and amendments.[7]

Formally, the decision-making power in all policy announcements rested with the Reserve Bank Governor. The Governors in question during this time span were C. Rangarajan, Bimal Jalan and Y. V. Reddy (see Table 2.2).[8] The Reserve Bank Governors held pre-policy consultations with the Finance Minister and the Technical Advisory Committee on Monetary Policy, or TACMP (set up in 2005), consisting of eminent economists and experts from the financial sector. The process of internal consultation was aided by the Deputy Governors, especially the officer in charge of monetary policy and the Executive Director and officials of the Monetary Policy Department (MPD). As a follow-up, mid-term reviews of the annual policy statement were undertaken in October or November. Since 2005–06, two quarterly reviews of monetary policy have been introduced in the months of July and January, in addition to the already established practice of one annual and one half-yearly announcement.

Shift from Monetary Targeting to Multiple Indicators Approach

The Multiple Indicators Approach

With the liberalisation of interest rates, the limitation of the monetary targeting approach was recognised in 1997. The Reserve Bank formally adopted a multiple indicators approach, in place of monetary targeting, in April 1998. In the latter case, a monetary aggregate is held as the target to achieve the objectives of inflation control and credit supply for growth. In the former, there is no one nominal anchor, such as money supply or an interest rate or the exchange rate; instead, 'movements not only in money supply but also in a host of economic variables are tracked for policy responses'.[9] As part of this approach, information content from a range of quantity variables, such as money, credit, output, trade, capital flows and fiscal position, as well as rate variables, such as rates of return in different markets, inflation rate and exchange rate, were analysed to guide monetary policy actions. It was a considered decision not to adopt the option of one-instrument-one-target, which was deemed to be an oversimplification of reality. To respond to the changing environment, the Credit Planning Cell, responsible for the formulation of monetary policy and other policy initiatives, was renamed as the Monetary Policy Department on 1 January 1998. This was necessary in the context of the growing integration of money, foreign exchange and other financial markets.

The emphasis, thereafter, shifted to market analysis, policy evaluation and implementation techniques.[10] A previous paradigm shift, which led to the adoption of the monetary targeting approach, had been influenced by lengthy deliberations that followed the Committee to Review the Working of the Monetary System (1985), better known as the Sukhamoy Chakravarty Committee. By contrast, the 1998 shift occurred quickly and internally. A draft note on monetary policy for 1998–99, prepared by A. Vasudevan, Executive Director, dated 19 March 1998 and submitted to the Reserve Bank Governor, significantly influenced the policy shift from monetary targeting to a multiple indicators approach presented in the Monetary and Credit Policy for the first half of 1998–99 on 29 April 1998. There appears to be no formal reference made to the government in this regard.

In several countries in the 1980s, monetary targeting lost favour and inflation targeting gained ground.[11] The underlying reason was the apparent instability in the relationship between money, output and prices, or the demand for money function. This was, however, not the case in India. At least until 1997, the stability of demand for money in India was never questioned. The Reserve Bank's *Annual Report 1996–97* defended monetary targeting by restating its advantages: 'Monetary aggregate as an intermediate target is useful since it helps to predict price movements with reasonable accuracy over a period of time. It is also easily understood by the public at large as indicative of the stance of monetary policy.'[12]

While monetary targeting did not completely lose credibility, it was coming into question for different reasons. In a practical sense, between 1985 and 1998, on only four occasions were the monetary targets achieved. Following a slowdown in credit growth during 1995–97, former Reserve Bank Governor S. Venkitaramanan remarked: 'India has been crucified on the monetarist paradigm, which makes expansion of credit a by-product of decisions on the numbers that go to make up M(1), M(2) and M(3).'[13] Furthermore, the reaction lag of policy actions under the monetary targeting approach was considered to be too long, particularly under volatile market conditions. Before the formal adoption of the multiple indicators approach under his governorship, Governor Jalan observed that an important lesson from the developments in the exchange markets was that all countries, developing countries in particular, had to be constantly watchful, indirectly calling for a flexible and discretionary approach.

In fact, it was the pace of trade and financial market development, following the initiation of structural reforms in the early 1990s, that rendered the efficacy of broad money as a target of monetary policy questionable. In December 1997, the Reserve Bank set up a working group on 'Money Supply: Analytics and Methodology of Compilation' (Chairman: Y. V. Reddy, Deputy Governor) to examine the analytical aspects of the monetary survey. While the working group did not find evidence of parameter instability for the period 1970–71 to 1996–97, it recognised that the predictive stability of the money demand equation was equally important for its use for policy purposes. Before the group submitted its report (June 1998), the Reserve Bank's Monetary and Credit Policy for the first half of 1998–99 observed: 'It is not easy to evolve, in the present circumstances, a monetary conditions index or a clear-cut interest rate channel of transmission of the effects of monetary policy.... It is necessary to adopt a multiple indicator approach.' The experience of the 1990s had also shown that relying solely on a single instrument, growth in M3, was no longer possible. The movements in market rates of interest, exchange rates, foreign exchange reserves, credit to the government and commercial sectors, and the fiscal position of the government had been closely monitored and utilised for policy actions (Box 3.1). Since the mid-1990s, apart from dealing with the usual supply shocks, monetary policy had to increasingly contend with external shocks emanating from swings in capital flows, volatility in the exchange rate, and global business cycles. In short, there was increasing evidence of changes in the underlying transmission mechanism of monetary policy with interest rate and the exchange rate gaining importance vis-à-vis quantity variables.

An alternative to monetary targeting would have been inflation targeting, a position recommended by multilateral institutions such as the International Monetary Fund (IMF). This, however, did not find favour with the Reserve Bank.[14] The Monetary and Credit Policy for the year 2000–01 stated that 'the high frequency data requirements including those on a fully dependable inflation rate for targeting purposes are yet to be met'.[15] Since India was introducing structural changes during the reference period, forecasting of inflation was rendered difficult.

Box 3.1 Reflections on the Multiple Indicators Approach

[Under multiple indicators approach], the rate of interest became the target variable or the instrument variable which you want to manipulate rather than money supply.… [T]his was made possible only because of the reforms we had introduced between 1992 and 1997. Until we dismantled the administrative structure of interest rates, you could not use interest rate as a policy variable.

C. Rangarajan, former Governor of RBI

... I found this whole multiple indicator approach to be a bit of a jumble.… [T]he big downside of the multiple indicators approach was that it gave too much play to the central bank – too many degrees of freedom. Any policy step could be interpreted in diverse ways with the result that markets were oftentimes confused about central bank intentions.

D. Subbarao, former Governor of RBI

Liquidity Adjustment Facility

Introduction of LAF

The Committee on Banking Sector Reforms (1998, better known as the Narasimham Committee II), as part of its recommendations on integration of the financial market, observed that the interest rate movement in the interbank call money market should be orderly and that could only happen if the Bank had a presence in the market through repos for as short a period as one day through primary markets. The Bank should introduce a LAF under which it would reset, daily if necessary, the repo and reverse repo rates. The committee also recommended phasing out non-banks from the call or notice money market to make it a pure interbank market.

The Reserve Bank broadly agreed with the Narasimham Committee II's suggestion and decided 'to take all actions that will enable, in due course, to replace general refinance facility', or the GRF, with security transactions.[16] However, for procedural reasons, a partial or interim LAF was recommended at first, pending technological and procedural changes, to facilitate electronic transfer and settlement. The interim LAF, or ILAF, would operate through reverse repos for absorption of liquidity and lending against collateral of central government securities for injection of liquidity.

A major challenge was to rationalise the existing sector-specific lending facilities at different rates from the Reserve Bank, often without any reference to market rates. In principle, the automatic additional liquidity available through refinance facilities to banks and PDs would constrain the effectiveness of the LAF. The ILAF took this into account and introduced the following measures. First, the GRF was replaced by a collateralised lending facility (CLF) of up to 0.25 per cent of the fortnightly average outstanding aggregate deposits in 1997–98, which would be available for two weeks at the Bank Rate. An additional CLF for an equivalent amount would also be available at the Bank Rate plus 2 per cent. Lending availed for periods beyond two weeks would be subject to a penal rate of 2 per cent for an additional two-week period. There would be a cooling period of two weeks thereafter. The existing restriction on participation in the money market (during the period that such facilities were made use of) was withdrawn in order to facilitate adjustment in liquidity.[17] Second, scheduled commercial banks became eligible for export credit refinance facility at the Bank Rate (15 April 1997). Third, liquidity support against the collateral of government securities would be available to PDs at the Bank Rate and the amounts would remain constant throughout the year. Each withdrawal would be subject to the usual restriction of repayment within ninety days. The limits for individual PDs were announced separately. Additional liquidity support would also be provided to PDs.

The ILAF operated through a combination of reverse repo at a fixed rate, export credit refinance, collateralised lending facilities and open market operations. A substantial use had been made of export credit refinance and collateralised lending facilities. There was, however, an asymmetry in respect of absorption and injection of liquidity. Whereas funds could be absorbed without any limit (limited only by the availability of securities with participants) at a fixed rate, only a fixed quantum of funds could be injected at the Bank Rate or Bank Rate plus 2 per cent. The short-term market rates could not breach the floor given by the fixed reverse repo rate but exceed the ceiling rate under deficit conditions. Furthermore, under the ILAF, multiple lending facilities at multiple rates continued.

The ILAF called for a review of the role of the Bank Rate. An informal internal group set up on 18 May 1999 examined this question (for more detailed discussion, see next section).[18] The group observed that a review of developments in operating procedures showed that changes in the Bank Rate were complemented by other measures like changes in the CRR and in reverse repo rate, and such a combination of measures added credibility to the policy stance taken by the Bank. Effectively, the Bank Rate had become a signalling rate.

The group pointed out an anomaly. Under the system prevalent then, which assured potential liquidity for definite amounts at pre-committed rates, the Reserve Bank had little manoeuverability for tightening liquidity temporarily unless it changed the Bank Rate. Further, the assured support at assured rates also created a certain complacency among the PDs to buy and hold securities rather than trade and distribute them. The group observed: '[A] ll facilities and accommodations at present provided at the Bank Rate should be dispensed with since it is the assured availability of large funds at this rate that has made the Bank Rate a ceiling rate for call money market.'[19]

In a meeting held between the internal group and representatives of industry bodies on 4 February 2000, the Primary Dealers' Association of India (PDAI) voiced concerns that in the absence of the Bank's liquidity support, they would become vulnerable to market forces since LAF rates would be decided in auctions. They argued that the PD system was still new. In fact, a few of them had not even completed a year. Their minimum capital requirement (₹50 crore) was low, which impaired their ability to borrow from the market. Their return on investment in government securities was relatively low. If their ability to hold a higher level of stocks for trading was curtailed, they might not be able to achieve sufficient levels of turnover. For all these reasons, the absence of the Reserve Bank's liquidity support would make them vulnerable in the market. The Bank members in the meeting pointed out that liquidity support during the financial year was high enough, imparting stickiness in the call rates at the upper range, and that it was not desirable for a central bank to make available large sums for a continued period on an assured basis. There was, therefore, a need to move over to a more flexible system of liquidity support. In any case, the concerns of PDs were addressed by retaining liquidity support to them as part of the new scheme. In a subsequent meeting with PDs (8 March 2000), the Chief General Manager of the Internal Debt Management Department (IDMD), Usha Thorat, announced that a last resort or 'back-stop facility' could be considered.

Before these discussions began, a phased introduction of LAF had been planned. In the first stage (from 5 June 2000), the additional CLF and Level-II support to PDs would be replaced by variable rate repo auctions with same-day settlement. In the second stage, CLF and Level-I liquidity support would also be replaced by variable rate repo auctions. With full computerisation of the Public Debt Office of the Reserve Bank and the introduction of real time gross settlement (RTGS) by the end of the financial year 2000–01, repo operations through electronic transfers would be introduced. In the final stage, it would be possible to operate LAF at different timings on the same day. There was no change in the export credit refinance scheme. Given some rigidities in the interest rate structure and the desirability of giving maximum support to exporters, there was a case for the scheme of export credit refinance to continue for some more time.

In addition to the regular reverse repo auctions, additional reverse repos for periods varying from three to seven days were introduced from 3 August 2000 as a measure of currency support. A weekly calendar of additional repos was worked out for internal purposes, but auctions were announced a day before the auctions. A review (24 November 2000) showed that the market interest for these additional reverse repos was fading and proposed that these could only be resorted to under extraordinary circumstances when there was a need to absorb liquidity on a continuous basis for longer periods – hence the additional reverse repo. The practice of preparing a calendar for that purpose could be discontinued.

Review of Operation

A review of the scheme undertaken by the IDMD about two weeks after its introduction made a few interesting observations.[20] The LAF was launched in a situation when worries over the dollar–rupee exchange rate had necessitated tightening of liquidity in the domestic market. The market was witnessing upward movement in yields, which subdued the demand for government securities, pushing down the prices of securities on a day-to-day basis, and turned market sentiment negative. As the volume of lending in the call money market fell, banks turned to LAF. The LAF rates were relatively high, and the PDs demanded assured support even at the higher rate. Based on the review, the IDMD concluded that assured liquidity support, in this case, would dilute LAF, and such support could be considered by reducing some other forms of assured support, such as export refinance. The Adviser-in-Charge, MPD, K. Kanagasabapathy, noted that the operations of the LAF were unduly influenced by volatility in the foreign exchange market, and that the role of PDs and their place in the market had to be viewed specially, since high call rates for a number of days may adversely affect their function and viability. The note also advocated uniform price auctions (more on this later).

In April 2001, an internal group recommended that the system of uniform price repo auctions could be replaced with discriminatory price with a view to making the market more sensitive to trades while bidding. Second, with a view to providing interest rate signals, the Bank should have the option to switch over to fixed-rate volume tender reverse repos on overnight basis when necessary. Third, a 'backstop facility' should be made available to banks and PDs. Fourth, although long-term repos were not favoured as a rule, at times of exigencies and when there was a need to either mop up or inject liquidity on a longer-term basis as a result of large unanticipated flows, multi-period repos could be used. Fifth, to activate interest in treasury bills (T-bills), there was the need to focus on a few maturities and to enhance the volume in primary issues of these bills. It would, therefore, be desirable to discontinue issuance of 14-day and 182-day T-bills and enhance the amount in respect of 91-day and 364-day T-bills.

The Second Stage

In 2001–02, the Bank moved forward to implement the second stage of the LAF. The move consisted of several steps – introducing multiple auctions within a day, which would be feasible after the proposed introduction of electronic transfers of funds and securities, the phasing out of all liquidity support, and working towards a pure interbank call/notice money market. The Monetary and Credit Policy for the year 2001–02 announced a package of measures encompassing changes in operating procedures of the LAF, including auction methods and periods, a strategy for a smooth transition of the call money market to a pure interbank market, and a comprehensive and coherent programme for rationalisation of liquidity support available to the system.

The main forms of liquidity support then were support to banks at the Bank Rate under a CLF and export credit refinance, and collateralised support to PDs. The main reform consisted of splitting liquidity support into 'normal' and 'backstop' components, the former to be provided at the Bank Rate, and the latter at a variable daily rate linked to rates emerging in regular LAF auctions or, in the absence of such rates, to the Mumbai Interbank Offered Rate (MIBOR). Of the total limit of liquidity support available to PDs and banks, the normal facility would initially constitute about two-thirds and the back-stop facility about one-third. Primary dealer-wise and bank-wise limits were announced separately.

Banks were provided export credit refinance based on outstanding export credit eligible for refinancing on an incremental basis over a base date. It had been observed that some banks that had large exposure to the export sector on the base date were either unable to get any refinance from the Reserve Bank or had very small entitlements. The Bank had, therefore, decided to rationalise the export credit refinance facility so that it could focus more on the extent of the total credit support being provided by banks to exporters. The new limits would be fixed based on the total outstanding export credit eligible instead of the incremental export credit eligible over a base date. The Bank decided that from 5 May 2001, scheduled commercial banks would be provided export credit refinance to the extent of 15 per cent of the outstanding export credit eligible for refinancing as at the end of the second preceding fortnight. As a matter of further comfort to all banks, the existing refinance limit would constitute the minimum limit available for a bank until 31 March 2002.

Further, several measures were taken to improve the LAF operating procedures, including a reduction in minimum bid size, extension of the timing of auctions, the supply of additional information to the market, and use of fixed-rate reverse repo and longer-term reverse repo. A discussion with market participants on the advantages, or otherwise, of uniform price auctions as opposed to variable price auctions was resolved into a decision to allow variable price auctions on an experimental basis in 2001.

Overall, the opinion of the internal monitoring groups and market bodies on the operation of the LAF was positive. But a surge in capital flows from 2002–03 put liquidity management under strain and forced the Bank to play a delicate balancing act between monetary management and financial stability. The average annual capital inflow, which stood at US$3.3 billion between 1990–91 and 1999–2000, shot up to US$14.8 billion from 2000–01 to 2004–05. During that period, the Reserve Bank's stock of central government securities was being used in reverse repo operations under LAF, OMO sale of securities, investment of surplus funds of governments into central government securities, investment in the Consolidated Sinking Fund and the Guarantee Redemption Fund besides backing up note issue. The balance consisted of non-marketable securities. Initially, the inflow was sterilised through the LAF and OMOs.[21] Later, other measures were used for this purpose, including the 91-day T-Bills, encouraging state governments to prepay high-cost debt of the centre and foreign exchange swaps. Capital account transactions were further liberalised, for example, rules regarding overseas investments and remittances abroad were relaxed.

In view of the need to create effective systems of sterilisation and free the LAF of this large burden, two internal groups were constituted to review the operation of monetary policy.

Two Reviews: 2003

The internal groups – one on the LAF and another on instruments of sterilisation – discussed some of the operational problems and suggested further refinements in the system. Their analyses and recommendations were compatible so that the Reserve Bank had to consider them together for drawing policy conclusions.[22] These two reports paved the way for the introduction of the Market Stabilisation Scheme (see the next section of this chapter, and Box 3.2).

Between January and March 2004, several proposals were made.[23] First, the Reserve Bank may conduct reverse repo under the LAF based on fixed-rate auction while retaining the option to conduct variable-rate reverse repo auctions. The minimum tenure of the repo would be changed from overnight to seven days to be conducted on daily basis. The Reserve Bank would have the discretion to hold both overnight repo and longer-term repo as and when required. Second, to relieve the economy of temporary shortages of funds, the Reserve Bank may continue with repo under the LAF on a fixed-rate auction basis. The tenure would be overnight. Third, the reverse repo rate, acting as policy rate, would continue to be announced taking into account various macroeconomic policy parameters. Fourth, the Bank Rate would be aligned with the repo rate, but changes in the former would be considered on merit from time to time. Fifth, the amount under standing liquidity facilities offered to banks would be made available at a single rate. Accordingly, a normal facility and a backstop facility may be merged into a single facility made available at repo rate. The Financial Markets Committee (FMC-RBI) accepted the proposals. The revised scheme came into effect from 29 March 2004. As per the revised scheme, 7-day fixed-rate reverse repo auctions were conducted on a daily basis. It was indicated that the reverse repo rate would be fixed by the Reserve Bank from time to time (see Table 3.1 for revisions in rates since 2004; also see Box 3.2).

Box 3.2 Internal Group on the Liquidity Adjustment Facility (2003)

The group reviewed the first three years of the operation of the LAF and raised the following points.

First, there was a need to clarify the role of the Bank Rate vis-à-vis the reverse repo rate in signalling the approach of monetary policy. Second, despite some rationalisation of interest rates, which was one of the objectives of the LAF, multiple interest rates persisted. Third, the relative position of the reverse repo rate within the interest rate corridor was subject to a debate. International experience showed that central banks preferred keeping liquidity in shortage mode and, therefore, the policy signalling rate in the form of repo rate was placed in the middle of the corridor. However, under the LAF, the reverse repo rate was placed at the bottom of the corridor and acted as both the policy rate as well as the rate for passive sterilisation of excess liquidity from capital flows.

Fourth, the surge in capital flows from 2002–03 onwards forced the Reserve Bank to maintain a balance between monetary management and financial stability. Initially, such inflows were sterilised through the LAF and OMOs, but the Reserve Bank's portfolio was limited. To address the situation, the entire stock of non-marketable special securities issued by the government to the Reserve Bank was converted into the tradable lot in two tranches by September 2003.

Fifth, the Reserve Bank's reverse repo operations tended to substitute market activities in call/notice money, term money, and market reverse repo operations. Banks seemed to have less incentive to lend fully in call/notice market in the presence of a narrow spread between the call rate and the repo rate. In fact, after considering credit risk, banks preferred to lend even at a marginally lower rate through reverse repo. The reverse repo in its existing form appeared to hinder market developments as it provided a haven to market participants. Whereas the placement of funds under the LAF window should normally take place as a matter of last resort, with the persistence of excess liquidity, the window was being treated as an absorber of funds of the first resort.

Sixth, the group recommended a standing deposit facility, which would provide more flexibility to the Reserve Bank's reverse repo operations and impart a floor to the movement of call money rates. However, it appeared that the RBI Act, 1934, did not permit borrowing on a clean basis and payment of interest thereon.

Table 3.1 Revisions in Reverse Repo and Repo Rates 2004–08

Effective Date	*Reverse Repo Rate (in per cent)*	*Repo Rate (in per cent)*	*Spread (in basis points)*
27 October 2004	4.75	6.00	125
29 April 2005	5.00	6.00	100
26 October 2005	5.25	6.25	100
24 January 2006	5.50	6.50	100
8 June 2006	5.75	6.75	100
25 July 2006	6.00	7.00	100
31 October 2006	6.00	7.25	125
31 January 2007	6.00	7.50	150
31 March 2007	6.00	7.75	175
30 October 2007	6.00*	7.75*	175*

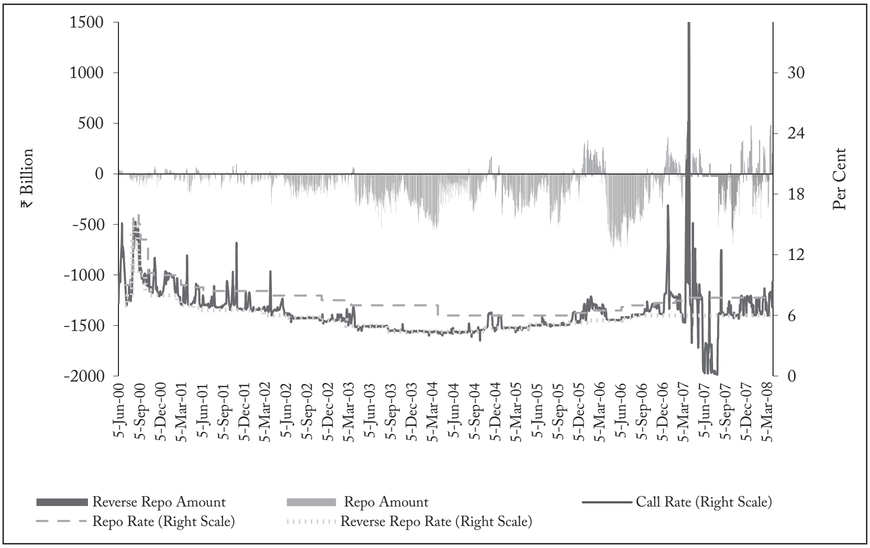
Source: RBI.

Note: *These remained unchanged until the end of the reference period.

With full computerisation of the Public Debt Office of the Reserve Bank and the introduction of the RTGS system in 2005–06, repo operations could be performed through electronic transfers at different times of the same day. Around this time, the economy witnessed strong and sustained credit demand, lower accretion of foreign exchange reserves, the build-up of the centre's cash balances with the Reserve Bank, and redemption of India Millennium Deposits (IMDs). To manage liquidity better, a second LAF (SLAF) was introduced in November 2005. The SLAF was used periodically, depending on liquidity conditions (see Figure 3.1 on volumes of transaction under all LAFs and movements in call money rate).

The eight-year period from the introduction of the LAF to its 2004 reform was a success story for the Reserve Bank's monetary operations and alignment with international practice in managing liquidity. One reason for the success was the transparent and consultative way in which the whole process was carried out. The MSS, as mentioned, provided a backdrop to the reforms.

Figure 3.1 Liquidity Adjustment Facility and Weighted Average Call Rate



Source: RBI.

Market Stabilisation Scheme

The MSS was established following a memorandum of understanding (MoU) signed by the Government of India and the Reserve Bank on 25 March 2004 (also see Appendix A3.1). As part of the MSS, the government T-bills and/or dated securities were issued with a view to absorbing excess liquidity consequent on the surge in capital inflows. Those securities had all the attributes of existing T-bills and dated securities and were tradable in the secondary market.

This was essentially a political decision accepting the Reserve Bank's recommendation.[24] Initially, when this idea was taken to the government, Finance Minister Jaswant Singh said that the Chief Economic Adviser Ashok Lahiri was not supportive since it could undermine the independence of the Reserve Bank. Governor Reddy pointed out that such independence was not needed and excessive use of sterilisation by the Reserve Bank would weaken its balance sheet. Finance Minister agreed to the proposal of MSS saying that he would not do anything that weakened the central bank. The cost of sterilisation, it was said, was distributed between the central bank through LAF, commercial banks through CRR, and the government through the issuance of MSS securities.[25]

The unique feature of MSS issues was that the proceeds from those issues were immobilised by holding them in a separate identifiable cash account maintained and operated by the Reserve Bank. The amounts credited into the account were appropriated only for redemption and/or buyback of the Treasury bills and/or dated securities issued under the MSS. The interest cost on these issues was borne by the government. Unlike repo and reverse repo operations under the LAF, operations under the MSS were not expected to impact reserve money.

To start with, an annual aggregate ceiling for securities to be issued under the MSS for 2004–05 was fixed at ₹600 billion. Within this ceiling, a threshold limit of ₹400 billion was also agreed upon so that as soon as securities outstanding under the MSS touched this limit, the Reserve Bank would notify the government and seek revision of the ceiling, if needed.

With sustained capital inflows resulting from surpluses in both current and capital accounts of the balance of payments, Deputy Governor Rakesh Mohan requested the government on 24 June 2004 to raise the ceiling to ₹1,000 billion, but on 19 August 2004 he requested a modified ceiling of ₹800 billion. The government agreed to this proposal. Subsequently, the ceiling and the threshold levels were revised generally upwards from time to time through mutual consultation between the government and the Reserve Bank except for 2006–07 when the ceiling was reduced to ₹700 billion from ₹800 billion in 2005–06. In the following year, the situation changed dramatically. There was an extraordinary surge in capital flows from September 2007, particularly following the reduction of 50 basis points (bps) in US federal funds target rate combined with the sustained growth momentum of the Indian economy and its relative attractiveness as an investment destination.[26] The inflow was so large that the government and the Reserve Bank had to revise upwards the annual ceiling on as many as six occasions from the level of ₹800 billion set on 20 February 2007 to ₹2,500 billion (threshold limit at ₹2,350 billion) as on 5 November 2007.

In the process of implementing the MSS and announcing quarterly calendars of MSS issuance, the Reserve Bank had been continually assessing the liquidity position in the market considering the movements in foreign exchange inflows, the government's cash balances with the Reserve Bank, the amount lying under the LAF, the behaviour of non-food credit, the growth of currency in circulation and, most importantly, the progress of the government's borrowing. However, the exercise was not straightforward. The unpredictability of the magnitude, composition (short-term or long-term) and even the direction of flows complicated decision-making.

Liquidity management also required issues of a mix of short-term (T-bills) and long-term (dated) securities under the MSS. This helped modulate liquidity under both surplus and deficit situations. Mere dependence on T-bills runs the risk that MSS auctions merely roll over the impounded liquidity with little prospect of absorbing liquidity when needed. Similarly, excessive dependence on dated securities can make unwinding difficult. The importance of dated securities in the MSS bag is also on account of insufficient market response for large T-bill issuances or on yield considerations as happened during the latter part of 2006–07. Under these challenging circumstances, the FMC-RBI set up a committee to review the liquidity conditions and advise the FMC-RBI every week.[27]

Thus, though the MSS was intended to sterilise the impact of capital flows, in practice it had proved to be an instrument also for meeting the shortage of liquidity whenever the situation so warranted. For instance, the MSS had been quite useful in liquidity management in the face of an anticipated event like redemption of IMDs on 29 December 2005. In fact, the Reserve Bank, in consultation with the government, increased the notified amount for the auctions of 91-day T-bills under the MSS for the five auctions scheduled during 31 August–28 September 2005 so that these amounts would eventually flow into the system to make available additional liquidity in December 2005. The Reserve Bank also stopped issuing any dated security under the MSS during the same period to check any upward pressure on long-term yields. Further, close to redemption, weekly T-bill auctions were discontinued from 9 November 2005 to retain liquidity in the system. Progressively larger injections through the LAF were allowed during the last week of December 2005 to supplement the additional liquidity need, following the large build-up of government cash balances on account of quarterly advance tax payment. Subsequently, auctions under the MSS remained suspended during 30 December 2005–2 May 2006 due to tightness in underlying liquidity. All these measures ensured that the Reserve Bank could sell foreign exchange for redemption of IMDs totalling nearly US$7.1 billion (about ₹320 billion) during 17–20 December 2005 without any disruption in the market. Such an effort in 'reverse' sterilisation combined with market operations helped to limit the liquidity mismatch. In that sense, the LAF, the MSS and other market operations were used as complementary instruments for systemic liquidity management.

The challenges faced by the Reserve Bank towards the latter part of the reference period cannot be explored fully without reviewing the developments in 2006–07 and 2007–08 when the MSS as an instrument came into its

Table 3.2 Trends in Select Indicators: 2004–05 to 2007–08

Year	*2004–05*	*2005–06*	*2006–07*	*2007–08*
I. Monetary Policy Instruments				
Average MSS outstanding (₹ billion)	464.45	587.92	376.98	1,286.84
Average LAF outstanding (₹ billion)	355.92	109.86	219.73	46.77
Increases in CRR (in bps)	50	0	100	150
Increases in repo rate (in bps)	0	50	125	0
II. Macro Indicators				
Capital flows – net (US$ billion)	28.0	25.5	45.2	106.6
Growth in non-food credit (%)	27.5	31.8	28.5	23.0
Current account balance (as % of GDP)	-0.4	-1.2	-1.0	-1.3
WPI inflation* (%)	5.3	3.9	6.6	7.5

Source: RBI.

Note: * Represents point-to-point inflation for March of respective financial years.

full bloom. The Indian economy had witnessed real GDP (as per 2004–05 base year) growth of 9 per cent and above over the three-year period ending 2007–08.[28] Such robust growth amid a global financial crisis since September 2007 made India an attractive destination for capital flows. In consequence, capital flows zoomed to US$45.2 billion in 2006–07 before rising to an unprecedented level of US$106.6 billion in 2007–08 (Table 3.2).

At the same time, the combination of strong growth in non-food credit, escalation in asset prices, widening of the current account deficit, and hardening of inflation and inflation expectations underscored the need to deal with the dangers of overheating. In response, the Reserve Bank introduced a package of measures over the two-year period that virtually made the cost of sterilisation a national cost sharable among the government (interest cost on MSS securities), the Reserve Bank (interest cost on both reverse repo balances under the LAF and CRR balance) and the banking sector (opportunity cost on CRR balance).[29] While the conventional instrument, the CRR, had been raised by as much as 250 bps over these two years, the raising of the repo rate by 125 bps had to be moderated so as not to affect adversely the high growth process continuing at that time and, at the same time, not to encourage more capital flows. Similarly, the relative burden of sterilisation had been pushed more towards the MSS because of which its average outstanding reached an all-time high in 2007–08 while that under the LAF declined. In fact, the improvement in liquidity was so significant that the Reserve Bank had to put in place a modified LAF scheme from 5 March 2007, whereby daily reverse repo absorption was capped. Also, an enhanced MSS programme was put in place wherein a mix of T-bills and dated securities for MSS issuances were used in a flexible manner. Eventually, however, the daily ceiling on reverse repo facility was withdrawn on 6 August 2007. These apart, the Reserve Bank not only reduced the interest rate ceiling on non-resident Indian (NRI) deposits to below the London Interbank Offered Rate (LIBOR) in April 2007, it also liberalised various limits associated with outflows, such as prepayment of external commercial borrowing (ECB), overseas investment limit by an Indian entity and the annual limit under the Liberalised Remittance Scheme between December 2006 and September 2007 (see Chapter 4).[30]

Evidently, the MSS had turned out to be an extraordinarily powerful tool for dealing with surplus and shortage of liquidity from 2004–05 to 2007–08. It also complemented other monetary policy instruments of the Reserve Bank well, thereby increasing the Bank's options in dealing with various situations.[31]

Bank Rate Before and After LAF

The Reserve Bank attempted to activate, at first, the Bank Rate as a reference and policy signalling rate. With the establishment of the LAF as the principal operating procedure for liquidity management, the reverse repo rate evolved into a sole policy signalling rate by 2006. In the interim, the role of the Bank Rate was reviewed from time to time, but it ceased to be an active policy instrument for all practical purposes.

In April 1997, Governor Rangarajan in his policy announcement favoured the use of the Bank Rate as a device to signal monetary policy stance and influence the direction of market interest rate movements. This was consistent with the shift in emphasis from reserve requirements to market-based monetary instruments. A number of interest rates, including the deposit rates of banks and the Bank's refinance rates were then linked to the Bank Rate. An Internal Group on Bank Rate (March 1997) advocated steps to make the Bank Rate the reference rate for the financial system (Box 3.3).

Box 3.3 Internal Group on Bank Rate (1997)

The Internal Group on Bank Rate (1997) played a role in drawing a blueprint for interest rate policy reform. The report started from the premise that the objective of the reform would be to do away with sector-specific accommodation provided by the Bank at concessional rates, and that during the transition to a fully market-led interest rate regime, the interest rates on such accommodation would be linked to the Bank Rate. The sector-specific accommodations involved the following main categories:

Export credit refinance: In the transitional phase, the refinance rate might be fixed below the Bank Rate. The interest rate on export credit refinance was linked to the Bank Rate from 15 April 1997.

Ways and means advances (WMA) to the central government: This should initially be below the Bank Rate. There should be a progressive reduction in the spread between the rate and the Bank Rate in two years. WMA rate to the central government was provided at the Bank Rate from April 1998.

Liquidity support to primary dealers: Liquidity support to PDs engaged in repo trading operations was provided at the Bank Rate.

The group considered two further issues: What the Bank Rate should be, and at what rate banks should be provided liquidity. While there was no consensus on whether the Bank Rate should be related to the short-term money market rates, different views were expressed on what rate it should be set at.

In 1996–97, there was considerable debate over the justification for a high level of 12 per cent for the Bank Rate.[32] After different arguments were considered, the Bank Rate was reduced to 11 per cent on 15 April 1997, 10 per cent on 25 June 1997 and 9 per cent on 21 October 1997. Accordingly, all interest rates linked to the Bank Rate were also reduced. In January the following year, the Bank Rate was raised in response to market volatility because of the East Asian crisis, but was reduced again in April.

Provision of liquidity at the Bank Rate made it an upper bound to overnight interest rates, thereby creating an informal band. The reverse repo rate was considered the floor in the call money market rate, while the Bank Rate the ceiling. The spread between the reverse repo rate and the Bank Rate had narrowed considerably, which would imply that short-term interest rates could fluctuate within a narrow band, thereby minimising volatility. While the call money rate represented by the MIBOR and T-bill auction yields seemed to have gained some acceptance as a reference rate, since the Bank Rate was fixed by the Reserve Bank, the market was hesitant to link other instruments to it.

The announcement or signalling effect of the Bank Rate was pronounced on PLR of banks. Following the 1 March 1999 reduction in the Bank Rate, several banks reduced their PLRs by 0.75 to 1.00 percentage points, while the prime term lending rate (PTLR) was reduced by 0.90 to 1.00 percentage points. The Bank Rate needed to be delinked from the liquidity operations of the Bank to serve as a policy instrument.

When the LAF started working, the reverse repo began to emerge as a major instrument of liquidity management. The auction of reverse repo – a short-term sale of security by the central bank to a dealer on a repurchase agreement – was introduced in 1992 on a next-day settlement basis. In November 1997, it was observed that the next-day settlement was not effective as a tool of monetary regulation, particularly in containing foreign exchange market volatility. Along with same-day settlement, fixed-quantity-based auctions at 4.5 per cent were introduced. Between 16 January and 20 August 1998, the reverse repo rate was raised and reduced three times. There were signs that the rate started to signal market expectations about movements in short-term interest rates. This was reflected in the fact that the interbank call rates had generally tracked above the fixed-rate reverse repo. Since then, the Bank Rate was used less frequently, whereas the reverse repo rate began to assume the role of a regular monetary policy instrument.

The use of the repo rate and interest rate corridor as signalling rates left the role of the Bank Rate ambiguous. With the withdrawal of the CLF in October 2002, the role of the Bank Rate in setting the ceiling for overnight call rate came to an end. At the same time, various refinancing schemes that the Reserve Bank made available were rationalised and delinked from the Bank Rate. In April 2003, the emergency lender of the last resort facility was available at repo rate plus 4 per cent.[33] Several other facilities made available at the Bank Rate were linked to the repo rate over time.

Ever since the Bank Rate was promoted as a reference rate in 1997, irrespective of surplus or deficit liquidity scenarios, it was generally revised downwards, except on two occasions – 17 January 1998 and 22 July 2000 – both in the wake of volatile foreign exchange market situations. The rate was revised on as many as fifteen occasions until 29 April 2003 when the last revision was made to reduce the rate from 6.25 per cent to 6 per cent. The Bank Rate was set to remain unchanged thereafter (Table 3.3).[34]

As in the case of the Bank Rate, so too with the policy on the lending rate of banks, ambiguity seemed to increase after the reforms.

Table 3.3 Changes in Bank Rate: 1997–98 to 2007–08

Year	*Effective since*	*Bank Rate*	*Change*
1992–97		12	
1997–98	16 April 1997	11	(-1.00)
	26 June 1997	10	(-1.00)
	22 October 1997	9	(-1.00)
	17 January 1998	11.00	(+2.00)
	19 March 1998	10.50	(-0.50)
1998–99	3 April 1998	10	(-0.50)
	29 April 1998	9	(-1.00)
	2 March 1999	8	(-1.00)
1999–2000		8	No Change
2000–01	2 April 2000	7	(-1.00)
	22 July 2000	8	(+1.00)
	17 February 2001	7.5	(-0.50)
	2 March 2001	7.0	(-0.50)
2001–02	23 October 2001	6.5	(-0.50)
2002–03	29 October 2002	6.25	(-0.25)
2003–04	29 April 2003	6	(-0.25)
2004–05 to 2007–08		6	No Change

Source: RBI.

Pricing of Credit

Lending rates of banks were tightly regulated until the 1980s and rationalised initially by reducing the multiplicity of rates and linking them to the size of advances in September 1990. From 17 October 1994, banks could set their own lending rates. The only lending rates still regulated were the concessional rates for certain sectors like exports, small loans of up to ₹0.2 million and loans made under the differential rate of interest scheme. Banks were required to declare their PLRs, taking into account the cost of funds and transaction costs, among other factors. The PLR was the minimum or floor rate for credit for loans above ₹0.2 million.

In 1997, a chamber of commerce (Deccan Manufacturers Association) wrote a letter to the Reserve Bank stating that the revision of interest rates was discriminatory since the revised rates on loans became applicable to all outstanding advances, whereas revised rates on deposits were applicable only to fresh deposits.[35] The Association held that the depositors and the borrowers were both clients of the bank and, from a legal point of view, had to be treated uniformly. In its reply, the Bank clarified that the deposits were accepted by banks as part of a contract under the terms of which banks were liable to pay interest at the rate contracted, whereas interest rates applicable to loans and advances were subject to changes as per the provisions of the agreement, mainly to ensure the profitability of banks. The reply did not convince the Association. The MPD again clarified that the interest chargeable on loans and advances was subject to changes taking into account the monetary policy, wherein interest rate was viewed as an important component of the overall transmission mechanism of monetary policy. Credit, the clarification went, was a continuous process and was determined as per the requirements of the business, whereas deposit was a fixed contract for a fixed period and was renewed only after the expiry of the term. Therefore, it was necessary to ensure that there was no rigidity built into the response of the credit mechanism to changes in policy interest rates. This brief exchange made it clear that in the eyes of the Reserve Bank, the interest rate that would act as a channel of monetary transmission was the lending rate.

In November 1996, the Corporation Bank made it known that it had introduced two PLRs, one on the loan component and the other for cash credit and other working capital facilities, the latter being half a per cent higher. The reason was that this would encourage borrowers to switch over to the loan delivery system. The MPD stated in a response in 1997 that banks had to declare only one PLR. After discussions, a circular was issued on 12 February 1997 to allow two rates. Banks could prescribe PLRs and spreads over PLRs separately for loan component and cash credit component.

In July 1997, Bank of America sought a clarification whether the Bank Rate could be used as a reference to set maximum and minimum lending rates, instead of announcing a separate PLR and maximum spread. While the MPD agreed that the linking of a bank's PLR to the Bank Rate with the approval of its board would be in order, to refrain from defining a PLR spread would go against the interest of transparency implied in the existing directives.

These individual exchanges showed that the transition from administered interest rates to market rates could not occur without negotiations with banks. To begin with, in 1997, banks asked for and received permission to set PTLR on term loans of three years' maturity or more. Whereas the PLR was the floor rate for loans above ₹0.2 million, for loans of smaller amounts, the PLR was expected to be the ceiling rate. For four categories of borrowings, the reference to PLR was waived from 29 October 1999 and these were: (*a*) loans covered by refinancing schemes of term lending institutions, (*b*) lending to intermediary agencies, (*c*) discounting of bills and (*d*) advances/overdrafts against domestic non-resident external rupee (NRE[R])/foreign currency non-resident (banks) (FCNR[B]) deposits. Banks also represented that the requirement of all changes in interest rates being approved by the board of directors of banks restricted their ability to respond promptly to changes in the market environment. The Reserve Bank decided that the boards could delegate necessary powers to the Asset Liability Management Committee for fixing interest rates on deposits and advances subject to reporting to the board immediately thereafter.

There were five larger issues with the transition to PLR – fixed rate loans, deposit rates, differential rates, the meaning of PLR for operational purposes and the downward rigidity of interest rates. On a proposal from industry seeking project loans, the Reserve Bank permitted banks to offer fixed rate loans. In 2000, it decided that banks would be free to offer different types of project loans subject to a reference to the PLR. A major point of negotiation was the fact that the deposit rates on existing deposits continued to be subject to regulation. While the PLR had been coming down, interest rates had remained unaltered on existing deposits. In certain cases, this had resulted in the interest rate on advances against fixed deposits based on the PLR turning out to be lower than the interest rate on deposits. In order to remove this anomaly, when the deposit rate exceeded the PLR, advances to depositors against fixed deposits could be made by banks without reference to the ceiling of the PLR and banks could charge suitable interest rates.

The Reserve Bank introduced further changes in 2000–01.[36] Banks were given the freedom to operate different PLRs for different maturities, provided there were transparency and uniformity of treatment. It was observed that some banks were declaring a standalone PLR in addition to 'tenor-linked' PLRs. The Reserve Bank directed that the banks that had moved over to declaration of tenor-linked PLRs should always indicate the specific tenor for which the declared PLR was applicable. There were negotiations with banks on the meaning of PLR: should it be a floor or a benchmark? In their meetings with bankers, a request was made that the PLR should be converted into a reference or benchmark rate for banks rather than treating it as the minimum rate chargeable to the borrowers.[37] A review of international practices showed that while the PLR was traditionally the lowest rate charged for prime borrowers, the practice of providing loans below the PLR by banks had become common. Accordingly, the requirement to treat PLR as the floor for loans up to ₹0.2 million was relaxed.

From the early 1990s, the Reserve Bank initiated a number of measures to pursue a regime of soft interest rates. Interest rates, in general, had softened considerably except for occasional fluctuations. The reduction in interest rates was not fully reflected in lending rates charged by banks, and the spread above the PLR was substantial for some banks.[38] Banks were urged to review the spread, reduce them, publicize them along with their PLRs, and switch over to an 'all cost' concept for borrowers by explicitly declaring processing and service charges to borrowers. Similar freedom was extended to the state and central cooperative banks and urban cooperative banks. They needed to maintain a minimum lending rate. This rule was removed, subject to the requirement that they should announce lending rates and set them on a cost basis.

Clearly, the PLR regime did not work quite as expected. The mid-term policy review on 19 October 2002 observed that both the PLR and the spread varied widely across banks. Furthermore, there was an increasing tendency by banks to advance credit to prime borrowers at rates below the PLR.[39] At the same time, credit was extended to other borrowers at increasingly higher spreads over the PLR. Governor Jalan queried in a note dated 12 November 2002: 'Should we use some "moral suasion" on banks to voluntarily fix a maximum spread above PLR?' To these issues of high spread was added the fact that the lending rate on consumer credit and other retail advances which gained prominence in the 2000s were delinked from the PLR. In 2003, a set of three reviews (June, August and September) took place between the Reserve Bank and bankers on the functioning of the PLR.

The first of these revealed that there was a difference in perception between banks, depending on the portfolio. The benchmarking of floating rate loans, for housing, for example, was not straightforward. From the Bank, Deputy Governor Rakesh Mohan and Advisors Deepak Mohanty and D. Anjaneyulu were in favour of allowing more flexibility in the use of other market-related benchmarks for pricing floating rate loans, while the benchmark PLR, or BPLR, scheme continued. Governor Jalan felt it would be useful to discuss this modification with the same set of bankers. The second review focused on transparent benchmarks for floating rate loans. While agreeing to the principle of a BPLR, the banks spoke against measures that would make it difficult to accommodate bank-specific requirements and wanted the BPLR to become effective from a future date.[40] The third review meeting was held with chief executives of select banks. Much to the surprise of the Reserve Bank, the banks, except for SBI and Indian Overseas Bank, expressed discomfort with a single BPLR. So, while the Reserve Bank wanted a single BPLR set by transparent criteria, the banks seemed to be apprehensive about the intention behind the Reserve Bank's insistence on transparency. They, it seemed, would be happier to have the freedom to set a range of PLRs for different products.

The third review ended with a decision on further review to be done by the Indian Banks' Association (IBA). The IBA constituted a group, headed by V. Leeladhar, Chairman, Union Bank of India, to provide suggestions for alternative approaches to lending rate determination. According to a letter from the IBA dated 6 October 2003, the consensus among bankers was that it was unacceptable to have a single BPLR around which banks could price all their products, given the great diversity in the customer profile, cost structure and risk premia. Accordingly, the IBA requested the Reserve Bank to retain the status quo on the then existing PLR norm while asking for additional flexibility in terms of allowing market benchmarks for floating rate loans. The IBA's views were publicised in the press. Former Deputy Governor S. S. Tarapore, in an article in the *Financial Express*, said that 'the whole PLR issue was a storm in a tea cup and an end should be put to this fiction', even though his proposal to announce a cost-and-risk-adjusted base lending rate did not seem very different from what the Reserve Bank wanted to have.[41]

In its response, the Reserve Bank clarified that the system they asked for was aimed at enhancing transparency in lending rates and did not curtail banks' freedom on pricing decisions or their loan products. Transparency would demand that a reference rate like the BPLR was set by considering term premia and/or risk premia. Following this response, there were again consultations between the Reserve Bank and the IBA. In 2003, the Reserve Bank reiterated that since lending rates for all loans could be determined with reference to the BPLR by taking into account term premia and/or risk premia, a need for multiple PLRs was not compelling. But banks had the freedom to price their loan products based on term premia and transaction costs.[42] In a circular issued on 25 November 2003 by H. N. Sinor, Chief Executive of the IBA, the principle was ratified. A range of specific types of loan, however, remained exempt from the BPLR regime.[43] Thus, the Reserve Bank shifted the responsibility to issue guidelines on BPLR to the IBA, the underlying reason being that it was consistent with the reform process and international practice. Passing on the responsibility to the IBA brought BPLR under a self-regulatory mechanism.

By January 2004, of twenty-seven public sector banks, sixteen had adopted BPLR and eleven were waiting for board approvals; of thirty private sector banks, only six had adopted BPLR, four awaited board approvals and twenty had not considered implementation yet; and of twenty-seven foreign banks, four had adopted BPLR, one awaited board approval and twenty-two were yet to start the process.[44] By 4 May the same year, almost all commercial banks had adopted the BPLR, and the BPLRs were lower in the range of 25–200 bps from their earlier PLRs. Big differences around the BPLR persisted. The Reserve Bank urged banks to rationalise the difference. Intense competition was forcing banks to extend sub-BPLR lending for segments such as corporates, housing and real estate.[45] The aggregate sub-BPLR lending at end of June 2005 accounted for 64 per cent of the total lending, with a credit limit above ₹0.2 million. The percentages for the private sector and foreign banks exceeded 80 per cent. Deputy Governor Rakesh Mohan wrote on the note: 'Clearly, BPLR has lost all meaning except as ceiling rate for small loans!'

The Reserve Bank and the IBA discussed the matter again in 2005. In a meeting in December, the IBA explained why banks seemed reluctant to adopt the guidelines. Interest rates in retail and corporate segments had lost linkage with the BPLR system. Given the surplus liquidity in the economy, corporate access to capital and foreign exchange market, and cutthroat competition in the banking industry, the lending rates for corporates did not always cover the cost or risk involved in such lending. But banks did not want to revise their BPLRs since any revision warranted corresponding changes in lending rates for the entire loan portfolio, including loans contracted earlier. The easier system for them was what had existed before – a sector-specific segmented lending rates system.

What was at stake in this protracted debate on banking practice? The complaint of many Indian corporates was that banks did not easily lend, and when they did, they charged high interest rates and did not pass on the benefit of lower rates signalled in monetary policy statements. Economists were concerned over the lack of transparency in the interest rate regime, there being significant price discrimination but no apparent basis to show why. The rigidity and lags in the transmission of monetary policy were also at stake. The Reserve Bank's *Report on Currency and Finance* (2005) devoted several pages to interest rate 'pass-through'. For the interest rate channel of policy to work effectively and efficiently, changes in the short-term policy rate should feed into the market rates. It would depend on a number of factors, such as the structure of the financial system, the extent of regulation, the degree of competition between banks, the use of variable-rate products, the response of portfolio substitution to the policy rate and the transparency of monetary policy operations. Its survey of international practice found that there was no uniform pattern in the pass-through between deposits and loans.

Why was the change so difficult to achieve? Reserve Bank data show that the average cost of deposits for major banks remained high and rigid because a substantial portion of deposits was in the form of long-term deposits at fixed interest rates. Banks had the freedom to offer variable interest rates on longer-term deposits. However, the preference of depositors was in favour of, and the traditional practice with banks was to offer, fixed interest rates on term deposits. Earlier data had revealed that in public sector banks, the average cost of funds was in the region of 8 per cent. The non-interest operating expenses worked out to 2.5 to 3 per cent of total assets. The relatively high overhang of non-performing assets (NPAs) together with interest tax pushed up the lending rates further. The relatively high interest rates offered on state-sponsored savings schemes, and the legacy of NPAs, legal constraints and procedural bottlenecks in the recovery of dues, all reduced banks' options on changing rates. The large borrowing programmes of the government provided banks with the option to invest in sovereign paper instead of lending to trade. One might argue that deregulation of interest rate was attempted without deep institutional reforms. In part at least, these obstacles were common to other emerging economies undergoing reform.[46]

Further complicating the story, an analysis by the EPW Research Foundation concluded that the flexibility of lending rate was asymmetric – it was sticky downwards. When money was tight, it paid banks to increase lending rates because their deposit rates were sticky. During an easing phase, it might prove to be difficult to adjust lending rates downwards when deposit rates did not change much. There was also the fear of flight of deposits and the prevalence of administered contractual savings rates like those on provident funds and small savings instruments, further adding to rigidity in deposit rates.[47]

During the reference period, there were deep changes in the way the Reserve Bank transacted with the government and the private sector, delivering greater autonomy to the Reserve Bank and greater transparency in its operations. It is to these issues that we now turn.

Changes in Process and Procedure

Relationship with the Government

The central government enjoys overriding statutory powers over the Reserve Bank. It can remove the head of the institution without assigning any reason and can supersede the governing board. It may also give directions to the Bank, though only after consultation with the Governor of the Bank, in public interest (Section 7 of the RBI Act). This is a unique feature, not found in any other regulatory legislation in India.

De facto, the Reserve Bank gained greater degrees of freedom from the 1990s in operating monetary policy, choosing the tools for doing so and communicating with the public. The mutual trust that existed among the people involved also helped in promoting coordination and operational independence of the Reserve Bank. Independence was thus negotiated between the Reserve Bank and the government and not decided unilaterally.

There were three ways in which the Reserve Bank gained more operational autonomy in the conduct of monetary policy. First, in the early 1990s, the then Reserve Bank Governor, C. Rangarajan, campaigned forcefully in favour of greater autonomy for the central bank, which had a direct effect, resulting in an agreement (1994–95) that set limits on the net issue of ad hoc T-bills, and, by 1997, ended automatic monetisation of government deficits. Second, the Reserve Bank's sustained dialogue with the government led to the passage of the FRBM Act, 2003, which, inter alia, prohibited the Reserve Bank from purchasing government securities in primary issues. Third, amendments to the RBI Act, 1934, and the Banking Regulation Act, 1949, led in 2006–07 to more flexibility in the use of conventional tools such as the CRR and the SLR, and more clarity on its money market and foreign exchange market operations.[48]

In his letter addressed to Finance Secretary Montek Singh Ahluwalia dated 28 January 1997, Governor Rangarajan reiterated the need to curtail monetised deficits in order to meet the larger aims (growth and price stability) with more certainty. This was perhaps the last letter from the Governor to the Finance Ministry setting out, along with market borrowing projections, strategies for monetary and debt management. While correspondence on the projection of the market borrowing programme continued, specific proposals for monetary and credit policy measures were not part of formal letters since 1998–99.

These letters on the market borrowing programme were also not signed by the Governor after 1998–99. There were pre-policy consultation meetings, but such meetings and their outcomes remained informal and no formal records are available. Mutual consultations replaced the practice of formal proposals and communication since formal communication became irrelevant after elimination of ad hoc T-bills, deregulation of administered interest rates and phasing out of the financing of development financial institutions.

He then elaborated on the proposals on the termination of ad hoc T-bills and the discontinuation of 91-day tap T-bills, and outlined a new provision of WMA for accommodating temporary mismatches in government receipts and payments from 1 April 1997. Already these issues were under discussion with the government, leading to the supplemental agreement signed between the Reserve Bank and the Government of India on 26 March 1997 (Box 3.4).

Eventually, the ad hoc T-bills were discontinued from 1 April 1997, and a WMA scheme was introduced to accommodate temporary mismatches in the government's receipts and payments. Besides WMA, the Reserve Bank's support would be available for the government's borrowings programme. Governor Rangarajan, in his policy announcement for the first half of 1997–98, called the move 'a bold and radical change which will strengthen fiscal discipline and provide greater autonomy to Reserve Bank in conducting monetary policy in the coming years'.

A further decisive step towards responsible debt management was the FRBM Act, which followed the recommendations of a government-instituted committee, set up on 17 January 2000.[49] Governor Jalan desired that Deputy Governor Reddy should head the committee on fiscal responsibility legislation and prepare the draft legislation. Deputy Governor Reddy, however, declined on the ground that it would not be appropriate for him as a central banker to work on a draft of legislation on fiscal matters. But he promised Governor Jalan to provide support to a government-appointed committee. Three years earlier, a Working Group on Separation of Debt Management from Monetary Management set up by the Reserve Bank had submitted its report. The report recommended, inter alia, separation of debt management from monetary management, and the establishment of an independent company under the Companies Act, 1956, to take over the debt management function. While the Reserve Bank took no decision on the details, a decision to separate the two functions was considered desirable in principle, subject to development of financial markets, control over fiscal deficit and necessary legislative changes.

Box 3.4 Committee to Examine the Modalities of Phasing out of Ad hoc Treasury Bills

To further fiscal consolidation and flexibility of the Reserve Bank in monetary management, the 1994–95 Union Budget announced an end to the practice of financing the central government's budget deficit through the creation of ad hoc T-bills without any limit. There followed a three-year period when caps were fixed for the net issue of ad hoc T-bills and the central government's access to ad hoc T-bills. A committee was formed by the government to examine the process. The committee submitted its report on 25 January 1997. The recommendations of the committee were:

1. The issue of ad hoc T-bills and 91-day T-bills would be discontinued from 1 April 1997.
2. The outstanding ad hoc T-bills on 31 March 1997 would be funded into special securities.
3. The outstanding tap T-bills on 31 March 1997 would be paid off on maturity, with an equivalent creation of special securities.
4. In the medium term, the special securities would be converted into marketable securities, as and when the need arose, to facilitate the Reserve Bank's open-market operations.
5. The committee fixed WMA limits for the year 1997–98 and recommended a review of these limits for subsequent years. The WMA would not be a supplementary source for the government to finance its deficit. The committee also fixed interest rates on the WMA, linking it with yields on 91-day auction T-bills.
6. For the period beyond 1997–98, when 75 per cent of the WMA was utilised, the Reserve Bank will trigger fresh floatation of government securities.
7. If the union government ran surplus cash balances exceeding an agreed level, the Reserve Bank would make investments as might be mutually agreed with a view to enabling the government to earn market-related interest rates on the surplus.
8. With the discontinuance of tap 91-day T-bills, the Reserve Bank would devise an arrangement for the disposition of surpluses of state governments.
9. Efforts should be made to effect improvements in cash management of the government and debt management by the Reserve Bank.

At the same time, the Reserve Bank set up an informal group which prepared an approach paper and a draft of a Fiscal Responsibility Bill for the committee.[50] During the process of its work, the committee regularly consulted the Reserve Bank in finalising the draft Bill. In the draft Bill, Governor Jalan suggested that the words 'economic growth with social justice on a sustainable basis' be dropped, because these might be 'open to misinterpretation and fiscal irresponsibility in the name of growth or social justice'. The point was accepted. The committee had set out to delink debt management from monetary management as far as possible, in the presence of the risk that managing public debt by monetising the debt compromised price stability, unless the tendency was legally restrained. The committee recommended that after a three-year transition period, the government should not directly borrow from the Reserve Bank except through the WMA repayable during the same year. The Reserve Bank may buy and sell government securities in the secondary market. These provisions were duly incorporated in the FRBM Act that was passed in August 2003.[51]

Among other areas of reform, institutional reforms in the financial market were already proceeding, with closer integration of financial market segments, and the introduction of new instruments, participants and institutional infrastructure. Notably, amendments to the Securities Contracts (Regulation) Act, 1956, demarcated the regulatory roles of the Reserve Bank and the Securities and Exchange Board of India (SEBI) over financial markets. With the setting up of the Clearing Corporation and the operation of the full-fledged LAF and the other technological infrastructure being put in place, the Reserve Bank would be able to operate its instruments of monetary policy with greater flexibility. The Finance Ministry and the Reserve Bank agreed on the need to accord greater operational flexibility to the Reserve Bank for the conduct of monetary policy and regulation of the financial system. Accordingly, the Reserve Bank had proposed amendments to various Acts, which was under active consideration. The Reserve Bank had already proposed an amendment to the RBI Act to take away the mandatory nature of management of public debt by the Reserve Bank and vesting the discretion with the central government to undertake the management of the public debt either by itself or by assigning it to some other independent body if it so desired. There was, however, no further progress relating to this until the end of reference period as the Reserve Bank reversed its stance later (see Chapter 7).

Legal Reform

In 2003, an internal working group reviewed the laws for regulation and supervision.[52] The group prepared recommendations for amendments in the

RBI Act, 1934, and the Banking Regulation Act, 1949, in 2003. After further consultations, the government referred to the Reserve Bank two draft Bills, the RBI (Amendment) Bill and the Banking Regulation (Amendment) and Miscellaneous Provisions Bill, 2005, for comments. The Parliament passed the RBI (Amendment) Act, 2006, on 17 May 2006 and the Banking Regulation (Amendment) Act, 2007, on 23 January 2007 (see Box 3.5).

Amendment to Section 42(1) of the RBI Act provided discretion to the Reserve Bank in deciding the percentage of the CRR to be maintained by scheduled banks. Earlier, the Reserve Bank could not prescribe CRR lower than 3 per cent and higher than 20 per cent. Now, the Reserve Bank acquired full manoeuverability. Amendment to Section 42(1A) enabled the Reserve Bank to change the prescribed CRR through a regular circular, without notification in the official gazette. The subsections (1AA) and 1(B) were omitted by the amendment, removing the provision for payment of interest by the Reserve Bank on CRR balances, effectively prohibiting the Reserve Bank from paying interest on such balances, since it was considered that such interest payments compromised the effectiveness of the CRR as a monetary tool.

Insertion of a new Chapter IIID provided clarity to the regulatory powers of the Reserve Bank over money and foreign exchange market derivatives, money market instruments, including repo and reverse repo and in general over money, government securities and foreign exchange markets. While some of these powers were earlier exercised by the Reserve Bank by convention and practice, these amendments provided clarity. The definitions of repo and reverse repo as borrowing and lending instruments in the money and foreign exchange markets were for the first time incorporated in the RBI Act in accordance with best international practices. Earlier, such transactions were treated as separate sale and purchase transactions in securities.[53] The Reserve Bank was empowered to regulate agencies dealing in related transactions. This amendment made the role of the Reserve Bank vis-à-vis SEBI clearer.

Among the amendments to the Banking Regulation Act, the definition of approved securities for SLR was made flexible. Approved securities were redefined to mean the securities issued by the central government or any state government or such other securities as may be specified by the Bank from time to time. Earlier, all trustee securities were eligible approved securities. Much before this amendment, approved securities were those issued by the central and state governments under their market borrowing programmes announced in respective budgets.

Box 3.5 Relevant Parliamentary Acts and Amendments

Act	*Date Enacted*	*Key Provisions*
Fiscal Responsibility and Budget Management Act, 2003	26 August 2003	The central government shall not borrow from the Reserve Bank except by way of advances to meet temporary excess of cash disbursement over cash receipts in accordance with the agreement which may be entered into from time to time.
Reserve Bank of India (Amendment) Act, 2006	17 May 2006	The Reserve Bank (*a*) gained necessary discretion in deciding the percentage of CRR to be maintained by banks; (*b*) was empowered to change the prescribed CRR through a regular circular, without notification in the official gazette; (*c*) was effectively prohibited from paying any interest on CRR balances, since it was considered that interest payments reduced the effectiveness of CRR as a monetary tool. Further, insertion of a new Chapter IIID provided clarity on regulatory powers of the Reserve Bank over money and foreign exchange market derivatives, money market instruments, including repo and reverse repo and in general over money, government securities and foreign exchange markets. The definitions of repo and reverse repo were for the first time incorporated in the RBI Act as per best international practices. The Reserve Bank was empowered to regulate agencies dealing in related transactions.
Banking Regulation (Amendment) Act, 2007	23 January 2007	The definition of approved securities for the purpose of the SLR was made flexible. Approved securities were redefined to mean securities issued by the central government or any state government or any other as may be specified by the Reserve Bank.[1]

Note: 1. An earlier proposal by the Reserve Bank to the government in May 1998 to this effect was not incorporated in the regular Budget for 1998–99 presented in June 1998. Pending this amendment, the Reserve Bank advised banks that only securities issued under the market borrowing programme approved by the central government would be eligible to be included under SLR prescription.

Interestingly, the discussion that led to this had shown that there was a difference between the legal position and the policy view on approved securities. One question was 'whether shares issued by their subsidiary banks were deemed to be included among the approved securities as defined under Section 5 of the Banking Regulation Act, 1949'. The Legal Department held that 'by virtue of the statutory provision, the shares of subsidiary banks have to be regarded as approved securities for the purpose of maintenance of SLR'. The MPD had all along been taking a different view on the matter and followed a practice of reckoning those securities for the purpose of Section 24 of the Banking Regulation Act that were issued under the market borrowing programme of the government.[54] In effect, the SLR was basically operated by the Reserve Bank to protect the market borrowing programme of the government.

This proved to be quite a complicated issue. When the IDMD received a number of references from regional offices of the Reserve Bank and from other departments seeking clarification on the SLR status of specific securities, one proposal considered was to prepare a list of approved securities under the market borrowing programme and place it on the Reserve Bank's website. The IDMD, however, considered that this could be a potentially disputatious move because it would invite many new applications and possibly legal challenges. There was also a protracted correspondence with the government on notifying IDBI and Industrial Finance Corporation of India (IFCI) bonds as approved securities for SLR requirement of banks. The key policy issue was set out in a letter by Executive Director Usha Thorat addressed to Atul Kumar Rai, Director, Banking Division, Department of Economic Affairs (1 July 2003):

> SLR status helps in maintaining a differentiation between the bonds issued under the approved market borrowing programme of the government and the bond which are not issued under the approved market borrowing programme. Elimination of this differentiation would lead to a situation in which both categories of bonds would compete with each other for limited investible resources in the economy.

Another amendment to Section 24(2A) of the Banking Regulation Act, 1949, allowed the Reserve Bank to prescribe the SLR without any statutory minimum (floor), retaining, however, the maximum (ceiling). Earlier the SLR was subject to a minimum of 25 per cent and a maximum of 40 per cent. The Reserve Bank was empowered to change the prescribed SLR through a circular, without notification in the official gazette of the government. The differential requirement of SLR for regional rural banks from that of other commercial banks was also removed.

Interface with Markets: Towards More Transparency

As the Bank started operating increasingly through market-based instruments, transparency improved. Traditionally, the making of monetary policy had been largely internal, with only the final measures being announced in the form of a circular signed by the Governor. This practice continued until October 1997. Since the late 1990s, the process became more consultative and participative, and communication became more open. The stance and rationale of monetary policy were communicated in a variety of ways, including through publications and speeches delivered by top management. The policy statements had become more comprehensive, giving detailed background information and data and analytical inputs that went into policymaking and in support of the stance taken from time to time. The frequency of these statements increased from 2005–06, as we have seen.

The consultative process changed somewhat in the 1990s, mainly by means of more frequent announcements and accommodating feedback on policy measures and instruments (also see Table 3.4). By the mid-2000s, there was a much better understanding than before on what the Reserve Bank was doing, and consequently there were more debates and consultations with the IBA, market participants, trade bodies and associations, and economists. This process had been of critical importance for India in view of economic reforms, which meant that there was a great deal of learning, un-learning and re-learning to do.

The formation of the FMC-RBI in 1997, which reviews the liquidity and interest rate situation in financial markets and advises the top management on strategic actions, strengthened policymaking and improved interdepartmental coordination.

The earlier practice of quarterly credit budget discussions with select bankers was converted into monthly resource management discussions between the MPD and senior officials of select banks from 1999. Besides reviewing a return-based data, in particular, on sectoral deployment of credit and other financial parameters of the individual banks, the department made use of the opportunity to get feedback about policies introduced from time to time, perception regarding current trends in macroeconomic indicators such as GDP, exports and imports, inflation, financial market trends, liquidity conditions, and suggestions for forthcoming policies.

Technical Advisory Committee on Monetary Policy

While pre-policy consultations with select bankers continued, the involvement of external experts and market participants was further enhanced with the formation of the TACMP in July 2005. The origin of this goes back to the Narasimham Advisory Group on Transparency in Monetary and Financial Policies (2000). This group, which was set up to advise the Reserve Bank on sound standards of central banking with reference to international practice, had suggested that even without legislative changes, the Reserve Bank should appoint a Monetary Policy Committee. A subcommittee of the Reserve Bank Board had been considered, but it was clarified that the Governor of the Reserve Bank or, in his absence, the Deputy Governor nominated by him had been given parallel powers of general superintendence and direction of the affairs and the business of the Bank under Section 7(3) of RBI Act; therefore, the Governor became individually accountable in decision-making. Hence, a suggestion based on a staff review was that, to begin with, an Advisory Committee on Monetary Policy on the lines of the Technical Advisory Committee on Money, Foreign Exchange and Government Securities Markets, or the Standing Technical Advisory Committee on Financial Regulation, could be constituted within the current provisions of law. A survey of eighteen countries by the BIS examined the approaches and structures of the Monetary Policy Committees' practices on the composition of internal and external members, and the size of the committees varied. Most countries covered by the survey did not publish minutes of the meetings. The committee was appointed by the Governor and was set up to strengthen the decision-making process. It also strengthened the hands of the Governor in negotiating with the Finance Minister during discussions on monetary policy. Whereas the Governor remained accountable and responsible for the conduct of monetary policy by the central bank, the actual deliberations had an element of collegiality and informality.

An informal advisory group was formed on 28 April 2005. The group consisted of D. M. Nachane (Director, Indira Gandhi Institute of Development Research), R. H. Patil (Chairman, Clearing Corporation of India Ltd.), Shankar Acharya (Honorary Professor, Indian Centre for Research in International Economic Relations) and S. S. Tarapore (former Reserve Bank Deputy Governor). The *Hindu Business Line* on 13 July 2005 commented that 'the introduction of the wise men was a first and sure step to increasing the independence of India's central bank'.

The informal advisory group was converted into the TACMP through a memorandum dated 8 July 2005. The TACMP had the Governor as the Chairman and four external members as mentioned earlier; the Deputy Governors were special invitees. The TACMP had the following terms of reference: (*a*) to review macroeconomic and monetary developments and (*b*) to advise on the stance of monetary policy. The views of the advisory committee would be discussed in the following meeting of the Central Board of the Reserve Bank. The tenure of the TACMP was up to 31 January 2007.

The TACMP was reconstituted in March 2007 for a further period up to January 2009 with five external members and two members of the Central Board of the Reserve Bank. The additional members were Suman Bery (economist and external member) and Y. H. Malegam and A. Ganguly (Central Board members). The Deputy Governor in charge of monetary policy was made the Vice-Chairman and other Deputy Governors were inducted as regular members. External members were drawn from the areas of monetary economics, central banking, financial markets and public finance.

The initial TACMP met during the reference period on seven occasions starting from 19 July 2005 and the reconstituted TACMP on four occasions starting from 17 April 2007. The issues for discussion had some common themes, such as demand pressures, the reasonableness of medium-term outlook, credit growth and the prospect of overheating, the balance of payments position, asset prices and their implications for monetary policy, and the monetary policy stance. Depending upon macroeconomic conditions, specific issues such as pass-through effects of international oil prices, the impact of capital flows and the consequent liquidity management challenges, and movements in exchange rates drew the attention of members from time to time, including the impact of developments in global financial markets since the second half of 2007.

On monetary policy, the views of members differed on the nature of instruments to be used and the extent of changes in rates that could be effected. The specific suggestions related to changes in repo and reverse repo rates and the percentage changes in the CRR. While no formal vote was taken and the views of the TACMP were purely advisory, it is interesting to observe the impact of these on policy announcements. Table 3.4 presents these details.

It is observed that of the eleven meetings held during the reference period, policy announcements reflected the majority view of the external members on five occasions, the announcements were against the majority view of the external members on three occasions, and the views expressed by majority members were partially accepted on the remaining three occasions. Thus, in eight out of eleven meetings, the majority view of the TACMP was accepted fully or partially. The TACMP indeed influenced the direction of policy stance during mid-2005 to early 2008 (also see Table 3.3).

Table 3.4 External Members' Views on the Stance of Policy and Actual Announcements by the Governor from July 2005 to January 2008

	Meeting Date	*General Stance of External Members*	*Policy Review Date*	*Actual Policy Decision*
1	19 July 2005	Two members were for no change in policy rates. One member favoured hike in repo rate by 25 bps.	26 July 2005	Status quo. (Majority view)
2	18 October 2005	All members supported hike in policy rates up to 50 bps, among whom one also supported a hike in the CRR.	25 October 2005	Increase in reverse repo rate by 25 bps. No change in repo rate or CRR. (Partially accepted)
3	17 January 2006	Two members favoured an increase in policy rates up to 50 bps. One favoured the status quo. No view from one member.	24 January 2006	Increase in reverse repo rate by 25 bps. (Partially accepted)
4	12 April 2006	One member favoured the status quo. Three members supported policy tightening by increasing repo rate up to 50 bps, among whom one wanted an increase in CRR by 50 bps.	18 April 2006	No change in policy rates or CRR. (Against majority view)
5	18 July 2006	Three members favoured an increase in repo rate by 25 bps. One member favoured a reduction in reverse repo rate and hike in CRR by 50 bps.	25 July 2006	Increase in repo and reverse repo rates by 25 bps. (Majority view)

(*Contd.*)

(*Contd.*)

	Meeting Date	*General Stance of External Members*	*Policy Review Date*	*Actual Policy Decision*
6	20 October 2006	Two members spoke for an increase in policy rates, among whom one also favoured an increase in CRR. Two members supported status quo.	31 October 2006	Increase in repo rate by 25 bps. (Partial view)
7	23 January 2007	All members wanted an increase in policy repo rate in the range of 25 to 50 bps.	31 January 2007	Increase in repo rate by 25 bps. (Majority view)
8	17 April 2007	One member suggested repo rate increase by 25 bps. One member favoured increase in both repo and CRR by 50 bps. Other four members favoured status quo. One absent.	24 April 2007	No change in policy rates. (Majority view)
9	23 July 2007	Two members favoured increase in CRR. Four favoured status quo. One absent.	31 July 2007	CRR increased by 50 bps. (Against majority view)
10	25 October 2007	Two members favoured lowering of policy rates. Three members favoured increasing CRR. One member favoured increasing both policy rates and CRR. No view from one member.	30 October 2007	Increase in CRR by 50 bps. (Majority view)
11	22 January 2008	All members suggested a reduction in repo rate from marginal to 50 to 75 bps. One member favoured the imposition of 10 per cent incremental CRR.	29 January 2008	No change in repo rate or CRR. (Against majority view)

The Reserve Bank had, over the years, developed a communication policy which was based upon announcements of a hierarchy of objectives, autonomy in policy operations, anchoring inflation expectations by promoting credibility and understanding of monetary policy, and supply of information (Table 3.5).

The speeches, press releases and interviews of officials generally followed these principles. The message communicated to the media could be taken to represent the views of the institution rather than the personal views of individuals.

Table 3.5 List of Transparency Practices

Communication and Disclosure	*Operating Procedures*	*Consultative Process*	*Strengthening of Information/ Database*
Publication of more information on the central bank's operations and also money and financial markets.	Financial Markets Committee to monitor and review day-to-day market developments.	Technical Advisory Committee on Financial Markets.	Business confidence and expectations surveys.
More detailed pronouncement of policy with a clear statement of stance, after careful assessment of macroeconomic and monetary developments.	Resource management discussion with select banks.	Technical Advisory Committee on Monetary Policy.	Inflation expectations survey.
	Consultation with economists/media	Inter-institutional coordination with other regulators.	Survey of forecasters.
A detailed supplement to policy statement assessing macroeconomic and monetary developments.	Consultation with industry/trade/ other associations representing various stakeholders.	Coordination committees with the government, such as on debt and cash management.	Surveys on lead indicators.
More frequent interventions in the market.	Internal working groups on major policy issues and sharing of reports with the public.	Regulatory changes through consultative process accommodating comments from market players and the public.	
Speeches of top management and press statements.			
Assessment of downside as well as upside biases to projections.		Extensive interactions with multilateral institutions and other central banks.	

The coordination between the government and the Reserve Bank was again an issue. Governor Reddy observed that the government happened to be a significant player in many emerging market economies, especially in the financial sector. It was quite possible that there were communications or signals, if not directions, from the Ministry of Finance often on issues relating to monetary policy or banking, a sector predominantly government-owned. If these were consistent with those of the central bank, they reinforced the central bank policies. But if these were divergent, it posed a dilemma for central bank communication and, to that extent, a central bank may be constrained in freely articulating its policies.

Governor Reddy was keen to connect Indian practice with the global practice in central banking and suggested that elements from a lecture delivered by Ben Bernanke (then a member of the Board of Governors of the Federal Reserve System, USA) on frameworks of monetary policy be incorporated in Indian policy statements.[55] Bernanke compared forecast-based policy process with the feedback-based or consultative process – the former involved adjustments when actual values deviated from the trend or desired values in a model, while the latter involved adjustments based on, in addition to macroeconomic variables, communications with the market to gauge private sector expectations. It is significant that the latter, or the consultative approach, seemed to fit well the way the Reserve Bank went about instituting reforms. Governor Reddy also desired to conduct a survey of the frequency and contents of monetary policy statements of select central banks.[56] Based on the findings, the frequency and pattern of policy announcement changed during his tenure.

There were discussions on improvements in data, measurement and representation of macroeconomic activity. A meeting of the TACMP held on 23 July 2007 saw a wide-ranging discussion on this subject. The meeting considered a variety of issues connected with measurement, how to capture economic outlook of India and the world, expectations regarding corporate performance, their savings/investment, especially in light of interest rate changes, the outlook on inflation and inflation expectations in light of changes in international crude oil and other commodity prices, the evolution of liquidity conditions, expectations regarding balance of payments developments and capital flows, risk-adjusted asset prices, developments in subprime market, hedge funds and private equity funds, and monetary policy stance and measures.

The meeting was held against the backdrop of the subprime crisis in the US and its global repercussions, and the prospect of a crisis following 'overheating' in emerging market economies. A sharp rise in stock market indices in

2006–07 added to the worry. The issue of stability and measurement, therefore, dominated the discussion. Governor Reddy, for example, raised the issue of choice of price index, the limitations of core inflation measures, and especially the danger of oversimplification by treating specific commodity prices as conveying shocks. Uncertainty about the direction of the exchange rate, the scale of capital inflows and the contagion effects of the global crisis occupied the discussion.

Conclusion

The period between 1997–98 and 2007–08 began with the Asian financial crisis. In these eleven years, the Indian economy remained remarkably crisis-free and stable. During these years a paradigm shift occurred in monetary management, which – by making new instruments available in addition to old ones, by allowing for greater coordination with the government and the financial market and by means of technological and legislative changes – enabled the Reserve Bank to effectively deal with the unintended consequences of the ongoing globalisation process.

Notes

1. From 2003–04, rapid expansion of credit in retail and real estate segments raised the fear that the economy could be 'overheating'. External sector liberalisation resulted in unprecedented capital inflows with consequent impact on domestic liquidity. Towards the end of the reference period, the sub-prime crisis in the United States (US) raised the fear of contagion. These developments reinforced the need for caution and led to the use of both old and new instruments to achieve stability.
2. Government of India (Committee on the Financial System), *Narasimham Committee Report on the Financial System, 1991* (New Delhi: Standard Book Company, 1992).
3. The minimum and maximum statutory CRR rates were originally 3 and 15 per cent of net demand and time liabilities of banks. The maximum was raised to 20 per cent in 1990–91. From the early 1990s, the Reserve Bank had followed a strategy of reducing the CRR to the minimum level of 3 per cent. Given the economic environment engendered by the currency crises in the South-East Asian region, the proposal to reduce CRR by 2 percentage points, envisaged in October 1997, could not materialise in full during 1997–98. Instead, CRR was raised with effect from 6 December 1997 and 17 January 1998 to siphon off liquidity and control the arbitrage opportunities between the call money market and the foreign exchange market. Subsequently, it was brought down

to 4.5 per cent by early 2003. The SLR was earlier used mainly to support the borrowing programme of governments. It was statutorily set at a minimum of 25 per cent and the maximum was 40 per cent. It was about 38 per cent by 1990–91. Following recommendations of the Narasimham Committee I, governments were required to raise resources at market rates, and reliance on SLR was to be brought down. The SLR was reduced to 25 per cent by 1997.

4. However, as we shall see, the process of implementation of these changes needed to be cautious. An example of caution would be 2003–04 onwards, when growth in foreign exchange inflow led the Reserve Bank to devise a sterilisation strategy that spread the burden among MSS, LAF and the CRR. As a result, the CRR again acquired a prominent position.
5. With effect from 29 October 2004, the nomenclature of repo and reverse repo was interchanged by the Reserve Bank as per international usage. Prior to that date, repo indicated absorption of liquidity while reverse repo meant injection of liquidity. The nomenclature in this volume is generally based on the new use of terms even for the period prior to 29 October 2004, that is, reverse repo indicates absorption of liquidity while repo indicates injection of liquidity. Furthermore, following a change in accounting practice with effect from 11 July 2014, liquidity operations (repo, term repo, and Marginal Standing Facility, net of reverse repo and term reverse repo) are now treated as loans and advances to banks and the commercial sector instead of the earlier treatment of purchase/sale of securities and therefore excluded from net Reserve Bank credit to government.
6. While this approach is 'monetary targeting', in technical parlance, it was 'monetary targeting with feedback' as recommended by the Sukhamoy Chakravarty Committee (1985), which allowed intra-year review of the target. The feedback is to emanate from the real sector and the specific mechanism suggested for this purpose is the mid-year review of the monetary target.
7. Certain amendments relating to the Securities Contracts (Regulation) Act, 1956, that influenced policy and operations in financial markets are covered in Chapter 6.
8. The reference period starts in April 1997 when Rangarajan was in position and covers his period up to November until Bimal Jalan took over; at the end of the reference period, in March 2008, Reddy was the Governor and his tenure extended up to September until Duvvuri Subbarao took over.
9. RBI, *Annual Report 1997–98*.
10. RBI, *Report on Currency and Finance* (2006).
11. Deepak Mohanty and A. K. Mitra, 'Experience with Monetary Targeting in India', *Economic and Political Weekly* 34, nos 3–4 (1999): 123–32.
12. RBI, *Annual Report 1996–97*.
13. S. Venkitaramanan, Discussant's remarks on 'Managing External Economic Challenges in the Nineties: Lessons for the Future', paper by Shankar

Acharya, Indian Council for Research on International Economic Relations, New Delhi, September 1999.

14. During the L. K. Jha Memorial Lecture by Donald T. Brash, Governor, Reserve Bank of New Zealand, on 17 June 1999 in Mumbai, the speaker argued in favour of inflation targeting for countries like India, and Governor Jalan questioned the position. He reiterated the point on 7 December 2000 at the time of the C. D. Deshmukh Memorial Lecture by Charles Goodhart of the London School of Economics in Mumbai.
15. See https://www.rbi.org.in/scripts/BS_ViewMonetaryCreditPolicy.aspx?Id=2261.
16. In its 'Mid-Term Review of Monetary and Credit Policy for 1998–99' (30 October 1998), available at https://www.rbi.org.in/Upload/Notification/Pdfs/3546.pdf.
17. The restriction was that if an entity borrowed from the Reserve Bank, it was not expected to lend in the money market. This was followed as a supervisory norm. However, subsequently the Reserve Bank issued a specific instruction on 21 March 2007 that banks can utilise the funds borrowed (from the Reserve Bank's LAF window) for interbank lending. Such interbank lending is part of normal money market functioning that enables daily liquidity management by market participants having temporary mismatches. However, such borrowings should not be persistent in order to fund balance sheets for credit needs of customer.
18. The members of the group were D. Anjaneyulu, Shyamala Gopinath, Usha Thorat, K. Kanagasabapathy and G. S. Bhati, with Jaya Mohanty acting as Coordinator and Secretary.
19. The same group was reconstituted into another Group on Operationalising LAF. The report of the latter group, submitted on 29 October 1999, was discussed with various bodies and market participants, including the Advisory Committee on Money and Government Securities Markets, chairmen and presidents of the Indian Banks' Association (IBA), the Fixed Income Money Market and Derivatives Association of India (FIMMDA) and the Primary Dealers' Association of India (PDAI).
20. A note prepared by S. C. Misra, 22 June 2000.
21. The net reverse repo increased from an average of ₹111.96 billion in 2002–03 to ₹387.50 billion on 30 September 2003. Net OMOs increased from ₹354.19 billion in 2002–03 to ₹537.80 billion in 2003–04.
22. See https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?FromDate=12/02/03&SECID=21&SUBSECID=0. The Financial Markets Committee (FMC-RBI) discussed the issue of releasing the reports on the LAF and on sterilization. The consensus was that if the LAF report alone was released, the impact on bond markets would be positive as the market would expect the liquidity absorption rate to be below the repo rate, in view of the suggestion for having a more flexible corridor. The impact on bond markets would,

however, be moderated if the sterilisation report was released simultaneously because it emphasised the need for sterilisation and the preparedness of the Reserve Bank to use several instruments for this purpose. The overall impact could well be neutral because the market would recognise that the suggestions for sterilisation required either government consent or legislative changes. In other words, the market would expect the Reserve Bank to continue to use the LAF as the main instrument of sterilisation. In the end, both reports were released simultaneously (on 2 December 2003).

23. By Amitava Sardar, Director, MPD.
24. In the meeting of the Central Board held in Thiruvananthapuram on 6 May 2004, Deputy Governor Rakesh Mohan mentioned that in view of earlier seminar discussions and the feedback, and following the recommendations of the Working Group on Instruments of Sterilisation, an MSS was introduced in April 2004 to strengthen the Bank's ability to conduct exchange rate and monetary management operations.
25. The government informally expressed an opinion that the Reserve Bank should consult them in the event of a higher cut-off in the auctions of both normal and MSS securities as it could prefer taking lesser amount in both auctions. The Reserve Bank did not agree with such an arrangement with respect to MSS securities on grounds that those were part of monetary policy operations and, therefore, discretion should lie with the Reserve Bank.
26. Letter by Deputy Governor Rakesh Mohan to Finance Secretary D. Subbarao on 31 October 2007 (see Appendix A3.2).
27. An internal group formed of officers from various departments such as the Department of External Investments and Operations (DEIO), IDMD and MPD.
28. As per the revised national accounts series with base year 2011–12, the growth averaged lower at 7.9 per cent.
29. Following the amendment of the RBI Act, no interest was payable by the Reserve Bank on CRR balances of banks with effect from the fortnight beginning 31 March 2007. Also see the section 'Legal Reform' in this chapter.
30. See https://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=14666 (para 12).
31. The situation later turned full circle when the MoU on the MSS was amended on 26 February 2009 to enable the Bank to de-sequester MSS cash balance for financing the government's expenditure in *lieu* of the approved market borrowings.
32. The Bank Rate remained at 10 per cent since July 1981 before being raised to 11 per cent in July 1991 and further to 12 per cent in October 1991, against the backdrop of high inflation and difficult balance of payments situation.
33. Policy note on Lender of Last Resort Facility presented to the Central Board of Directors in its meeting held on 15 July 2002. A special liquidity facility

in the nature of last resort was granted at the Bank Rate plus 4 per cent to Global Trust Bank on 28 July 2004.

34. At the instance of Deputy Governor Rakesh Mohan, an interdepartmental group was constituted on 2 November 2006 to review the legal position of the Bank Rate in Section 49 of the RBI Act, 1934, ascertain its role as a signalling device, and consider how efficient a policy tool it still was. The group submitted its report (with a dissenting note) on 17 January 2007. The majority report concluded that the Bank Rate had largely become redundant as a policy instrument, the repo rate could be treated as a reference rate for all purposes, and the Bank Rate be treated as a penal rate for shortfall in reserve requirements. The Bank Rate, it was suggested, could be fixed at the level of the repo rate, in line with the recommendation of the Internal Group on LAF (2003), and be used as a reference rate for medium-term policy stance. This could be achieved by placing the Bank Rate in the middle of the reverse repo rate and repo rate corridor. The Reserve Bank did not accept the recommendations of the report.
35. A symmetrical clause in the case of deposits, stipulating that 'the rate of interest payable on the deposit was subject of the directives of the Reserve Bank that may be issued from time to time', was reportedly withdrawn on 24 June 1991.
36. RBI, 'Monetary and Credit Policy for the Year 2000–01', available at https://www.rbi.org.in/scripts/BS_ViewMonetaryCreditPolicy.aspx?Id=2261.
37. Until then the Reserve Bank maintained that charging loans below the PLR would contravene Reserve Bank directives. In the context of participating in a consortium lending led by State Bank of India (SBI), State Bank of Indore asked (September 1997) if they could charge a rate of 13.5 per cent, consistent with SBI and 1 percentage point below their own PLR, to be able to participate in the consortium lending. State Bank of Patiala also came up with a similar request. The MPD, on examination of the case, held that charging loans below the PLR would contravene Reserve Bank directives. However, it said that the consortium could address the problem and arrive at a settlement. Even in public discussion, this remained a controversial issue. In the column on 'Counter View' in the *Hindu Business Line* dated 16 August 1997, bankers discussed under the heading 'Subverting the PLR?' the pros and cons of charging lending rates for borrowers below bank's own PLR. One banker's view was that once a bank decided on the PLR and justified it based on various parameters, lending below the PLR would send wrong signals to the customers. Another view was that this was normal internationally – sub-LIBOR lending existed. PLR and LIBOR were only reference or benchmark rates. A third view from a corporate borrower was that the very concept of PLR was not going to last long because of its inherent inflexibility.
38. RBI, 'Annual Policy Statement of 29 April 2002'.

39. An internal note of the MPD stated that, as on December 2002, nearly a third of all credit was extended at sub-PLR rates.
40. The point was noted earlier by Deputy Governor Rakesh Mohan in an internal meeting. In view of the Reserve Bank's policy of moving away from micro-regulation of banks, he stressed that Reserve Bank guidelines should be advisory.
41. S.S. Tarapore, 'PLR: Fact or Fiction', *Financial Express*, 8 October 2003.
42. Mid-term policy of 3 November 2003.
43. Loans to individuals for acquiring residential properties or purchase of consumer durables, loans to individuals against shares and debentures/bonds, non-priority sector personal loans, advances/overdrafts against domestic/NRE/FCNR(B) deposits with the bank, subject to restrictions, finance granted to intermediary agencies (excluding those of housing) for on-lending to ultimate beneficiaries and agencies providing input support, loans covered by refinance schemes of term lending institutions, finance granted to housing finance intermediary agencies for on-lending to ultimate beneficiaries, discounting of bills, loans to cooperative banks or any other banking institution, and loans to own employees.
44. Note prepared by the MPD, dated 8 January.
45. Note recorded in the MPD, 21 October 2005. Internationally the PLR meant rate generally charged for prime borrowers and sub-PLR rates offered for a section of prime borrowers.
46. Several studies reported that, especially in the Euro area, shifts in policy rates were not completely passed through to retail lending rates. See Teruyoshi Kobayashi, 'Incomplete Interest Rate Pass-Through and Optimal Monetary Policy', *International Journal of Central Banking* 4, no. 3 (2008): 77–118.
47. EPW Research Foundation, 'Downward Sticky Lending Rates', in Money Market Review, *Economic and Political Weekly* 44, no. 25 (2008): 25–31.
48. Partly as a follow-up to the recommendations of the 'Action Taken Report on the Report of the Joint Parliamentary Committee on Stock Market Scam and matters Relating Thereto', Government of India, Ministry of Finance, 9 May 2003.
49. Headed by E. A. S. Sarma, Secretary, Economic Affairs, Government of India (GOI). The other members of the committee were: from the Reserve Bank, Y. V. Reddy, Deputy Governor; and from GOI, A. M. Sehgal, Controller General of Accounts; J. S. Mathur, Additional Secretary (Budget); K. N. Khandelwal, Additional Deputy Comptroller and Auditor General; Ashok Lahiri, Director, National Institute of Public Finance and Policy; N. L. Mitra, Director, National School of Law; Ajoy Sinha, Joint Secretary, Department of Legal Affairs; V. K. Bhasin, Joint Secretary, Legislative Department; and S. C. Pandey, Director (Budget), as Convenor.

50. The approach paper was prepared by K. Kanagasabapathy and R. K. Pattnaik, and the illustrative draft Bill by N. V. Deshpande and L. N. Mitra as the external member.
51. The passage of this Act took about three years and was not smooth. Though the FRBM Bill was introduced in December 2000 by Yashwant Sinha, Finance Minister, it was referred to the Parliamentary Standing Committee on Finance. The Standing Committee recommended that the numerical targets proposed in the Bill be incorporated in the rules to be framed under the Act rather than the Act itself. When the Act was passed, Saumitra Chaudhary commented that 'all teeth of the Fiscal Responsibility Bill have been pulled out and in the current form it will not be able to deliver the anticipated results' (ENS Economic Bureau, 'Tenth Plan for Adoption of Fiscal Responsibility Bills by States', *Indian Express*, 4 November 2002). See Chapter 7 for more details of the larger provisions of this Act and the process of its implementation.
52. The internal working group consisted of heads of several departments and was chaired by N. V. Deshpande, Principal Legal Advisor.
53. The reverse repo auctions in government securities were proposed as early as October 1992. There was no specific mention about repo transactions in the RBI Act then. Subsequently, in response to two queries about the legal status of these transactions, the Legal Advisor of the Reserve Bank gave different opinions. On 6 October 1992, the Legal Department held that repo transactions in government securities would not amount to 'borrowing' within the meaning of section 17(4) of the RBI Act. On 6 April 1998, in response to another query, the Legal Department held that Section 17(12A) of the RBI Act could be taken to cover transactions of sale and purchase of securities of every type and it was possible to take a view that the repo and reverse repo transactions were also covered by this section as the condition to repurchase could simply be considered as part of the terms and conditions of the transactions. The amendment to the RBI Act at that time was, therefore, not pursued.
54. A reference was also made by the Urban Banks Department, RBI, on shares and bonds of the Industrial Investment Bank of India (IIBI) issued under private placement. On this, the MPD has taken a view that the shares, bonds and debentures issued by the IIBI under Section 11 of the RBI Act, although approved securities under the Banking Regulation Act and also the Indian Trust Act, 1882, are not issued under the market borrowing programme.
55. 'Central Bank Talk and Monetary Policy', Remarks by Governor Ben S. Bernanke At the Japan Society Corporate Luncheon, New York, 7 October 2004, available at https://www.federalreserve.gov/boarddocs/speeches/2004/200410072/default.htm. MPD note prepared by Sanjay Hansda, Assistant Adviser, 17 December 2004.
56. Note prepared by Mohua Roy, Director.