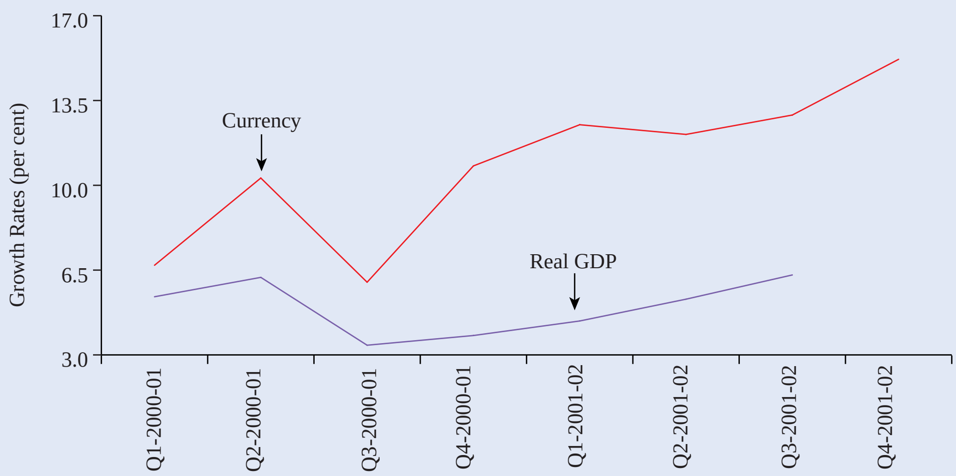
III. Monetary and Liquidity Conditions

Monetary Trends

Broad money (M_3) increased by 14.0 per cent during 2001-02, on a point-to-point basis, as against 16.8 per cent (14.5 per cent, net of India Millennium Deposits (IMDs)) during 2000-01. Currency growth at 15.2 per cent during 2001-02 was higher than that of 10.8 per cent recorded during the previous year reflecting the modest pick-up in economic activity (Chart 23). Aggregate deposits increased by 13.9 per cent during 2001-02, which was lower than that of 15.3 per cent (net of IMDs) recorded during the previous year. The accretion to aggregate deposits was largely on account of time deposits of commercial banks which increased by 15.7 per cent (15.8 per cent, net of IMDs, in 2000-01). Demand deposits of the commercial banks, on the other hand, decelerated to 6.4 per cent from 11.9 per cent in 2000-01.

Chart 23: Cash Demand and Economic Activity



The broad money growth of 14.0 per cent was in alignment with the indicative projection of 14.5 per cent set out in the Monetary and Credit Policy Statement for 2001-02 (Table 8 and Chart 24). On a monthly average basis, the year-on-year M_3 (net of RIBs/IMDs) growth rate at 15.2 per cent during 2001-02 was almost the same as that of 15.0 per cent recorded during 2000-01.

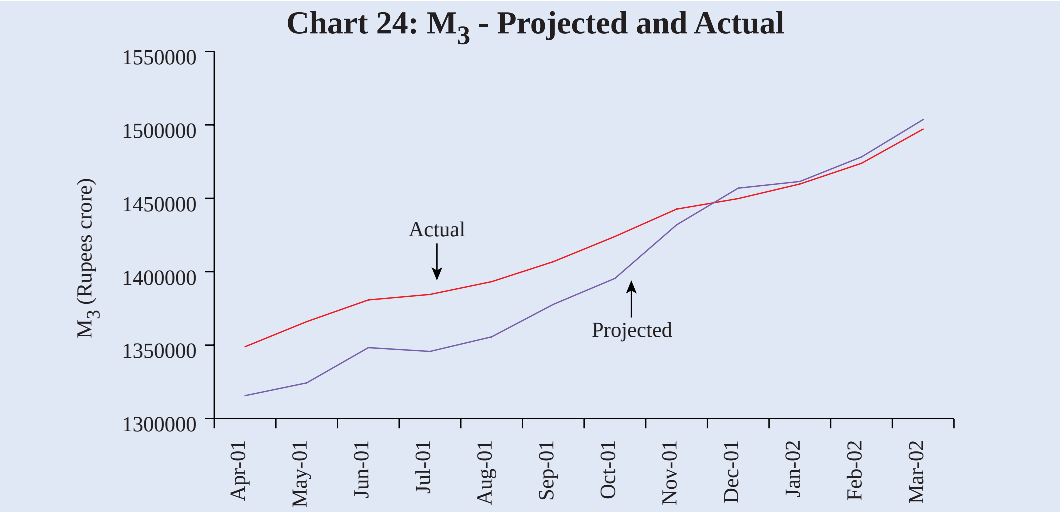


Table 8: Monetary Indicators

(Variation in per cent)

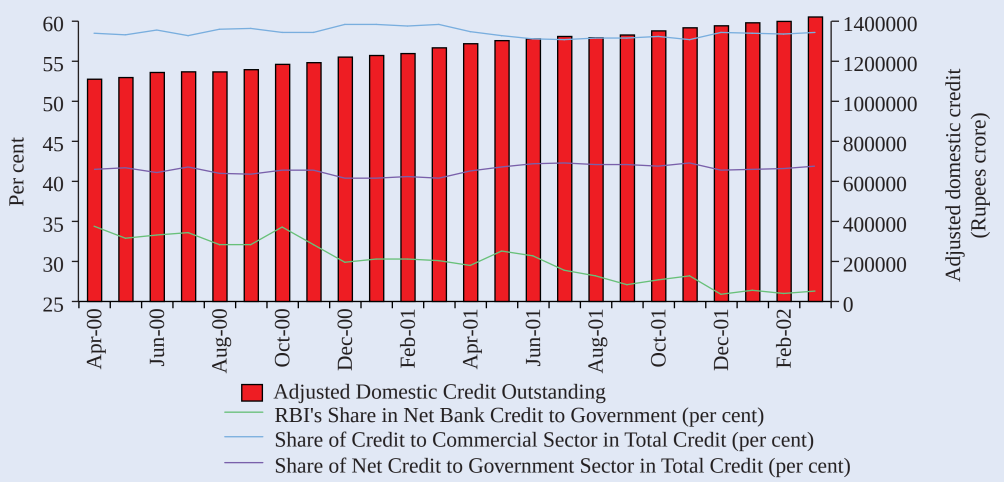
Variable	Outstanding as on March 31, 2002 (Rupees crore)	Point-to-point basis		Monthly average basis	
		2000-01	2001-02	2000-01	2001-02
1	2	3	4	5	6
1. Reserve Money	3,37,825	8.1	11.4	7.8	11.1
2. Narrow Money (M_1)	4,21,202	11.0	11.0	11.2	11.4
3. Broad Money (M_3)	14,97,133	16.8	14.0	15.8	16.2
a) M_3 net of IMDs and RIBs	14,53,526	14.8	14.5	15.0	15.2
4. Major Components of Broad Money					
a) Currency with the Public	2,41,441	10.8	15.2	9.2	12.7
b) Aggregate Deposits	12,52,847	18.0	13.9	17.3	16.9
Of which: Scheduled Commercial Banks' (SCBs') Aggregate Deposits (i+ii)	11,00,454	18.4	14.3	16.7	17.3
i) SCBs' Demand Deposits	1,51,681	11.9	6.4	14.7	10.4
ii) SCBs' Time Deposits	9,48,773	19.5	15.7	17.1	18.4
5. Major Sources of Broad Money					
a) Net Bank Credit to the Government (i+ii)	5,87,808	16.0	14.8	13.8	16.5
i) Net Reserve Bank Credit to the Government	1,54,471	3.8	0.4	0.9	1.7
Of which: to the Centre	1,46,028	4.8	-0.3	0.3	0.9
ii) Other Banks' Credit to the Government	4,33,338	22.2	21.0	21.2	23.6
b) Bank Credit to Commercial Sector	7,54,209	15.8	11.0	20.1	12.6
Of which: Scheduled commercial banks' credit	5,85,832	17.3	14.5	21.4	14.2
Of which: Non-food Credit	5,31,854	14.9	12.8	19.7	11.7
c) Net Foreign Exchange Assets of the Banking Sector	3,14,733	21.5	26.0	17.9	24.6

Data are provisional.
Figures pertaining to March 31, 2002 are before closure of the Government accounts.

Credit Trends

The growth in adjusted domestic credit (domestic credit inclusive of commercial banks' non-SLR investments) decelerated to 12.2 per cent during 2001-02 from 16.3 per cent during 2000-01. This was due to a deceleration in adjusted non-food credit off-take (11.6 per cent during 2001-02 as against 16.0 per cent in 2000-01) due to subdued industrial activity. Food credit increased by Rs.13,987 crore (35.0 per cent) during 2001-02 as against Rs.14,300 crore (55.7 per cent) during 2000-01. Net bank credit to the Government increased by 14.8 per cent during 2001-02, which was lower than that of 16.0 per cent during the previous year. The share of net bank credit to the Government was consistently around 42.0 per cent of adjusted domestic credit. The higher net bank credit to the Government was largely provided by commercial banks; the share of the Reserve Bank in outstanding net bank credit to the Government sector, on the other hand, declined from 30.1 per cent at end-March 2001 to 26.3 per cent at end-March 2002 (Chart 25).

Chart 25: Share of Government and Commercial Sector in Adjusted Domestic Credit



New Monetary and Liquidity Aggregates

The new broad money aggregates (NM_3) [compiled on the basis of the recommendations of the Working Group on Money Supply: Analytics and

Methodology of Compilation (Chairman: Dr. Y.V. Reddy)] registered a growth of 15.8 per cent as on February 22, 2002 as against an increase of 13.9 per cent a year ago. The trends in NM_3, by and large, mirrored those of the existing broad money aggregates (M_3), netted for the IMDs. The three liquidity aggregates (L_1, L_2 and L_3) introduced along with new monetary aggregates suggest an increase in liquidity in the system during 2001-02 as compared with the previous year (Table 9).

Table 9: Select New Monetary and Liquidity Aggregates

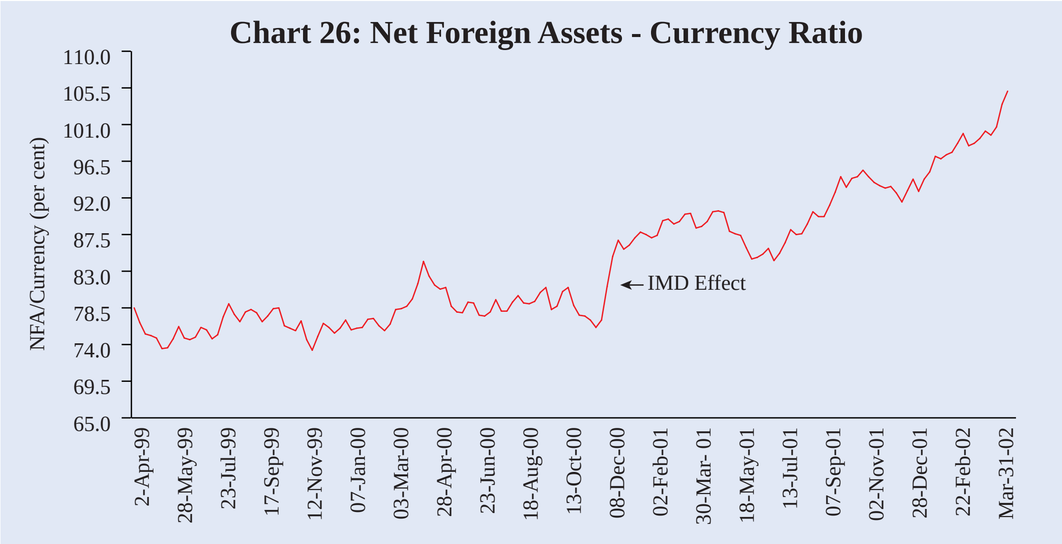
(Rupees crore)

Aggregate	Definitional changes	Outstanding as at end-February 2002	Year-on-year variations (per cent) 2000-01	2001-02
1	2	3	4	5
NM_3	M_3 – Non-resident repatriable foreign currency fixed deposits + Non-bank call/term borrowings	13,97,814	13.9	15.8
L_1	NM_3 + Post Office deposits (excluding National Savings Certificates)	14,38,017	14.2	15.9
L_2	L_1 + Term deposits with term-lending and refinancing institutions (FIs) + Term borrowing by FIs + Certificates of deposit issued by FIs	14,49,645	14.4	15.7
L_3*	L_2 + Public deposits of NBFCs	14,37,053	14.2	14.7
Domestic Credit	Domestic credit (existing) + RBI's credit to NABARD + Banks' investments in all securities other than approved securities + Banks' net credit to primary dealers (PDs)	14,57,067	16.4	12.6
NFA of the Banking Sector	Net foreign assets (NFA) of the banking sector (existing) – Non-resident repatriable foreign currency fixed deposits – Banks' overseas foreign currency borrowing	2,12,093	23.7	30.2

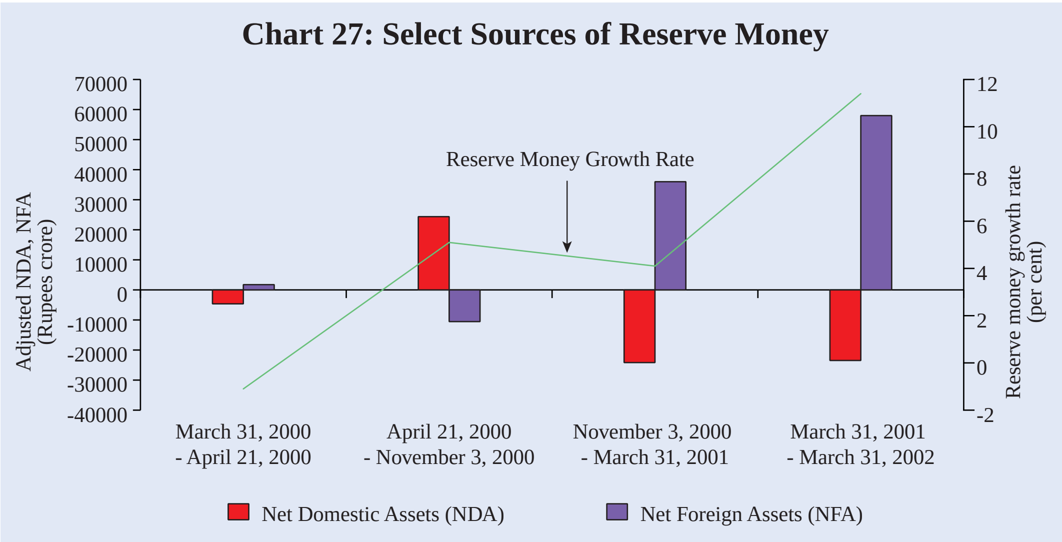
Data are provisional. * As at end-December 2001.

Reserve Money

Reserve money expansion during 2001-02 was 11.4 per cent (Rs.34,514 crore) as against 8.1 per cent (Rs.22,757 crore) during the previous year. The increase in reserve money was driven primarily by a steady accretion to the Reserve Bank's foreign currency assets which, net of revaluation, rose by Rs.55,836 crore during 2001-02 as against Rs.27,463 crore in 2000-01. The year-on-year expansion in reserve money was 12.9 per cent as on April 19, 2002 as against 9.7 per cent a year ago. The ratio of net foreign assets of the Reserve Bank to currency increased steadily during the year to reach 105.2 per cent as on March 31, 2002 (Chart 26).



The net domestic assets (NDA) of the Reserve Bank (adjusted for revaluation), on the other hand, declined by Rs.23,480 crore during 2001-02 on top of a decline of Rs.4,444 crore during the previous year (Chart 27).



All the major components of net domestic assets (NDA) recorded a decline. Although the Reserve Bank's subscription to the Centre's fresh dated securities amounted to Rs.28,892 crore (at face value), it was more than offset by net open market sales amounting to Rs.30,335 crore. As a result, the net Reserve Bank credit to the Central Government declined by 0.3 per cent during 2001-02 (before closure of the Government accounts) as against an increase of 4.8 per cent during 2000-01. Recourse to refinance by commercial banks and Primary Dealers also declined by Rs.2,119 crore and Rs.1,782 crore, respectively.

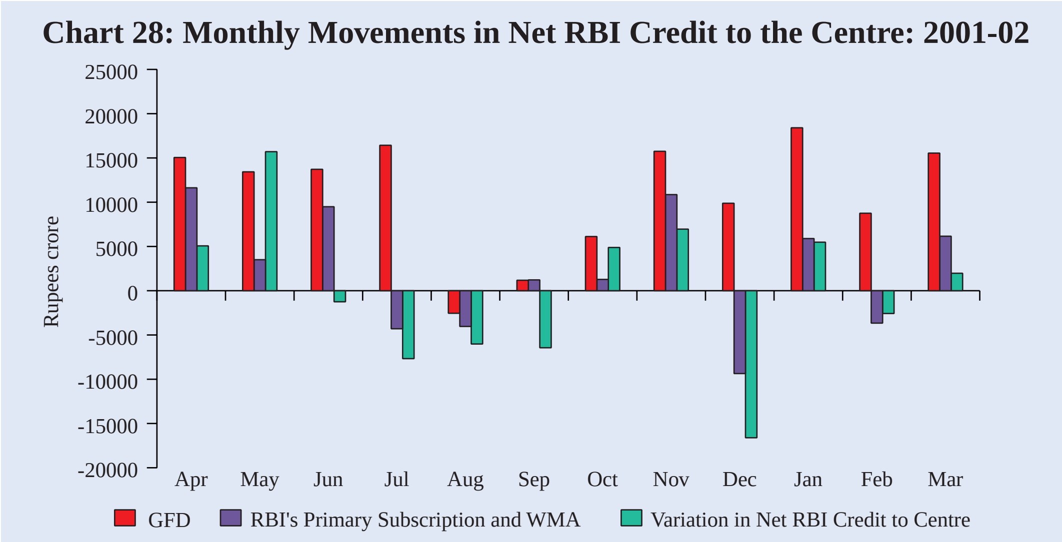
The Reserve Bank's net credit to the Centre can be viewed as a result of the interaction of direct monetisation of the fiscal deficit in terms of Reserve Bank's primary operations and strategic open market (including repo) operations, reflective of the Reserve Bank's assessment of the liquidity and absorptive capacity of the market rather than being passively determined by the budgetary gap, as was the case earlier (Table 10 and Chart 28).

Table 10: Net Reserve Bank Credit to the Centre: Variations

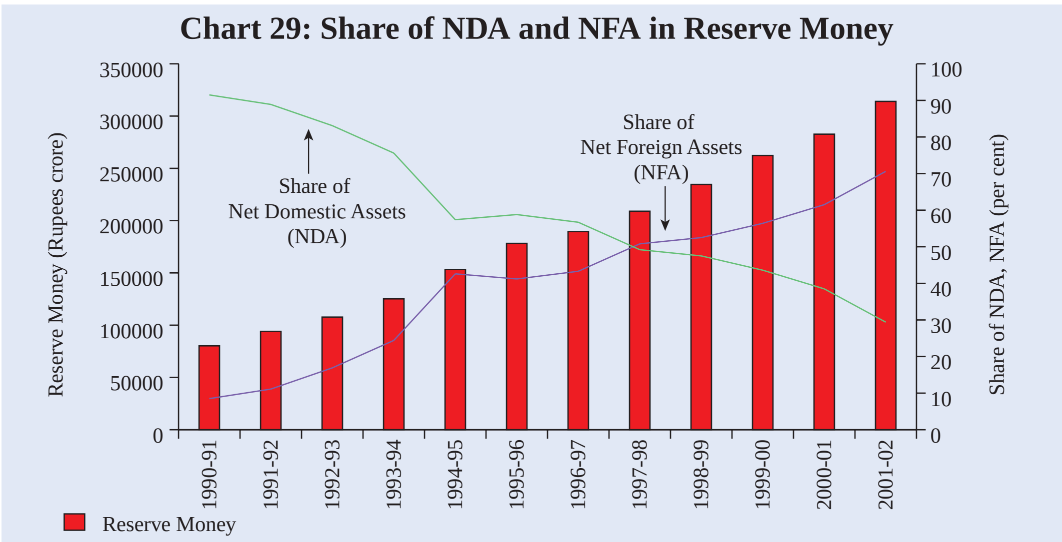
(Rupees crore)

Variable	2000-01	2001-02	June 29, 2001 over March 31, 2001	September 21, 2001 over June 29, 2001	December 28, 2001 over September 21, 2001	March 31, 2002 over December 28, 2001
1	2	3	4	5	6	7
Net Reserve Bank Credit to the Centre (1+2+3+4-5)	6,705 (4.8)	-506 (-0.3)	19,523 (13.3)	-20,140 (-12.1)	-4,770 (-3.3)	4,880 (3.5)
1. Loans and Advances	4,413	-219	3,619	-7,791	-1,223	5,176
2. Treasury Bills held by the Reserve Bank	-1,388	-464	-3	-480	0	18
3. Reserve Bank's holdings of Dated Securities	4,301	-2,223	13,150	-11,907	-3,529	63
4. Reserve Bank's holdings of Rupee Coins	-25	82	39	38	-18	24
5. Central Government Deposits	596	-2,319	-2,718	0	-1	400
*Memo Items**						
1. Market Borrowings of Dated Securities by the Centre #	1,00,183	1,14,213	46,000	31,000	24,000	13,213
2. Reserve Bank's Primary Subscription to Dated Securities	31,151	28,892	21,000	679	4,000	3,213
3. Repos (-) / Reverse Repos (+) (LAF), Net position	-1,355	-3,000	1,355	1,410	-1,160	-4,605
4. Net Open Market Sales #	19,218	30,335	10,929	13,985	5,273	148
5. Primary Operations	34,943	31,074	27,376	-7,074	2,759	8,013

* At face value. # Excludes Treasury Bills. Figures in parentheses refer to percentage variations. Figures pertaining to March 31, 2002 are before closure of the Government accounts.

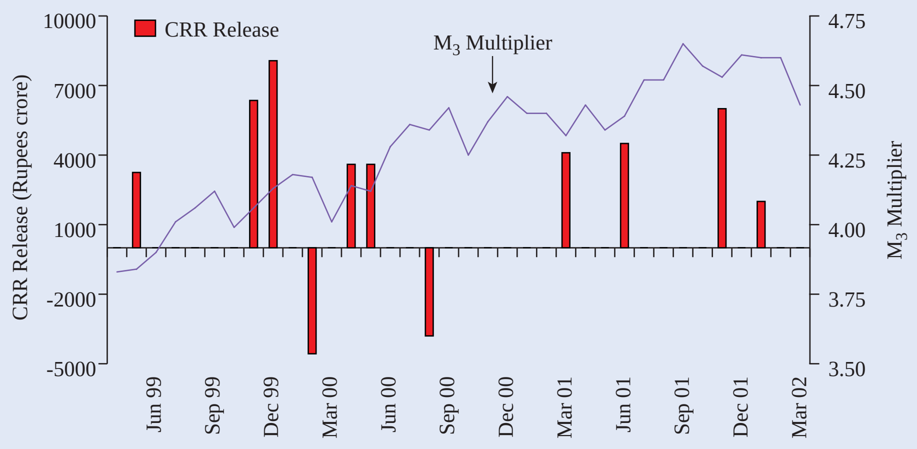


The net foreign exchange assets of the Reserve Bank formed only 8.5 per cent of the average outstanding reserve money in 1990-91. The proportion, however, increased sharply to 61.5 per cent by 2000-01 and further to 70.6 during 2001-02 with a corresponding decline in the share of net domestic assets (Chart 29).



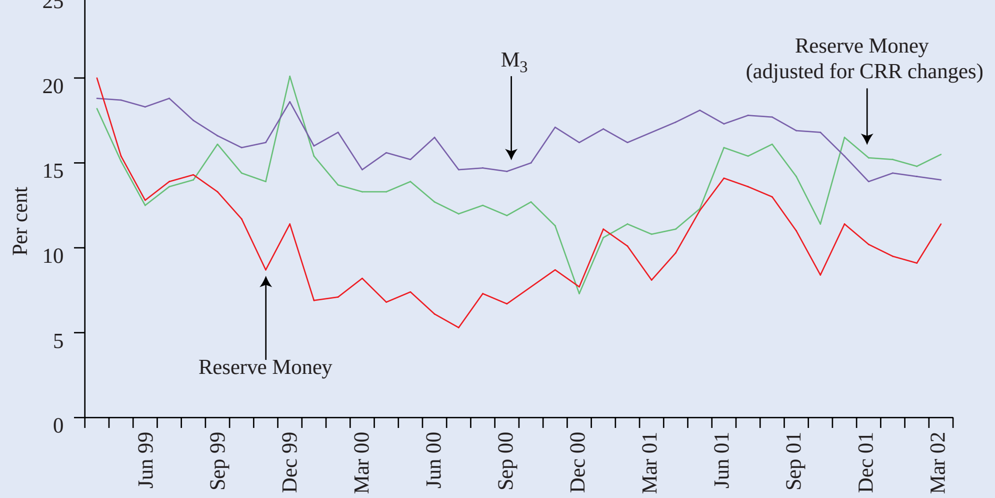
The broad money multiplier increased from a monthly average of 4.3 in 2000-01 to 4.5 during 2001-02 reflecting reduction in the CRR (Chart 30).

Chart 30: Movements in Broad Money Multiplier



Adjusted for the first round impact of CRR changes, the reserve money registered a year-on-year growth rate of 14.5 per cent, on a monthly average basis, during 2001-02, which was higher than that of 11.7 per cent during 2000-01 (Chart 31).

Chart 31: Money Supply and Reserve Money



Liquidity Management

The shift from a regime of administered interest rates and direct credit control to indirect market-based monetary instruments in India has necessitated the institution of an efficient liquidity management framework that ensures stable financial market conditions. Most central banks attempt to estimate the market liquidity, autonomous of policy action, and then conduct money market operations to achieve a targeted quantum or price of liquidity or a combination of both depending upon the relative efficacy of monetary policy transmission channels (Table 11).

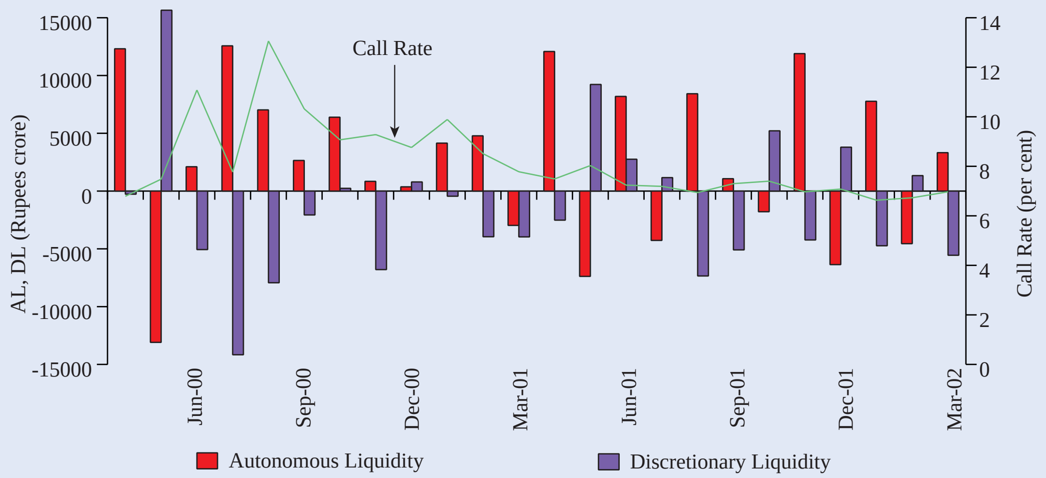
Table 11: Operating Procedures of Liquidity Management: Major Paradigms

Central Bank/ Country	Operating Target	Dissemina-tion of estimate of Liquidity Forecast	Instruments	Frequency of Market Operations	Eligible Counter parties	Eligible collateral
1	2	3	4	5	6	7
European Central Bank	No official operating target	Weekly	OMO, repos, marginal lending facility and deposit facility	One per week plus an additional one per month, on a regular basis	Credit institutions meeting certain operational requirements	Both marketable and non-marketable private and public instruments
Japan	Current account balances@	Daily	OMO, repos, comple-mentary lending facility	More than one per day	Major players in the market	Both private and public instruments
USA	Federal funds rate		Discount rate, OMO, repos, changes in required reserve ratios (rarely used)	Typically one per day	Primary dealers	Direct obligations of the government or those fully guaranteed by federal government agencies.

@ Effective March 2001, the Bank of Japan switched from its previous interest rate target (uncollateralised overnight call money rate) to the quantitative target (current account balances held by financial institutions at the Bank of Japan) in view of prevailing conditions.

In line with the evolving international practices and keeping in view the characteristics of the Indian economy, the Reserve Bank has put in place a liquidity adjustment facility in which the liquidity in the system is modulated primarily through repo and reverse-repo operations. The repo operations are supplemented by open market operations (outright purchases/sales of government securities), changes in reserve requirements, access to the Reserve Bank's standing facilities and direct interest rate signals through changes in the Bank Rate/repo rates. Liquidity is modulated, to the extent feasible, by strategically counterbalancing autonomous liquidity (AL[1]) with changes in both the quantum and the price of discretionary liquidity (DL) in order to ensure stability in the money market conditions (Chart 32).

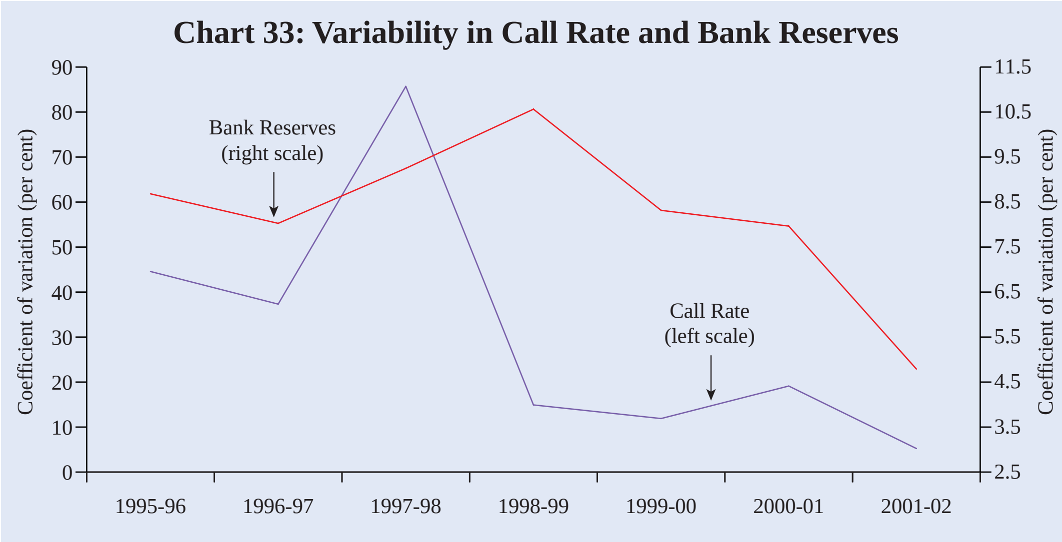
Chart 32: AL, DL and Call Rate Movements



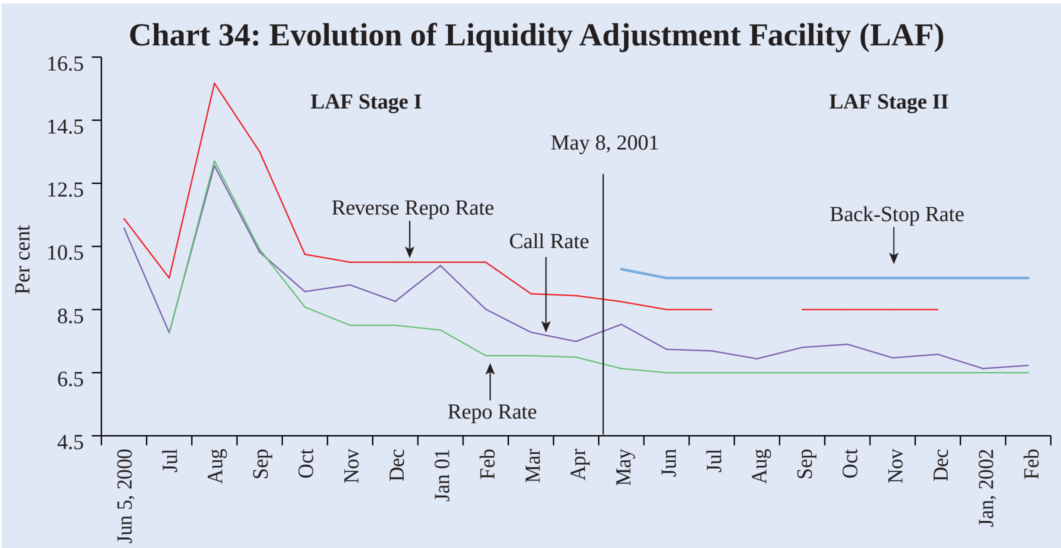
The volatility in the inter-bank call rates and bank reserves, as measured by the co-efficient of variation, has come down appreciably in recent years (Chart 33).

[1] AL = Reserve Bank's net claims on the Government (adjusted for net open market (including repo) operations) + Claims on banks (other than credit to scheduled commercial banks) + Credit to the commercial sector (other than credit to PDs) + Net foreign assets – Notes in circulation – 'Other' deposits – Net non-monetary liabilities, in flow terms.

DL = Net open market (including repo) operations + Credit to scheduled commercial banks and primary dealers netted for cumulative changes in reserve requirements, in flow terms.



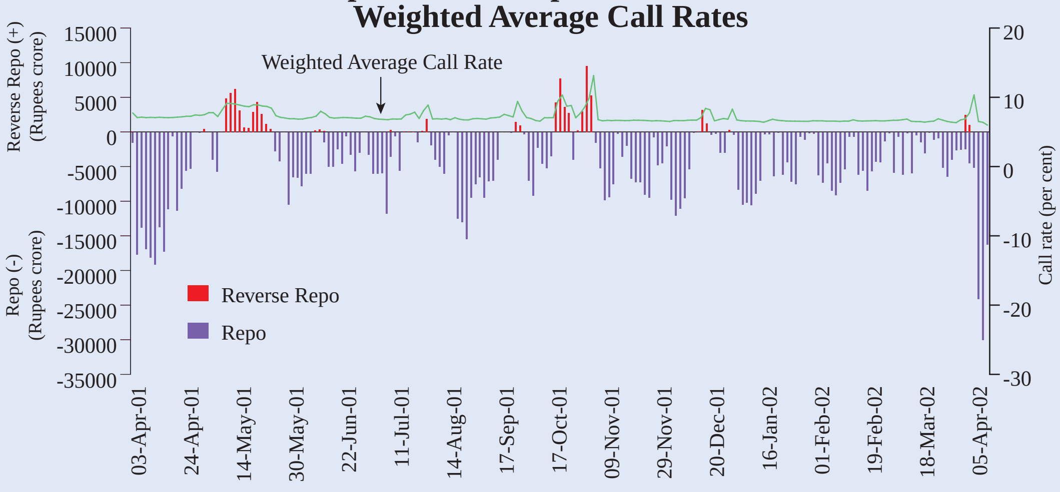
The liquidity adjustment facility (LAF), introduced since June 5, 2000, has emerged as an effective and flexible tool to modulate liquidity conditions on a day-to-day basis (Chart 34). While the Bank Rate provides the medium-term signal, the operation of LAF through repo and reverse repo rates in conjunction with all other operating instruments lends support to the direction of interest rates consistent with the monetary policy stance from time to time. The repo and reverse repo rates



are expected to operate a flexible corridor around the Bank Rate. This enables the LAF operations to meet the system's mismatches in liquidity effectively and smoothens out aberrations in the short-term money market rates. The second stage of LAF with rationalisation of standing liquidity facilities, changes in the operating procedures and curtailment of call money lending by non-bank participants became effective in May 2001.

The liquidity conditions remained generally comfortable during 2001-02 prompting the Reserve Bank to absorb liquidity through repo operations. Injections of liquidity through reverse repos were, however, undertaken on a few occasions to manage temporary tightness in the money market (Chart 35).

Chart 35: Repo, Reverse Repo Auctions under LAF and Weighted Average Call Rates



The repo and reverse repo cut-off rates were reduced by 25 basis points to 6.75 per cent and 8.75 per cent, respectively, towards end-April 2001 signalling softer interest rate conditions. During the transitional period of switchover into the second stage of the LAF, monetary conditions were eased and a series of reverse repo injections were made during May 8-23, 2001 (averaging an outstanding amount of Rs. 3,340 crore) to stabilise the call money rates within an acceptable range. Repo and reverse repo cut-off rates were further reduced by 25 basis points each to 6.5 per cent and 8.5 per cent, respectively, during May-June 2001.

As monetary conditions eased, ample liquidity was available during the second half of 2001-02. A cut in the interest rate on small saving instrument in the Union Budget 2002-03 enabled the Reserve Bank to conduct a fixed rate repo auction at a lower cut-off rate of 6.0 per cent on March 5, 2002, which prevailed in the subsequent LAF auctions. The usual year-end tightening at end-March 2002 on account of balance sheet considerations and tax outflows was accommodated through liquidity injections by reverse repos.

The year 2002-03 commenced with a significant easing of liquidity conditions. This was reflected in higher repo bids received at the LAF auctions. The average daily repo outstanding amounted to Rs. 12,907 crore during the period April 2-16, 2002 with a peak repo outstanding amount of Rs. 30,055 crore recorded on April 4, 2002.