Monetary policy operating procedures in India

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1. Monetary policy objectives

The preamble to the Reserve Bank of India Act sets out the objectives of the Bank as "to regulate the issue of Bank notes and the keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage". Although there has not been any explicit legislation for price stability, as has been the current trend in many countries, the objectives of monetary policy in India have evolved as those of maintaining price stability and ensuring an adequate flow of credit to the productive sectors of the economy. These twin objectives are clearly spelt out from time to time in monetary and credit policy announcements by the Reserve Bank. The objective of price stability has, however, gained further importance following the opening-up of the economy and the deregulation of financial markets in India in recent times.[1]

The growing recognition that price stability ought to be the core objective of monetary policy is reflected in the Reserve Bank's Annual Report for 1996/97: "in the case of India, both output expansion and price stability are important objectives but depending on the specific circumstances of the year, emphasis is placed on either of the two. Increasingly, it is being recognised that central banks would have to target price stability since real growth itself would be in jeopardy if inflation rates go beyond the margin of tolerance".

[1] It may be noted in this context that a number of measures have been taken in recent years to remove various restrictions on international current account transactions and ease capital account transactions, culminating in India accepting Article VIII status under the Articles of Agreement of the International Monetary Fund (IMF) in August 1994.

2. Institutional background

As regards the conduct of monetary policy, the choice of targets, instruments and operating procedures was circumscribed to a large extent by the nature of the financial markets and the institutional arrangements. In this context, the period prior to 1992 can be termed as the pre-reform period, with the post-reform period emerging thereafter. Although the reform of the financial sector was initiated in the mid-1980s, the process was hastened following the economic crisis in the summer of 1991. The foundation for the reform of the monetary and financial system was laid by the Committee to Review the Working of the Monetary System (Chakravarty Committee, 1985) and the Working Group on the Money Market (Vaghul Group, 1987).

(i) Pre-reform period

In the pre-reform era, the financial market in India was highly segmented and regulated. The money market lacked depth, with only the overnight interbank market in place. The interest rates in the government securities market and the credit market were tightly regulated. The dispensation of credit to the Government took place via a statutory liquidity ratio (SLR) process whereby the commercial banks were made to set aside substantial portions of their liabilities for investment in government securities at below market interest rates. Furthermore, credit to the commercial sector was regulated, with prescriptions of multiple lending rates and a prevalence of directed credit at highly subsidised interest rates. However, the institutional arrangement for financing the government deficit is of particular significance for an understanding of the conduct of monetary policy. The provision for extending short-term credit (not exceeding three months) to the Central government slipped into a practice of rolling over this facility, resulting in automatic monetisation of the Government's deficit. The situation was aggravated further during the 1980s as the Government's fiscal balance rapidly deteriorated. The process of creating 91-day ad hoc Treasury bills and subsequently funding them into non-marketable special securities at a very low interest rate emerged as the principal source of monetary expansion. In addition, the Reserve Bank had to subscribe to the government dated securities which were not taken up by the

market. As a result, net Reserve Bank credit to the Central government, which constituted about three-quarters of the monetary base (reserve money) during the 1970s, rose to over 92% during the 1980s. It was only in the 1990s that the trend was reversed following economic reforms (Table 1).

In such an environment, monetary policy had to address itself to the task of neutralising the inflationary impact of the growing deficit. The Reserve Bank had to resort to direct instruments of monetary control, in particular the cash reserve ratio. This ratio was used to neutralise the financial impact of the Government's budgetary operations rather than as an independent monetary instrument.

(ii) Post-reform period

The financial sector reforms initiated following the recommendations of the Narasimham Committee (1991), in conjunction with the recommendations of the Chakravarty Committee and the Vaghul Working Group, produced far-reaching changes in the financial sector which had an important bearing on the conduct of monetary policy.

The Chakravarty Committee had advocated regulation of the money supply in line with the evolving price/output situation. As regards the means of achieving the desired monetary expansion, the Committee had recommended control of the monetary base (reserve money). However,

Table 1

Composition of monetary base

In percentages

Items	Averages of end-March figures			End of March			
	1971–80	1981–90	1991–94	1995	1996	1997	1998
Ratio of reserve money:							
Credit to the central government	76.8	92.3	87.1	58.4	61.1	60.3	59.1
Net foreign exchange assets	19.7	10.7	21.4	44.1	38.1	47.4	51.2
Other assets*	3.5	–3.0	–8.5	–2.6	0.8	–7.8	–10.3

* Includes refinance to banks, credit to financial institutions net of items of non-monetary nature such as capital and reserves, and revaluation accounts for foreign exchange assets.

as the practice of automatic monetisation of the Government's fiscal deficit impinged on the effective control of the monetary base, there was an imperative need for a change in the institutional arrangement. A momentous step in this direction was the historic agreement of 1994–95 between the Government of India and the Reserve Bank, eventually culminating in the elimination of the issuance of ad hoc Treasury bills with effect from 1st April 1997.[2]

With the initiation of financial sector reforms, the emphasis was placed on the development and deepening of money, government securities and forex markets, and an effort was made to move away from the use of direct instruments of monetary control to indirect measures such as open market operations and market-related interest rates.

In order to improve short-term liquidity and encourage its efficient management, interbank participation certificates, certificates of deposit (CDs) and commercial paper (CP) were introduced. The Discount and Finance House of India (DFHI) was set up to promote a secondary market in a range of money market instruments. Treasury bills of varying maturities (14-, 91- and 364-day) were introduced. More importantly, interest rates on money market instruments were left to be determined by the market.

The process was well supported by reforms in the government securities market. Concomitant with sharp fiscal adjustment by the Central government, the interest rates on government paper were made market-related and the maturity periods reduced substantially to a maximum of ten years.[3] Other fundamental reforms in the government securities market include setting up a system of primary dealers (PDs) for dealing in government securities, introducing a delivery-versus-payment (DVP) system in respect of government securities settlement,

[2] Since 1st April 1997, the RBI has provided temporary accommodation to the Central government to take care of its mismatches in receipts and expenditures through a scheme of ways and means advances. This scheme, which operates within ways and means limits provided for different periods of the financial year, replaced the open-ended access to the facility prevalent earlier. In addition, an "overdraft" facility was set up available for a transition period of two years to allow for the introduction and improvement of cash and debt management operations within the Central government. Overdrafts will not be permissible after 31st March 1999.

[3] It may be noted in this connection that, since April 1992, the entire central government borrowing programme in dated securities has been conducted through auctions. During 1998–99, the Reserve Bank issued two central government securities of 15-year and 20-year maturity.

adopting new techniques for flotation, introducing new instruments such as zero coupon bonds, partly paid stock and capital-indexed bonds, conducting auctions to impart greater transparency in operations, allowing repos in government dated securities and Treasury bills of all maturities and issuing guidelines for setting up satellite dealers (SDs). All these measures have brought about significant changes in that a new treasury culture has been developed amongst banks and institutions so that the demand for government paper is no longer governed solely by statutory liquidity ratio (SLR) requirements but by considerations concerning the effective management of liquidity.

In consonance with the medium-term objectives of financial sector reform, the SLR was brought down from its peak level of 38.5% in April 1992 to 25% of net demand and time liabilities (NDTL) in October 1997. Moreover, there were sharp cuts in the cash reserve ratio (CRR), progressively to 10% in January 1997 from 15% in 1991.[4] The Reserve Bank's refinance facility was also rationalised while lowering the CRR – the sector-specific refinance facilities were de-emphasised and simultaneously a general refinance window was opened in April 1997.

Open market operations (OMOs) have gained considerable momentum as the Reserve Bank now responds more flexibly to market yields when drawing up its price list. It also conducts repo and reverse repo transactions in order to ensure a reasonable corridor for money market rates of interest.

The interest rate structure was rationalised. Banks are now free to determine their domestic term deposit rates and prime lending rates (PLRs), except for certain categories of export credit and small loans below Rs 0.2 million. In addition, all money market rates are also free. The most significant development in this area has, however, been the reactivation of the bank rate by linking it to all other rates including the Reserve Bank's refinance rate.

India switched over to a market-determined exchange rate system in March 1993 and current account convertibility was instituted in August 1994. Since then, a number of steps have been taken to integrate the Indian forex market with the global financial system by allowing authorised dealers (ADs) more freedom to manage their foreign

[4] In May 1991, an incremental CRR of 10% was imposed. This was subsequently withdrawn. In August 1998, the CRR was raised to 11%.

currency assets and liberalising inward capital flows. Furthermore, with a view to moving progressively towards capital account convertibility a committee was set up and its recommendations are under consideration by the Government of India and the Reserve Bank.

3. Intermediate targets

In view of the fairly stable demand function for money, broad money (M3) has been treated as an intermediate target in the conduct of monetary policy. The Reserve Bank sets indicative broad money expansion targets in line with the expected rate of growth of GDP and a tolerable level of inflation. On the basis of the targeted level of broad money expansion, the desired level of reserve money expansion is ascertained. The order of the reserve money expansion, however, has to be consistent with the likely fiscal and external payments position. With the recent change in the institutional arrangement resulting in the phasing-out of the automatic financing of the Government's deficit, the Reserve Bank has some manoeuvrability with regard to the expansion of reserve money. The targeted M3 expansion is publicly announced through the Governor's statement on monetary and credit policy. However, a number of other indicators such as movement in interest rates, exchange rate and availability of credit to productive sectors of the economy are also considered when formulating monetary policy.

4. Operating procedures and instruments

The reform of the monetary and financial sector has enabled the Reserve Bank to expand the array of instruments at its command. The operational target of monetary policy continues to be banks' reserves, which are controlled by changes in reserve requirements effected mainly through the cash reserve ratio (CRR). However, the Reserve Bank is attempting to reduce the emphasis on the use of the CRR as an instrument of monetary control. The CRR has been progressively brought down and the liquidity management in the system is carried out through open market operations in the form of (i) outright purchases/sales of government securities and (ii) repo and reverse repo operations.

In the face of unidirectional movements in the CRR,[5] except on occasions of exchange rate volatility or necessitated by the need to sterilise capital inflows, the excess liquidity in the system was mopped up by outright sales of government securities by the Reserve Bank. Although the net demand and time liabilities (liabilities subject to reserve requirements) of the commercial banks expanded from Rs 3,602 billion in August 1994 to Rs 5,201 billion in January 1997, their deposit balances with the Reserve Bank declined from Rs 504 billion to Rs 446 billion during the same period. This would imply, that between August 1994 and January 1997, the incremental liabilities of the commercial banks were not only free from reserves but there was a release of reserves to the tune of Rs 58 billion. The liquidity pressure thus generated was to be contained by resorting to open market operations. The cumulative net outright sales of government securities during the four-year period between 1993/94 and 1996/97 amounted to Rs 216 billion. The market demand for government securities was so strong, partly aided by cuts in the CRR, that the Reserve Bank was able to offload most of its stock of marketable securities accumulated in the past. However, the reduction of marketable securities in the Reserve Bank's portfolio did not hinder the subsequent conduct of open market operations as non-marketable special securities worth Rs 200 billion were converted into marketable lots during 1997/98. Over the reform period, the market absorption of government securities was rendered possible by reforms in the government securities markets, which ensured market-related rates of interest and thus helped the development of a secondary market.

Short-term liquidity management was undertaken by repos on a regular basis. Usually, the Reserve Bank engages in repos for a maturity of up to 14 days, which is the cycle for reserve requirements. Recently, the Reserve Bank has been performing three to four-day repos to absorb very short-term liquidity and even out money market rates. During 1993/94, repo auctions were conducted on as many as 36 occasions in the interest rate range of 5–11½%. Although the frequency of repo auctions was reduced in the subsequent two years on account of tight liquidity conditions,[6] during 1997/98, repos were carried out on as many as 176 occasions (Table 2). The repo operations have become a firm

[5] The CRR was gradually reduced from 15% in August 1994 to 10% in January 1997.

[6] Repo transactions were temporarily discontinued between February 1995 and October 1996.

Table 2

Repo auctions

	No. of times	Repo amounts (Rs billion)		Cut-off repo rates (in %)		DFHI's average fortnightly call-money lending rates (in %)		
		Low	High	Low	High	Low	Median	High
1993/94	36	0.35	108	5.00	11.50	4.1	5.3	10.0
1994/95	23	0	11	5.40	7.00	3.6	11.6	27.2*
1995/96	0	–	–	–	–	9.2	13.9	31.9*
1996/97	24	3.0	42	4.00	5.48	3.2	7.8	10.2
1997/98	176	0	64	2.40	9.00	0.5	6.2	50.0*

* Reflects the phase of exchange rate volatility when the call rates were allowed to rise as a matter of policy.

fixture, with the Reserve Bank offering daily fixed rate repos for a maturity of three to four days since November 1997.

The repo rates and the amounts tendered in the repo auctions, apart from reflecting liquidity conditions, provide a floor for the overnight call-money rates. In the event of tight liquidity conditions, the Reserve Bank provides liquidity support to primary dealers in the form of a reverse repo facility in government dated securities. The conduct of such reverse repos enables the Reserve Bank to indirectly intervene in the market, alleviating undue pressure on overnight call-money rates. In addition to the repo rates, in April 1997 the Reserve Bank also reactivated the bank rate, which is now used as a signalling rate to reflect the stance of monetary policy. The interest rates on all accommodations from the Reserve Bank, including refinance, are linked to the bank rate. The use of the bank rate as an active instrument of policy can be gauged from the fact that it was changed on as many as five occasions during 1997/98, the most often so far in any financial year.

The refinance window of the Reserve Bank provides an additional source of reserves. The Reserve Bank currently provides two types of refinance facility to banks – export credit refinance and general refinance.[7] While the former facility is formula-based and extended to

[7] In addition, since September 1998 a special liquidity support facility has been put in place by way of refinance to banks which have invested in government securities out of rupee proceeds from "Resurgent India Bonds" (RIBs) issued in August 1998 to mobilise foreign currency deposits from non-resident Indians.

banks against their outstanding export credit eligible for refinance, the latter facility is provided to tide banks over their temporary liquidity shortages. Banks are eligible for export credit refinance to the extent of 100% of the increase in outstanding export credit eligible for refinance over the level of such credit in mid-February 1996, and the rate of interest on the facility is equal to the bank rate.[8] The Reserve Bank provides a general refinance facility to banks which is equal to 0.25% of each bank's fortnightly average outstanding aggregate deposits in 1996/97. This refinance is provided for two blocks of four weeks each. The rate on this refinance for the first block of four weeks is the bank rate, and for the next four weeks it is the bank rate plus 1 percentage point.

Although there is no formal corridor for interest rates, the bank rate provides an upper bound to the overnight interest rates, thereby creating an informal corridor for interest rate determination. Moreover, the spread between repo rates and the bank rate has narrowed considerably, which would imply that short-term interest rates could fluctuate in a narrow band, thereby minimising interest rate volatility. However, short-term interest rates are allowed to rise in periods of exchange rate volatility. For example, in the second half of 1995/96, the foreign exchange market experienced considerable volatility, requiring the Reserve Bank to actively intervene in the market. A panic demand for cover by importers and cancellations of forward contracts by exporters created persistent mismatches of supply and demand in both the spot and forward segments of the market. Forward premia rose sharply in October 1995, far out of alignment with interest rate differentials. The prohibitive cost of foreign exchange cover prevented banks from mobilising foreign currency assets and employing them to fund domestic assets. The exchange market intervention (net sales) by the Reserve Bank in the spot market led to a withdrawal of liquidity, causing a sharp increase in call rates given the buoyant demand for credit. Intervention, in turn, was supported by measures such as the imposition of an interest surcharge on import finance and the tightening of concessionality in export credit for a longer period. As the exchange rate stabilised, money market support was provided by the Reserve

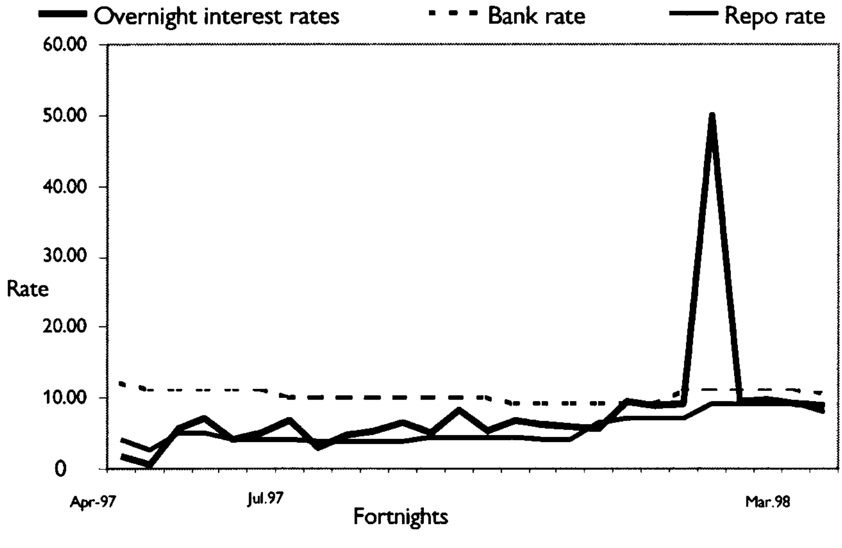
[8] As a temporary measure for the period August 1998-March 1999, the rate has been fixed at 200 basis points lower than the bank rate.

Bank, mainly through reverse repos conducted with primary dealers and an easing of the reserve requirements. As a result, call-money rates moved downwards to more realistic levels.

In the backwash of the Asian currency turmoil, the foreign exchange market in India once again came under severe pressure during the second half of 1997/98, obliging the Reserve Bank to undertake strong monetary policy measures in January 1998, leading to a withdrawal of liquidity and a temporary sharp increase in short-term interest rates. Once orderly conditions were restored in the foreign exchange market, the overnight interest rates reverted to the corridor provided by the repo rates and the bank rate (Chart 1).

Although there has been no explicit interest rate target, in recent years a great reliance has been placed on interest rates and exchange rates in the day-to-day conduct of monetary policy. The movements in the interest rates and exchange rate also increasingly reflect the integration of the money market and the foreign exchange market on the one hand, and various money market segments on the other hand. The interest rates on major money market instruments (91- and 364-day Treasury bills, CP and CDs) in the recent period show a cointegrating

Chart 1
Interest rate corridor



movement with a very high speed of adjustment, reflecting a convergence of money market rates which augurs well for the prospective targeting of interest rates in the conduct of monetary policy.

The use of monetary instruments in India has undergone a shift from direct to indirect instruments. The process has been facilitated by reforms in the monetary and financial system. The increasing openness of the economy and a market-determined exchange rate mean that the focus of policy should increasingly be to ensure an orderly movement in exchange and interest rates. There is growing evidence of a strengthening of the interest rate channel of the monetary transmission mechanism, which would imply that interest rates could be used as effective targets of monetary policy. Although the Reserve Bank has been relying on broad money targets as a guide for conducting monetary policy, the focus of short-term monetary management in recent times has thus been on interest rates and the exchange rate. In the light of the emerging dynamics, the monetary and credit policy announcements for the year 1998-99 have emphasised a multi-indicator approach, with movements not only in the money supply but also in a host of economic variables being tracked for policy purposes.

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