Monetary developments

Emerging trends in 2008-09

4.49 Practitioners of monetary policy in India, as in other countries of the world, have faced an extraordinary economic situation in the recent past, calling for innovative solutions not only backed by economic theory and sophisticated mathematical models but also by initiatives to respond in time and even ahead of the time curve. While the task of monetary management by the RBI in India has centred around managing a judicious balance between price stability and sustaining the growth momentum, the global financial turmoil reinforced the importance of preserving financial stability through prudent regulatory surveillance and effective supervision. The current policy challenge, accordingly, was perceived as the need to strike an optimal balance between preserving financial stability, maintaining price stability, anchoring inflationary expectations, and at the same time sustaining the growth momentum. Key features of the Annual Policy Statement for 2008-09 and of the mid-term review of the RBI are detailed in Box 4.3.

4.50 During financial year 2007-08 in the backdrop of increased capital inflows, changes in the policy rates mainly involved the cash reserve ratio (CRR) (which was increased by 150 basis points from 6.0 per cent as it prevailed on April 1, 2007 to 7.5 per cent w.e.f. November 10, 2007); the repo rate (RR) at 7.75 per cent and the reverse-repo rate (R-RR) at 6.0 per cent were left unchanged.

4.51 During the first six months of the financial year 2008-09, RBI consciously endeavoured to control monetary expansion through increases in CRR and RR. While CRR was increased by 150 basis points in six tranches from 7.50 (before April 26, 2008) to 9.0 per cent w.e.f. August 30, 2008, RR was also increased by 125 basis points in three tranches from the level of 7.75 (as it prevailed on April 1, 2008) to 9.0 per cent w.e.f. August 30, 2008. These changes were made in the context of monetary expansion and double-digit inflation in the economy. The R-RR was, however, left unchanged at 6.0 per cent.

4.52 The subsequent six months of the financial year 2008-09 witnessed tight liquidity situation in the economy. In view of this, RBI facilitated monetary expansion through decreases in the CRR, RR, R-RR and the statutory liquidity ratio (SLR). The CRR was lowered by 400 basis points in four tranches

Box 4.3 : Annual policy statement of the RBI (2008-09)

A: Annual policy statement for 2008-09, announced on April 29, 2008

- The bank rate kept unchanged at 6.0 per cent.
- The reverse-repo rate and repo rate kept unchanged at 6.00 per cent and 7.75 per cent, respectively.
- The RBI retains the option to conduct overnight repo or longer term repo under the liquidity adjustment facility (LAF) depending on market conditions and other relevant factors. The RBI will continue to use this flexibly including the right to accept or reject tender(s) under the LAF, wholly or partially, if deemed fit, so as to make efficient use of the LAF in daily liquidity management.
- Cash reserve ratio (CRR) of the scheduled banks increased to 8.25 per cent with effect from the fortnight beginning May 24, 2008.

B: Mid-term review of annual policy statement

- The bank rate kept unchanged at 6.0 per cent.
- The repo rate under LAF is kept unchanged at 8.0 per cent.
- The reverse-repo rate under the LAF kept unchanged at 6.0 per cent.
- RBI has the flexibility to conduct repo/reverse-repo auctions at a fixed rate or at variable rates as circumstances warrant.
- RBI retains the option to conduct overnight or longer term repo/reverse-repo under the LAF depending on market conditions and other relevant factors. The RBI will continue to use this flexibility including the right to accept or reject tender(s) under the LAF, wholly or partially, if deemed fit, so as to make efficient use of LAF in daily liquidity management.
- The CRR kept unchanged at 6.5 per cent.

Table 4.19 : Revision in policy rates and movement of lending rates

Sl. No	Date	Repo rate	Reverse-repo rate	CRR	Yield on TBs 91 days**	Range of PLR **
1	November 10, 2007	7.75	6.00	7.50	7.31	12.75-13.25
2	April 26, 2008	7.75	6.00	7.75	7.44	12.25-12.75
3	May 10, 2008	7.75	6.00	8.00	7.31	12.25-12.75
4	May 24, 2008	7.75	6.00	8.25	7.48	12.25-12.75
5	June 12, 2008	8.00	6.00	8.25	7.69	12.25-12.75
6	June 25, 2008	8.50	6.00	8.25	8.73	12.25-12.75
7	July 5, 2008	8.50	6.00	8.50	8.81	12.75-13.25
8	July 19, 2008	8.50	6.00	8.75	9.11	12.75-13.25
9	August 30, 2008	9.00	6.00	9.00	9.06	13.25-14.00
10	October 11, 2008	9.00	6.00	6.50	8.48	13.75-14.00
11	October 20, 2008	8.00	6.00	6.50	8.69	13.75-14.00
12	October 25, 2008	8.00	6.00	6.00	7.19	13.75-14.00
13	November 3, 2008	7.50	6.00	6.00	7.44	13.75-14.00
14	November 8, 2008	7.50	6.00	5.50	7.39	13.75-14.00
15	December 6, 2008	6.50	5.00	5.50	6.60	12.50-13.25
16	December 10, 2008	6.50	5.00	5.50	5.65	12.50-13.25
17	December 24, 2008	6.50	5.00	5.50	5.04	12.75-13.25
18	December 31, 2008	6.50	5.00	5.50	4.71	12.75-13.25
19	January 5, 2009	5.50	4.00	5.50	4.71	12.00-12.50
20	January 17, 2009	5.50	4.00	5.00	4.58	12.00-12.50
21	January 31, 2009	5.50	4.00	5.00	4.79	12.00-12.50
22	March 5, 2009	5.00	3.50	5.00	4.67	11.50-12.50
23	April 21, 2009	4.75	3.25	5.00	3.81	11.50-12.50

Source : RBI

** Closest Date   CRR : Cash Reserve Ratio   PLR : Prime Lending Rate   TB : Treasury Bills

from 9.0 (as of August 30, 2008) to 5.0 per cent w.e.f. January 17, 2009. The RR was also reduced in the wake of emerging liquidity crunch, by 400 basis points in five tranches from 9.0 (as of September 30, 2008) to 5.0 per cent w.e.f. March 5, 2009. The R-RR was lowered by 250 basis points in three tranches from 6.0 (as it was prevalent in November 2008) to 3.5 per cent w.e.f. March 5, 2009. The reductions in R-RR were simultaneous with decreases in the RR. The changes in the policy rates are brought out in Table 4.19.

4.53 The SLR was also cut by 100 basis points from 25 per cent of net demand and time liabilities (NDTL) to 24 per cent with effect from fortnight beginning November 8, 2008. In addition, sector-specific steps to ease liquidity were introduced, in consonance with an upward revision of the indicative target growth rates for broad money and bank credit to the commercial sector.

Monetary aggregates

4.54 During financial year 2007-08, with enhanced level of capital inflows, reserve money (M_0) growth at 31.0 per cent was higher than 23.9 per cent during the financial year 2006-07; the growth rates of narrow money (M_1) at 19.3 per cent and broad money (M_3) at 21.2 per cent marginally differed from 17.1 per cent and 21.5 per cent respectively, recorded in 2006-07. During the financial year 2008-09 all the monetary aggregates and parameters were impacted by the overall developments in the economy. Reversing the past uptrend capital inflows reduced, because of a decline in Foreign Institutional Investor (FII) inflows. The months of September/October 2008 witnessed tight liquidity conditions in the Indian money market which was co-terminus with the emergent turbulence in the global financial markets. While the global financial crisis continued beyond October 2008, the liquidity conditions in the Indian money market eased; in fact the position changed to one of surplus liquidity as reflected in the extensive recourse to reverse-repo (R-R) facility of the RBI.

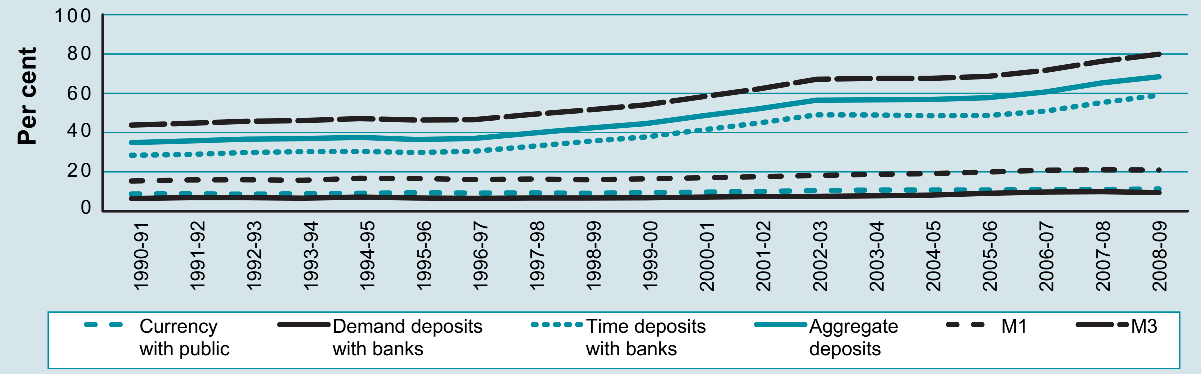
4.55 The following data traces the trend in the relationship between monetary aggregates and

Table 4.20 : Select monetary aggregates (as per cent of GDP)

Year	As per cent of GDP-MP					
	Currency with public	Demand deposits with banks	Time deposits with banks	Aggregate deposits	M_1	M_3
1990-91	8.7	6.4	28.5	34.9	15.3	43.8
1991-92	8.8	6.9	28.8	35.7	15.9	44.7
1992-93	8.6	6.9	29.8	36.6	16.0	45.7
1993-94	8.8	6.6	30.3	36.9	15.7	46.1
1994-95	9.1	7.2	30.4	37.6	16.7	47.1
1995-96	9.4	6.7	29.8	36.5	16.6	46.4
1996-97	9.2	6.5	30.5	37.0	16.1	46.6
1997-98	9.3	6.7	33.0	39.7	16.3	49.2
1998-99	9.1	6.7	35.5	42.2	16.0	51.5
1999-00	9.5	6.8	37.7	44.5	16.4	54.1
2000-01	9.6	7.2	41.3	48.5	17.0	58.2
2001-02	10.0	7.4	44.9	52.2	17.5	62.3
2002-03	10.5	7.5	49.0	56.5	18.2	67.1
2003-04	10.7	7.8	48.9	56.7	18.7	67.6
2004-05	10.7	8.2	48.6	56.8	19.1	67.6
2005-06	10.7	9.1	48.7	57.8	19.9	68.6
2006-07	10.9	9.7	50.9	60.6	20.8	71.6
2007-08	11.0	9.9	55.3	65.3	21.0	76.3
2008-09	11.3	9.5	59.0	68.4	20.9	79.9

Source : RBI GDP-MP : Gross Domestic Product at market prices

Figure 4.7 : Selected monetary aggregates as per cent of GDP-MP



GDP_{MP} (Table 4.20, Figure 4.7). The steady increase in the ratio of money supply to GDP is consistent with the monetary deepening in the economy.

Reserve money (M_0)

4.56 Reserve money (M_0) during the financial year 2008-09 (till March 31, 2009) increased moderately by Rs. 59,600 crore compared to an expansion of Rs. 2,19,412 crore in the corresponding period of last year. This translated into an increase of 6.4 per cent compared to an increase of 31.0 per cent in the corresponding period of last year. During the first half (H I) of the financial year (till September 26, 2008) reserve money (M_0) expansion at Rs. 28,634 crore was lower than Rs. 72,318 crore in the H I of last year. This translated into an increase of 3.1 per cent compared to 10.2 per cent in the corresponding period of last year.

4.57 Reserve money (M_0) during the second half (H II) of financial year 2008-09 (from September 26, 2008 till March 31, 2009) increased by Rs. 30,966 crore compared to an expansion of Rs. 1,47,094 crore in the corresponding period of last year. This translated into an increase of 3.2 per cent compared to an increase of 18.8 per cent in the corresponding period of last year.

Sources of change in reserve money (M_0)

4.58 The increase in an important source of reserve money, viz. the net foreign exchange assets (NFA) of RBI during the financial year 2008-09 (till March 31, 2009) was Rs. 43,986 crore which was significantly lower as compared to the expansion of Rs. 3,69,977 crore in the corresponding period of last year. This translated into an increase of 3.6 per cent compared to an expansion of 42.7 per cent in the corresponding period of last year. The lower level of growth of NFA of RBI owed mainly to the moderation in capital inflows (Figure 4.8).

4.59 The other source of reserve money viz. the net domestic credit (NDC) of the RBI during the financial year 2008-09 (till March 31, 2009) expanded by Rs. 2,00,921 crore compared to a contraction of (-) Rs. 1,18,426 crore in the corresponding period of the previous year. This was due to an increase in net RBI credit to the Central Government by Rs. 1,83,947 crore compared to a decrease of (-) Rs. 1,16,722 crore in the corresponding period of the previous year. The trend in the sources of M_0 during first/second half of the financial year 2008-09 are detailed below.

4.60 Expansion of NFA of RBI during the first half of financial year 2008-09 (till September 26, 2008) at Rs. 1,14,268 crore was marginally lower than the expansion of Rs. 1,16,685 crore in the corresponding period of previous year. This translated into an increase of 9.2 per cent only compared to 13.5 per cent in the corresponding period of last year. NDC of the RBI during the first half of financial year 2008-09 (till September 26, 2008) expanded by Rs. 52,952 crore compared to a decline of (-) Rs. 84,555 crore in the corresponding period of 2007-08. This was due to an increase in net RBI credit to the Central Government by Rs. 52,809 crore compared to a decline of (-) Rs. 77,413 crore in the corresponding period of 2007-08.

4.61 NFA of RBI during the second half of the financial year 2008-09 (from September 26, 2008 till March 31, 2009) contracted by (-) Rs. 70,282 crore compared to an expansion of Rs. 2,53,291 crore in the corresponding period of 2007-08. This translated into a decrease of (-) 5.2 per cent compared to an increase of 25.8 per cent in the corresponding period of previous year. NDC of the RBI during the second half of financial year 2008-09 (from September 26, 2008 till March 31, 2009) expanded by Rs. 1,47,970 crore compared to a decline of (-) Rs. 33,871 crore in the corresponding period of last year. This was mainly due to an increase in net RBI credit to the Central Government by Rs. 1,31,138 crore compared to a decline of (-) Rs. 39,359 crore in the corresponding period of last year.

Narrow money (M_1)

4.62 Narrow money (M_1) during the financial year 2008-09 (till March 31, 2009) increased by 8.1 per cent compared to an increase of 19.3 per cent in the corresponding period of last year. Narrow Money (M_1) during the first half of financial year 2008-09 (till September 26, 2008) decreased by (-) 1.2 per cent compared to an increase of 1.6 per cent in the corresponding period of 2007-08. On y-o-y basis, as on September 26, 2008, M_1 grew at the rate of 16.1 per cent, compared to an increase of 15.8 per cent in the corresponding date of the previous year. During the second half of the financial year 2008-09 (from September 26, 2008 till March 31, 2009), Narrow Money (M_1) increased by 9.3 per cent compared to an increase of 17.4 per cent in the corresponding period of the previous year (Figure 4.9).

Figure 4.8 : Reserve money and RBI net foreign exchange assets-annual growth rate

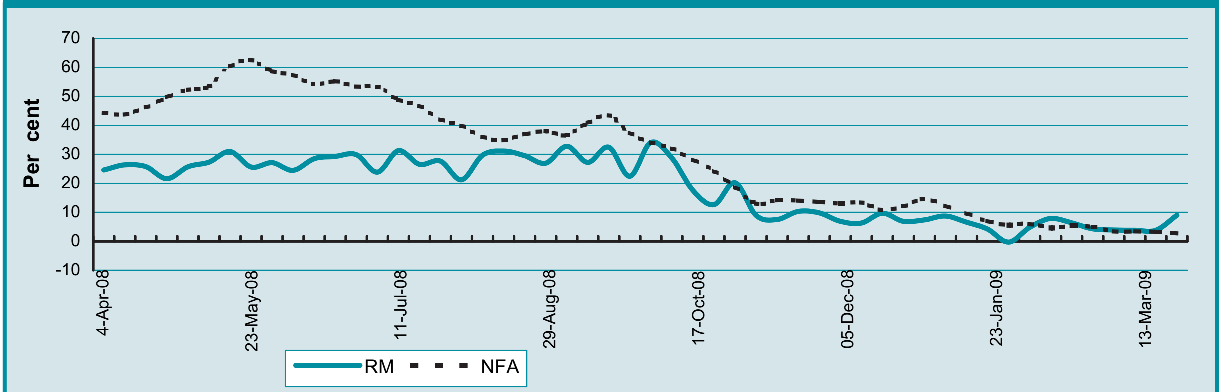
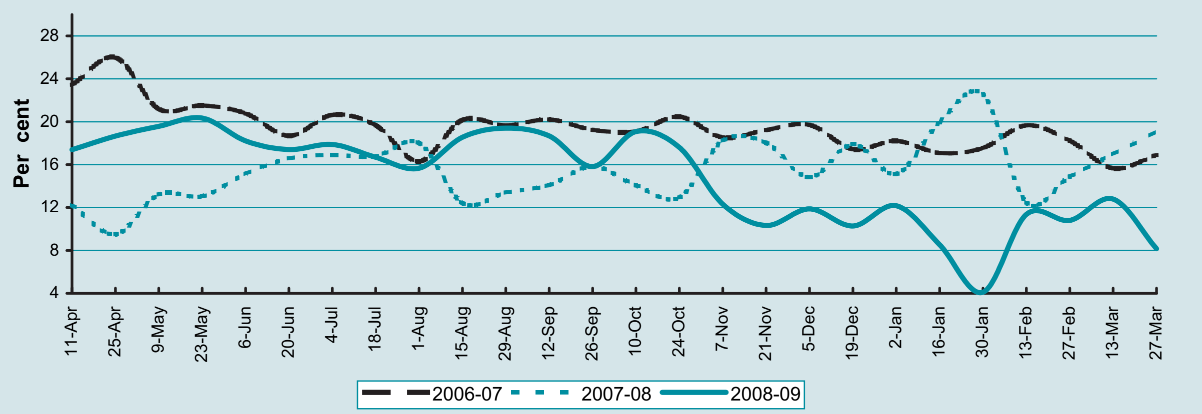


Figure 4.9 : Narrow money(M1) - annual growth rate (%)



Broad money (M_3)

4.63 The growth in Broad money (M_3) during the financial year 2008-09 (till March 31, 2009) was 18.4 per cent as compared to 21.2 per cent in 2007-08. Currency with the public, an important component of M_3 increased by 17.2 per cent in 2008-09 as compared to 17.7 per cent growth in 2007-08; growth in demand deposits during this period however declined by (-) 0.21 per cent compared to an increase of 20.9 per cent in during the comparable periods. The trend in growth in M_3 and its components during first/second half of the financial year 2008-09 presents the picture reflective of the monetary stance of RBI in the two periods.

4.64 Broad money (M_3) during the first half of financial year 2008-09 (till September 26, 2008) increased by 6.5 per cent compared to 8.2 per cent in the corresponding period of the previous year. During the same period, currency with the public increased by 3.1 per cent compared to 0.7 per cent in the corresponding period of last year. Growth in demand deposits during the first half of financial year 2008-09 (till September 26, 2008), in fact declined by (-)4.7 per cent compared to an increase of 3.0 per cent in the corresponding period of 2007-08; in respect of time deposits with banks, the growth in the first half of 2008-09 was lower at 9.5 per cent, vis-à-vis 11.0 per cent growth witnessed in the first half of 2007-08 (Figure 4.10).

4.65 Broad money (M_3) during the second half of financial year 2008-09 (from September 26, 2008 till March 31, 2009) increased by 11.2 per cent compared to 11.9 per cent in the corresponding period of 2007-08. During the second half of the financial year 2008-09 currency with the public increased by 13.7 per cent compared to 16.9 per cent in the corresponding period 2007-08; demand deposits during the second half of financial year 2008-09 at 4.73 per cent recorded a modest increase compared to an increase of 17.4 per cent recorded in the corresponding period of the previous year. The growth in time deposits in the second half of financial year 2008-09 at 11.9 per cent

Figure 4.10 : Broad money(M3) - annual growth rate (%)

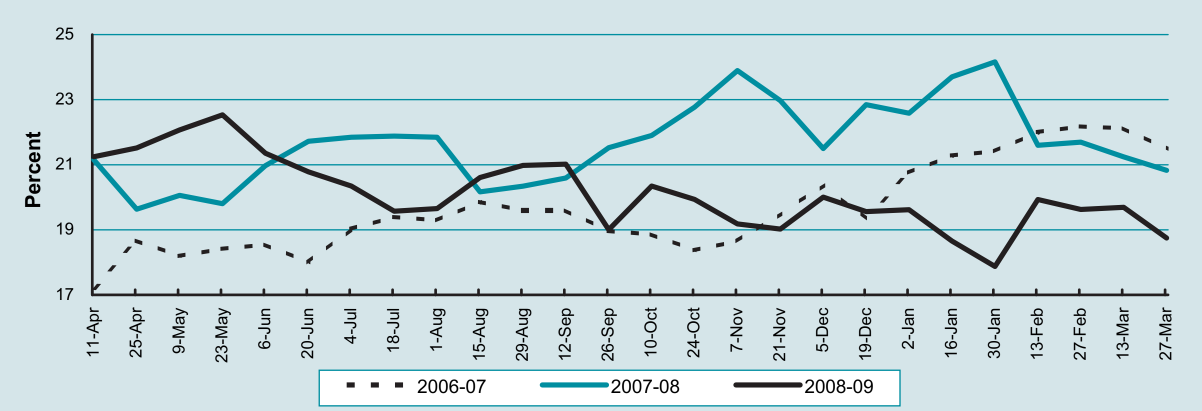


Table 4.21 : Summary table on monetary aggregates

Item	As on March 31, 2007-08	As on March 31, 2008-09	Growth rates (in per cent) 31-03-2008 to 26-09-2008	31-03-2007 to 26-09-2007	26-09-2008 to 31-03-2009	26-09-2007 to 31-03-2008
Reserve money (M_0)	31.0	6.4	3.1	10.2	3.2	18.8
Components						
(a) Currency in circulation	17.2	17.0	3.8	0.7	12.7	16.4
(b) Bankers' deposits with RBI	66.5	-11.3	3.0	35.8	-13.9	22.6
(c) Other deposits with RBI	20.8	-38.8	-39.7	-25.6	1.6	62.2
Narrow money (M_1)	19.3	8.1	-1.2	1.6	9.3	17.4
Broad money (M_3)	21.2	18.4	6.5	8.2	11.2	11.9
Components						
(a) Currency with public	17.7	17.2	3.1	0.7	13.7	16.9
(b) Demand deposits with banks	20.9	-0.2	-4.7	3	4.7	17.4
(c) Time deposits with banks	21.9	22.6	9.5	11.0	11.9	9.9
(d) Other deposits with banks	20.8	38.8	-39.7	-25.5	1.6	62.2
Bank credit	22.3	17.5	8.0	5.5	8.8	15.9
(a) Food credit	-4.6	4.1	1.7	-20.4	2.3	20.0
(b) Non-food credit	23	17.8	8.1	6.1	8.9	15.8
Memo item						
Money multiplier (M3/M0)	4.3	4.8				
Net Domestic Assets	13.3	26.2	6.8	7.2	18.1	5.7
Net Domestic Credit	17.5	23.3	7.4	5.4	14.8	11.5

Source : RBI

(from September 26, 2008 till March 31, 2009) was higher compared to 9.9 per cent recorded a year ago (Table 4.21).

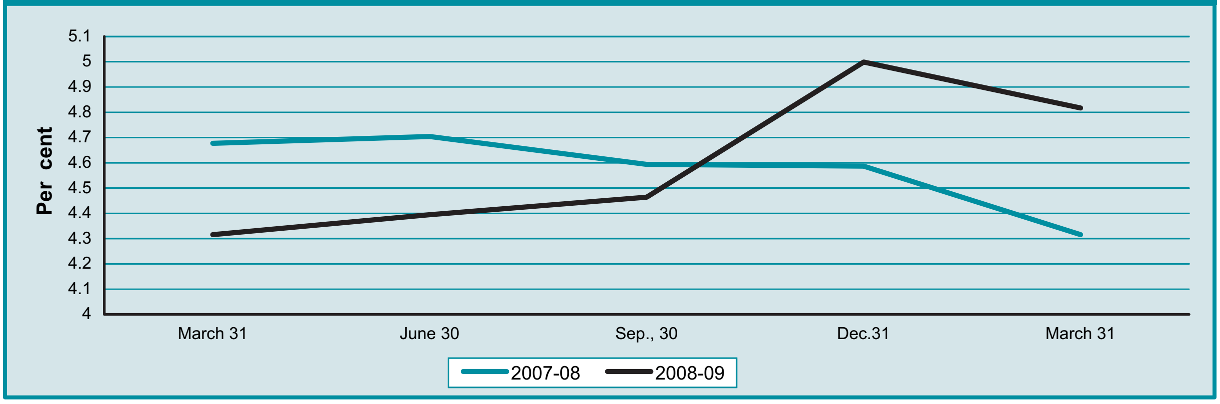
Money multiplier

4.66 During 2007-08, the growth rate of M_0 was higher than that of M_3. Accordingly, the money multiplier which is calculated as the ratio of M_3 to M_0 declined. From a level of 4.7 as of end-March 2007, it reached a level of 4.3 as of end-March 2008. However, during 2008-09 reduced capital inflows slowed down the growth of M_0; accordingly, the money multiplier that was 4.4 in June 2008 subsequently increased to 5.0 in December 2008 (Figure 4.11). It has moderated to a level of 4.8 as on March 31, 2009.

Liquidity management

4.67 Variations in cash balances of the Central Government, capital flows and the concomitant foreign exchange operations of the Reserve Bank were the key drivers of liquidity conditions during the year. RBI continued its policy of active management of liquidity during the financial year

Figure 4.11 : Movements in money multiplier



2008-09 using CRR, open market operations (OMO) including the market stabilization scheme (MSS) and the liquidity adjustment facility (LAF) to maintain appropriate liquidity in the system so that all legitimate requirements of credit were met consistent with the objective of price and financial stability. Accordingly, monetary and liquidity management operations changed course beginning mid-September 2008 in order to address the liquidity situation emerging from the unfolding global financial crisis.

4.68 During most of the period April to mid-September 2008, the drying up of capital inflows and the changes in RBI forex market operations from net spot purchases up to May 2008 to net spot sales thereafter (barring August 2008) reduced the generation of domestic liquidity. Consequently, auctions of dated securities under MSS were kept in abeyance after end-April 2008. Central Government cash balances generally declined (and thus eased systemic liquidity conditions) except during advance tax collections around mid-June 2008. Special market operations (SMO) were conducted by the RBI during the first week of June 2008 to the first week of August 2008 to improve access of public sector oil companies to domestic liquidity and alleviate the lumpy demand in the foreign exchange market in the context of the unprecedented increase in international oil prices. The SMOs were, however, liquidity neutral in nature. The SMOs were conducted intermittently in the subsequent part of the financial year (Table 4.22 and Figure 4.12).

4.69 Beginning mid-September 2008, the severe disruptions in international financial markets brought pressures on the domestic money and foreign exchange markets in conjunction with transient local factors such as advance tax payments. In order to alleviate these stresses and with the abatement of inflationary pressures, the Reserve Bank augmented rupee liquidity through a series of measures including

Table 4.22 : Liquidity management

(Rs. crore)

Outstanding as on last Friday	LAF	MSS @	Centre's surplus cash balances#
2008			
January	985	166739	70657
February	8085	175089	68538
March*	-50350	168392	76586
April	32765	172444	36549
May	-9600	175362	17102
June	-32090	174433	36513
July	-43260	171327	15043
August	-7600	173658	17393
September	-56480	173804	40358
October	-73590	165187	14383
November	-9880	132531	7981
December	14630	120050	3804
2009			
January	54605	108764	-9166
February	59820	101991	-9603
March*	1485	88077	16219

Source : RBI

@ MSS ceiling remained unchanged at Rs. 2,50,000 crore from November 7, 2007

* Data pertains to March 31.

\# Excludes minimum cash balances with the Reserve Bank in case of surplus, and negative sign indicates WMA/Overdraft.

Note : Negative sign under LAF indicates injection of liquidity through LAF.

Figure 4.12 : Market Stabilisation Scheme

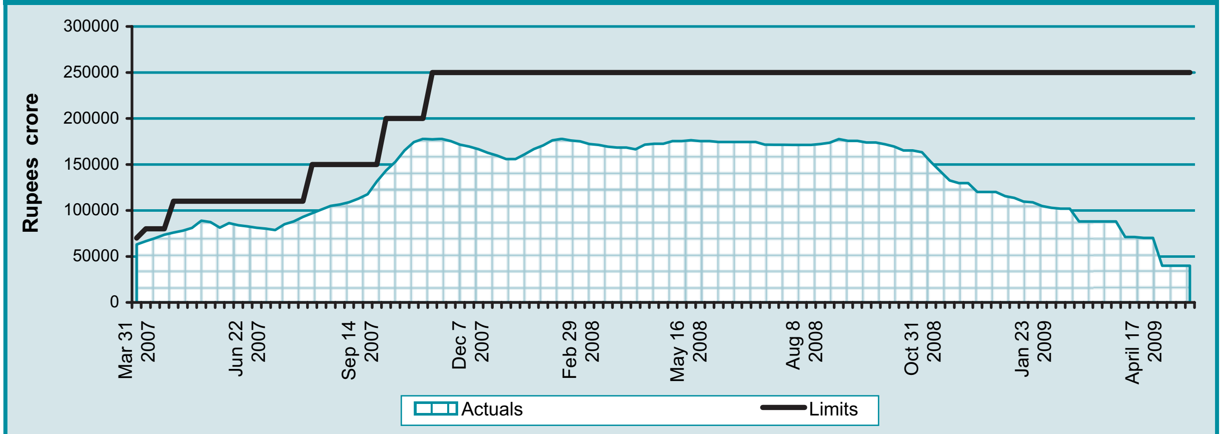
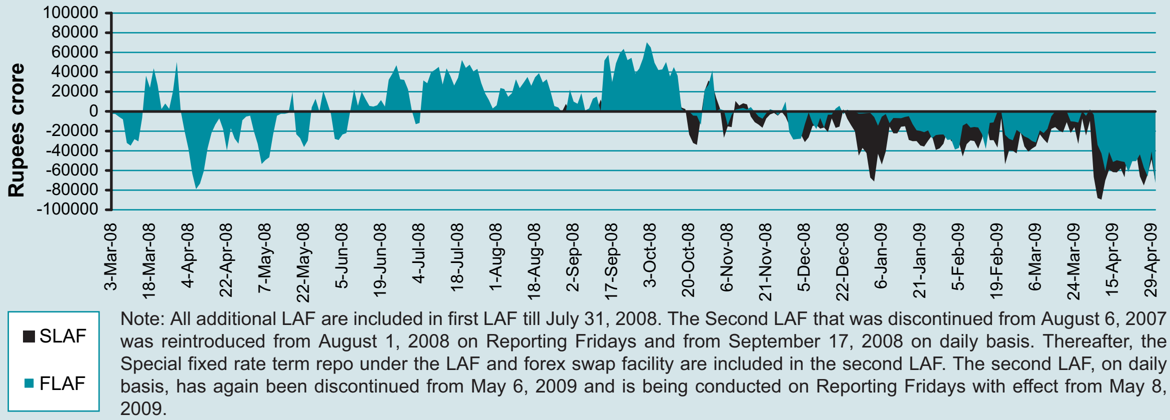


Figure 4.13 : LAF reverse-repo and repo volume



Note: All additional LAF are included in first LAF till July 31, 2008. The Second LAF that was discontinued from August 6, 2007 was reintroduced from August 1, 2008 on Reporting Fridays and from September 17, 2008 on daily basis. Thereafter, the Special fixed rate term repo under the LAF and forex swap facility are included in the second LAF. The second LAF, on daily basis, has again been discontinued from May 6, 2009 and is being conducted on Reporting Fridays with effect from May 8, 2009.

reduction in CRR by a cumulative 400 basis points to 5.0 per cent and a slew of special facilities. Furthermore, the repo rate and the reverse-repo rate under LAF were progressively reduced from 9.0 per cent to 5.0 per cent and 6.0 per cent to 3.5 per cent, respectively. These apart, MSS buy-back auctions were started from November 6, 2008, largely dovetailed with the Government's normal market borrowing programme to provide another avenue for injecting liquidity. Reflecting the impact of these measures, the average daily net outstanding liquidity injection under LAF, which had increased to around Rs. 43,000-46,000 crore during September and October 2008, declined sharply thereafter and turned into net absorption from early December 2008 (Figure 4.13).

4.70 For more effective liquidity management and to ensure that the market borrowing programme of the Government was conducted in a non-disruptive manner, the scope of the OMO was widened with effect from February 19, 2009 by including purchases of government securities through an auction-based mechanism in addition to purchases through the negotiated dealing system-order matching (NDS-OM) segment. The cut-off yields in the OMO purchase auctions were based on the attractiveness of offers for securities relative to their secondary market yields. Auction-based purchases aggregated Rs. 5,000 crore whereas purchases through NDS-OM aggregated Rs. 800 crore during February 2009.

4.71 With the change in the external accounts in the recent period resulting in attendant draining of primary liquidity reflecting the impact of the Reserve Bank's operations in the foreign exchange market, the memorandum of understanding (MoU) on the MSS between RBI and the GoI was amended on February 26, 2009 to permit the transfer of the sterilized liquidity from the MSS cash account to the normal cash account of the Government.

4.72 In March 2009, the OMO purchases through auctions and NDS-OM were placed at Rs. 41,640 crore and Rs. 4,475 crore respectively, whereas MSS redemptions amounted to Rs. 2,000 crore (over and above the de-sequestering of Rs. 12,000 crore of MSS balances); these helped to further ease liquidity conditions. The average daily net outstanding liquidity absorption through LAF, however, declined to around Rs. 33,000 crore in March 2009 from over Rs. 50,000 crore in the previous month, reflecting, inter alia, advance tax outflows. It is, however, noteworthy that the net injection of liquidity through LAF did not occur even on a single day of March 2009, including the last day of the month, in sharp contrast to the experience in the previous few years. The Reserve Bank also took a series of measures beginning mid-September 2008 to augment domestic liquidity (Box 4.4). Liquidity conditions eased significantly during April 2009, mainly reflecting the steep decline in GoI cash balances, notwithstanding relatively higher market borrowings. Auction-based OMO purchases during April 2009 aggregated around Rs. 12,000 crore. Average daily net absorption under LAF exceeded Rs. 1,00,000 crore during April 2009, as compared to that of around Rs. 33,000 crore in the previous month. On a review of the cash position of the Government of India, it was decided to de-sequester MSS balances to the extent of Rs. 28,000 crore as on May 2, 2009.

4.73 RBI had in April 2009 estimated the release of overall primary liquidity (actual/potential) to be of

Box 4.4 : Steps taken by the RBI to enhance rupee liquidity during 2008-09

In order to enhance domestic rupee liquidity, the RBI has taken several steps which are as follows:

- The cash reserve ratio (CRR) as a percentage of the net demand and time liabilities (NDTL) was reduced by a cumulative 400 basis points from 9 per cent to 5 per cent with effect from January 17, 2009.
- The statutory liquidity ratio (SLR) as a percentage of the NDTL was reduced by hundred basis point from 25 per cent to 24 per cent with effect from November 8, 2008.
- A term repo facility for an amount of Rs. 60,000 crore was instituted under the LAF to enable banks to ease liquidity stress faced by mutual funds (MFs) and non-banking financial companies (NBFCs) with associated SLR exemption of 1.5 per cent of NDTL.
- An advance of Rs. 25,000 crore was provided to financial institutions under the Agricultural Debt Waiver and Debt Relief Scheme pending release of money by the Government.
- A special refinance facility was introduced for scheduled commercial banks (excluding RRBs) with a limit of 1.0 per cent of each bank's NDTL as on October 24, 2008 at the LAF repo rate up to a maximum period of 90 days. During this period, flexibility was allowed to draw and repay the refinance amount.
- Buy-back dated securities issued under the market stabilization scheme so as to provide another avenue for injecting liquidity of a more durable nature into the system.
- Provision of a refinance facility for an amount of Rs. 4,000 crore to the National Housing Bank (NHB) was made to provide liquidity support to the housing sector, and particularly to housing finance companies (HFCs).
- Provision of a refinance facility to the EXIM Bank with a view to mitigating the pressures on Indian exporting companies.
- Provision of refinance of an amount of Rs. 7,000 crore to the Small Industries Development Bank of India (SIDBI) under the provisions of Section 17(4H) of the Reserve Bank of India Act, 1934 for enhancing credit delivery to the employment-intensive micro- and small-enterprises (MSE) sector.

the order of Rs. 4,22,793 crore; the reduction in SLR was also estimated to enable release of Rs. 40,000 crore of liquidity. Actual release of liquidity would however be of a lower order, depending on the availments of credit facilities. Further, the reduction in SLR would not have been fully translated into liquidity enhancement, since the banking system has been holding securities at levels higher than the required 24 per cent.

Movement of interest rates

4.74 During 2008-09, the money market generally remained orderly except for some pressures experienced during September-October 2008, mainly reflecting the knock-on effects of the disruptions in international financial markets. At the beginning of the first quarter of 2008-09, money market rates moderated from their levels in the second half of March 2008 as liquidity conditions eased on account of significant reduction in the cash balances of the Central Government. The weighted average call rate remained mostly within the informal corridor set by the repo and reverse-repo rates of the liquidity adjustment facility. The weighted average call rate for the first quarter was at 6.83 per cent.

4.75 The call rate mostly hovered around the repo rate during the second quarter of 2008-09, reflecting the impact, inter alia, of the hikes in the cash reserve ratio and repo rate (in the context of the inflationary pressures) as well as the foreign exchange market operations of the Reserve Bank (in the context of the drying up of capital inflows). The indirect effects of the global financial turmoil in conjunction with advance tax collections around mid-September 2008 exerted further pressure on the money market and consequently the call money rate remained much above the repo rate till the end of September 2008. The average daily call rate increased to 9.46 per cent in the second quarter.

4.76 The pressure on money markets continued to prevail in the beginning of the third quarter of 2008-09 partly on account of the forex operations of the Reserve Bank to contain excess volatility in the exchange rate in the wake of forex outflows. Consequently, the call rate increased sharply and continued to remain above the informal corridor in the first half of October 2008. Subsequently, the call rate declined under the impact of the reduction in the cash reserve ratio. The call rate again crossed the upper bound of the LAF corridor in the last week of October 2008, partly reflecting the festive season related increase in demand for currency. The weighted average call rate was 9.90 per cent during October 2008 (Table 4.23 and Figure 4.14).

4.77 As the demand for currency receded and as the series of measures initiated by the Reserve Bank began to take effect, the weighted average call money rate declined from a high of 19.7 per cent

Figure 4.14 : Movement of interest rates

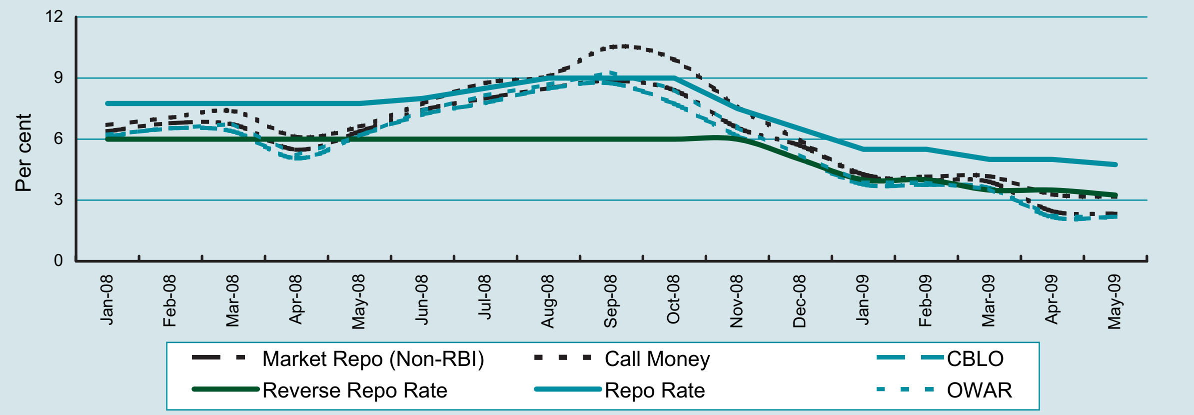


Table 4.23 : Call Money markets at a glance

	Call turnover (Rs. crore)	Call rate (in per cent)
Mar 07	23217	14.07
Apr 07	29689	8.33
May 07	20476	6.96
Jun 07	16826	2.42
Jul 07	16581	0.73
Aug 07	23603	6.31
Sep 07	21991	6.41
Oct 07	18549	6.03
Nov 07	20146	6.98
Dec 07	16249	7.50
Jan 08	27531	6.69
Feb 08	22716	7.06
Mar 08	22364	7.37
Apr 08	19516	6.11
May 08	19481	6.62
Jun 08	21707	7.75
Jul 08	24736	8.76
Aug 08	23408	9.10
Sep 08	23379	10.52
Oct 08	28995	9.90
Nov 08	21812	7.57
Dec 08	21641	5.92
Jan 09	18496	4.18
Feb 09	22241	4.16
Mar 09	23818	4.17

Source : RBI

(on October 10, 2008) and mostly remained within the LAF corridor since November 3, 2008. The weighted average call rate declined from 9.9 per cent in October 2008 to 7.57 per cent in November 2008. The overnight money market rate also mostly remained well below the upper bound of the LAF corridor since November 3, 2008. The weighted average overnight call rate and the weighted average overnight money market rate were placed at 5.92 per cent and 5.22 per cent, respectively on December 18, 2008.

4.78 Reflecting the significant improvement in liquidity conditions with the implementation of various measures by the RBI, the call rate mostly hovered around the lower bound of the LAF corridor during the last quarter of 2008-09 and the average call rate during this period was at 4.17 per cent. During 2009-10 so far, money market rates declined further with the substantial easing of liquidity conditions. The call rate mostly remained around the lower bound of the LAF corridor, and the average call rate was placed at 3.28 per cent during April 2009.

Treasury Bills

4.79 In the annual issuance calendar for Treasury Bills issued on March 24, 2008, the notified amounts of 91-day,182-day and 364-day Treasury Bills under the normal market borrowing programme were kept unchanged at Rs. 500 crore (weekly auction), Rs. 500 crore (fortnightly auction) and Rs. 1,000 crore (fortnightly auction), respectively, for the year. It was decided to raise additional short-term funds to finance the debt waiver scheme through a mix of draw-down of cash balance, WMA and Treasury Bills. Accordingly, up to December 26, 2008, additional resources amounting to Rs. 1,03,500 crore (over and above the regular and non-competitive portion of Rs. 1,26,644 crore) were raised through the issuance of 91-day (Rs. 88,000 crore),182-day (Rs. 8,500 crore) and 364-day (Rs. 7,000 crore) Treasury Bills. However, the 91-day and 182-day Treasury Bills amounting to Rs. 41,500 crore matured by December 26, 2008 and as such the net additional resources raised through the issuance of Treasury Bills as on December 26, 2008 amounted to Rs. 62,000 crore.

4.80 The primary market yields for 91-day TBs, 182-day TBs and 364-day TBs stood at 6.94 per cent, 7.19 per cent and 7.37 per cent respectively in the first auction of the financial year 2008-09. The yields remained high till September 2008 reflecting high inflation and crude prices. Thereafter, the yields declined following the various measures announced by RBI to ease the liquidity situation in the system. The primary yields on 91-day TBs, 182-day and 364-day TBs stood at 4.95 per cent, 5.10 per cent and 5.50 per cent respectively as per the last auction held on March 25, 2009. The comparative position of the yield to maturity in respect of 91-day TBs and 364-day TBs is presented in Figures 4.15 and 4.16 revealing their decline in the second half of 2008-09. The real yield to maturity during 2008-09 is brought out in Figure 4.17 reflecting gradual increase in the second half of the year, consistent with the drop in WPI inflation.

Figure 4.15 : 91-day treasury bills - yield to maturity at auction

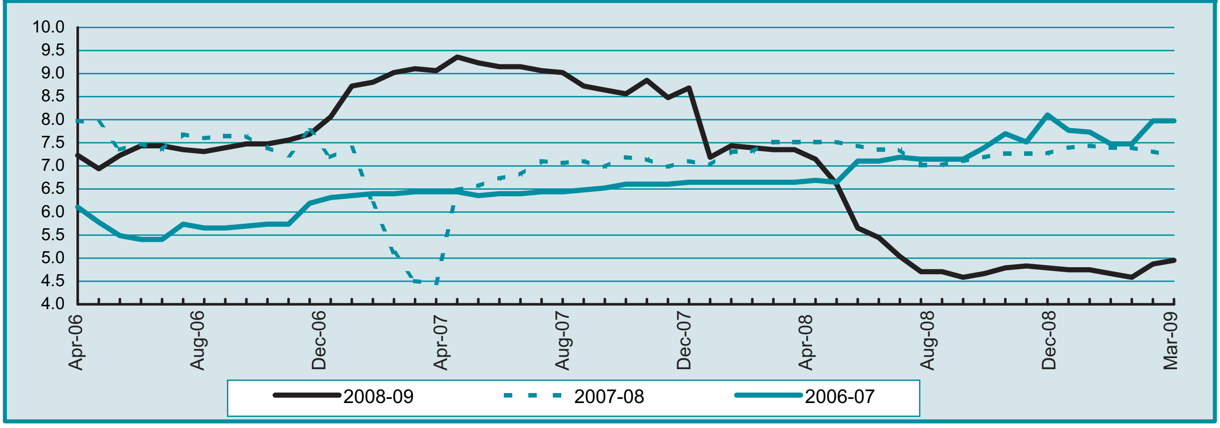


Figure 4.16 : 364-day treasury bill- yield to maturity at auction

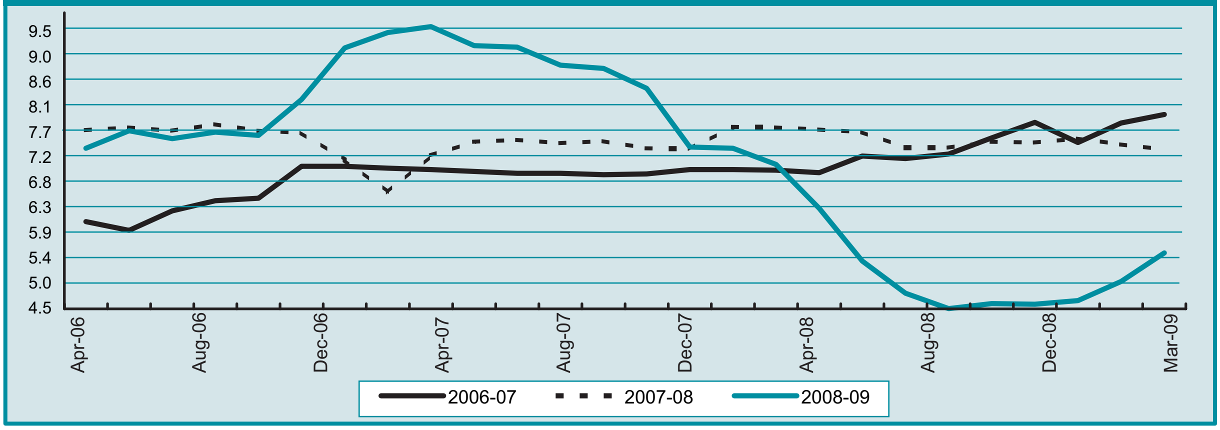
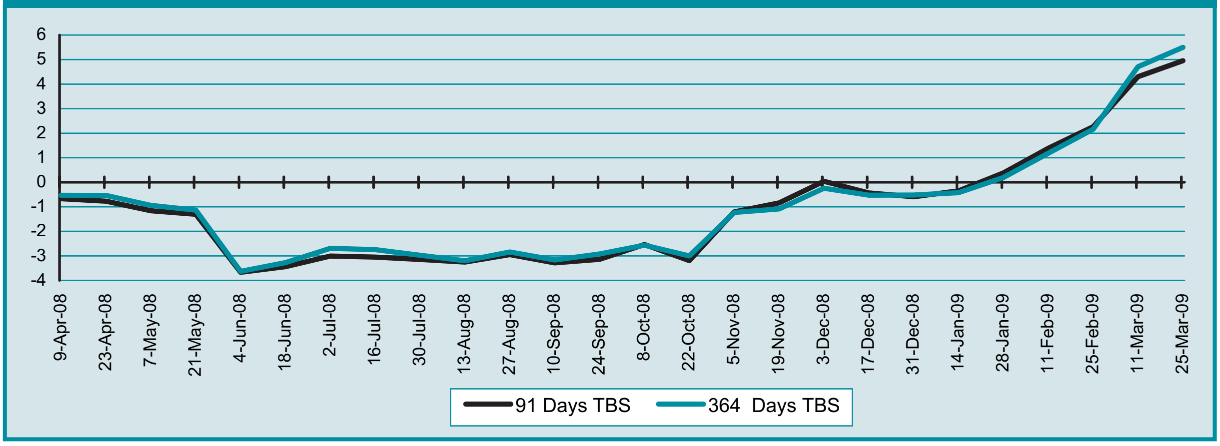


Figure 4.17 : Real yield to maturity on treasury Bills



Yields on government securities

4.81 Yields in the Government securities (G-Sec) market had hardened at the beginning of the financial year 2008-09, with the yield of the 10-year paper reaching 8.23 per cent on April 21, 2008 (compared to 7.93 per cent on end-March 2008) in response to higher levels of domestic inflation.

4.82 The decision to keep policy rates unchanged at the time of the Annual Policy Statement for the year 2008-09 (announced on April 29, 2008), helped the market to rally. Subsequently, heightened inflationary expectations emanating from the sharp increase in global commodity prices, especially crude oil prices as well as repo rate hike of 75 bps in two stages led to the hardening of yields. The 10-year G-Sec yield rose to 8.69 per cent by end-June 2008 and further to 9.51 per cent on July 15, 2008, mainly against the backdrop of higher than expected inflation. The 10-year G-Sec yield, however, eased moderately at the beginning of the second fortnight of July 2008, tracking softening in crude oil prices before hardening in response to increases in the LAF repo rate and the CRR announced in the First Quarter Review of Annual Monetary Policy for the Year 2008-09 (issued on July 29, 2008). The 10-year G-Sec yield at end-July was at 9.32 per cent. The 10-year G-Sec yield, eased during the first fortnight of August 2008 tracking the lower level of global crude oil prices and easing of liquidity conditions at the close of the fortnight. The 10-year G-Sec yield was broadly range-bound thereafter. The yield on 10-year paper, at end-August stood at 8.78 per cent. The yield continued to ease, during the first fortnight of September 2008; however, there was considerable hardening of the yield in the second fortnight of the month as the liquidity conditions tightened owing to advance tax outflows in conjunction with the impact of adverse developments in international financial markets. At end-September 2008, the 10-year yield was placed at 8.63 per cent. Since then, the Government securities yields have eased. The CRR reduction of 250 basis points with effect from October 11, 2008 had facilitated the decline in yield. The 10-year yield at end-October stood at 7.45 per cent. Moderate hardening of yields was observed in the first week of November 2008. G-Sec yields thereafter eased tracking lower money market rates reflecting the reduction of CRR by 100 basis points in two tranches in the first fortnight of November 2008. The 10-year yield stood at 6.99 per cent at end-November 2008. The repo rate and reverse-repo rate cut by 100 basis points to 6.50 per cent and 5 per cent respectively and reduction of petrol and diesel prices domestically by Rs. 5 and Rs. 2 respectively in the first week of December 2008 resulted in lower-than-expected inflation. Consequently, the 10-year yield declined sharply by 150 basis points. The 10-year G-Sec yield stood at 5.31 per cent as on end-December 2008.

4.83 Notwithstanding further reduction in policy rates in January 2009, market sentiment worsened in January and February 2009 following the increase in Government's market borrowing programme. Even as the RBI initiated a series of auction-based purchase of Government dated securities, the 10-year G-Sec yield increased to 6.02 per cent as at end-February 2009. The yields continued to harden in early March 2009, despite a cut in LAF interest rates effective March 5, 2009. The yield on benchmark G-Sec dropped by 40 bps to 7.07 per cent on March 13, 2009, following rejection of all bids received for sale of dated securities. The subsequent announcement of enhancement in amounts of auction-based purchases of Government dated securities by RBI on March 16 and March 19, 2009 helped improve the market sentiment. The 10-year G-Sec yield stood at 7.01 per cent as at end-March 2009 (Figure 4.18).

Figure 4.18 : 10 year Govt. yield movement

4.84 The G-Sec yields declined thereafter on account of easing of liquidity conditions, decline in inflation rate, OMO purchase auctions and reduction in LAF policy interest rates by 25 basis points (as announced in the Annual Policy statement for 2009-10, on April 21, 2009). The 10-year yield was placed at 6.23 per cent as at end-April 2009. The 10-year yield, however, hardened somewhat in the month of May 2009, on supply concerns. The 10-year yield was placed at 6.46 per cent as on May 22, 2009.

Update on monetary policy stance during 2009-10

4.85 The monetary policy in 2008-09 had to address the emerging economic situation, wherein the position in the second half of the year was substantially different from the first half. The policy had to contend with the spill-over effects of the global financial crisis, on the country's growth path. The liquidity situation had improved significantly towards the end of 2008-09, in the wake of measures taken by the RBI.

4.86 For the year 2009-10, RBI has envisaged a macroeconomic scenario with the real GDP growth at 6.0 per cent and WPI inflation to be around 4.0 per cent by end-March 2010. Taking into account the need to respond to sluggish economic growth witnessed lately, the RBI has envisaged growth in money supply (M_3) for 2009-10 at 17.0 per cent as an indicative projection. Consistent with this, the growth in aggregate deposits of scheduled commercial banks has been projected to grow at 18.0 per cent and non-food credit by 20.0 per cent.

4.87 The Annual Policy Statement for 2009-10 was announced on April 21, 2009. Therein marginal reductions in the policy rates have been announced. The salient points are as under (Box 4.5).

4.88 The monetary policy stance for 2009-10 aims to:

- Ensure a policy regime that will enable credit expansion at viable rates while preserving credit quality so as to support the return of the economy to a high growth path.
- Continuously monitor the global and domestic conditions and respond swiftly and effectively through policy adjustments as warranted so as to minimize the impact of adverse developments and reinforce the impact of positive developments.
- Maintain a monetary and interest rate regime supportive of price stability and financial stability taking into account the emerging lessons of the global financial crisis.

Anti-inflationary measures

4.89 Rationalization of import duties of essential commodities, effective supply-demand management through tariff and trade policies and strengthening of the public distribution system, in addition to fiscal and monetary discipline were the major anti-inflationary measures adopted to lighten the burden of high inflation rates on the economically weaker sections.

4.90 Government had taken a number of measures covering a wide range of articles of mass consumption to enhance supply and availability. To augment availability of cereals, minimum support prices (MSP) have been systematically increased, leading to increased acreage, production, productivity and central procurement. For the marketing season of 2007-08, the MSP of wheat was increased to Rs. 1,000 and that of the different grades of paddy to Rs. 645-880 per quintal, with additional incentive bonuses of Rs. 50-100 per quintal. The resultant record procurement of wheat

Box 4.5 : Measures announced in Annual Policy Statement of April 21, 2009

- The bank rate has been retained unchanged at 6.0 per cent.
- The repo rate under the liquidity adjustment facility (LAF) reduced by 25 basis points from 5.0 per cent to 4.75 per cent with immediate effect.
- The reverse-repo rate under LAF reduced by 25 basis points from 3.5 per cent to 3.25 per cent with immediate effect.
- The Reserve Bank has the flexibility to conduct repo/reverse-repo auctions at a fixed rate or at variable rates as circumstances warrant.
- The Reserve Bank retains the option to conduct overnight or longer term repo/reverse-repo under the LAF depending on market conditions and other relevant factors. This will be used flexibly including the right to accept or reject tender(s) under the LAF, wholly or partially, ifdeemed fit, so as to make efficient use of the LAF in daily liquidity management.
- The cash reserve ratio (CRR) of scheduled banks has been retained unchanged at 5.0 per cent of net demand and time liabilities (NDTL).

at 22.68 million tonnes in 2008-09 was twice the level in 2007-08, which besides the Nil import requirement in the near future, has simultaneously facilitated open market intervention schemes for bulk and small consumers, stabilizing market prices, additional allocations under TPDS, creation of a 3 MT strategic reserve in addition to the normal buffer stocks in 2008-09. In the case of paddy, the procurement was higher at 28.50 MT.

4.91 To avoid depletion of domestic foodgrains stock, the exports of wheat and non-basmati rice had been banned. The minimum export price applicable for basmati rice was enhanced to US$ 1,200 per MT from April 2008, later reduced to US$ 1,100 with additional customs duty of Rs. 8,000 per MT, while exports of basmati and non-basmati rice had been restricted to specified ports of Kandla, Kakinada, Kolkata and JNPT, Mumbai. From November 2008 a relaxation in non-basmati rice exports for 100 per cent export-oriented units had been given. In wheat, exports had been banned from February 2007 and is still continued. Exports of pulses and edible oils had been banned, but branded consumer packs of 5 kgs or less can be exported up to 10,000 tonnes, while public sector undertakings were allowed to import pulses to enhance domestic availability, with reimbursement of losses up to 15 per cent. Customs duty on butter and ghee had been reduced to 30 per cent and 20 per cent import duty imposed on crude degummed soyabean oil from November 2008. Exports of castor oil, coconut oil and oils produced from minor forest produce were closely monitored, with coconut oil exports being permitted only from Kochi port. Import of raw sugar at zero duty had been allowed under the advance authorization scheme with the sugar factories permitted to sell processed raw sugar domestically and government agencies allowed to import a million tonnes of white sugar duty-free, while export obligations on raw sugar import under OGL had been removed. Higher quota of non-levy sugar had been released in the open market.

4.92 To maintain price stability, the central issue price for rice and wheat had not been revised since July 2002. The offtake by states for TPDS increased to 84.77 per cent in 2008-09. Further, with a view to augment domestic availability, import duties of rice, wheat, pulses, edible oils (crude) and maize, butter and ghee had been kept at zero; while those on refined and hydrogenated oils and vegetable oils had been reduced to 7.5 per cent. Vegetable oils imports increased in 2008-09 due to reduced customs and import duties and a scheme was launched to distribute 1 MT of imported edible oils at a subsidized Rs. 15 per kg under PDS, with 1 kg. per ration card per month. To check rising sugar prices, the Government allowed higher free-sale releases and additional allocations, stipulated monthly sale of fixed quantity of dismantled buffer stock, monitored open market sale with the central excise authorities, initiated proceedings against delinquent mills under Essential Commodities Act, 1955 and discontinued reimbursement of expenses earlier available for exports from October 2008.

4.93 In August 2006, the Centre had issued an order under the Essential Commodities Act, 1955 to enable the State Governments to invoke stock limits in respect of wheat and pulses for a period of six months in view of the prevalent price situation, empowering them to act against their hoarding to ensure availability at reasonable prices, the validity of which order had been extended from time to time. Similar stock limit orders have been in place on sugar, edible oils and oilseeds.