IV. Monetary and Liquidity Conditions

Tight liquidity conditions prevailing during the third quarter of 2010-11 eased somewhat during the fourth quarter mainly on account of softening of both structural and frictional stress factors. The deficit liquidity conditions strengthened monetary transmission, which was reflected in higher deposit as well as lending rates of banks, and in turn improved deposit growth and induced slight moderation in credit growth. The anti-inflationary thrust of monetary policy, however, continued to remain non-disruptive of the growth momentum.

Monetary conditions remain consistent with the anti-inflationary bias

IV.1 During 2010-11, the monetary and liquidity conditions remained consistent with the anti-inflationary stance. The monetary policy stance of the Reserve Bank shifted to tightening mode since October 2009 in response to rising inflationary pressures. The calibrated policy actions so far have not been disruptive to growth. The Reserve Bank increased cash reserve ratio by 100 basis points (bps), reverse repo rate by 250 bps, and the repo rate by 200 bps since February 2010 so far. A shift from absorption mode to injection mode in the liquidity adjustment facility (LAF) implies effective rise in policy rates by 350 bps since February 2010 (Table IV.1).

IV.2 During 2010-11, the Reserve Bank articulated a net liquidity level of ±1 per cent of net demand and time liabilities (NDTL) of banks as ideal for effective monetary transmission. The persistence of deficit liquidity conditions in Q4 of 2010-11 helped in further strengthening the monetary policy transmission. However, inflation continues to remain at elevated levels. The Reserve Bank strove to maintain the difficult balance between ensuring sufficient liquidity for smooth functioning of markets on the one hand and sustaining the anti-inflationary monetary policy stance on the other.

Table IV.1: Movements in Key Policy Rates in India

(Per cent)

Effective since	Reverse Repo Rate		Repo Rate		Cash Reserve Ratio	
1	2		3		4	
October 11, 2008	6.00		9.00		6.50	(–2.50)
October 20, 2008	6.00		8.00	(–1.00)	6.50	
October 25, 2008	6.00		8.00		6.00	(–0.50)
November 3, 2008	6.00		7.50	(–0.50)	6.00	
November 8, 2008	6.00		7.50		5.50	(–0.50)
December 8, 2008	5.00	(-1.00)	6.50	(–1.00)	5.50	
January 5, 2009	4.00	(-1.00)	5.50	(–1.00)	5.50	
January 17, 2009	4.00		5.50		5.00	(–0.50)
March 4, 2009	3.50	(-0.50)	5.00	(-0.50)	5.00	
April 21, 2009	3.25	(-0.25)	4.75	(-0.25)	5.00	
February 13, 2010	3.25		4.75		5.50	(+0.50)
February 27, 2010	3.25		4.75		5.75	(+0.25)
March 19, 2010	3.50	(+0.25)	5.00	(+0.25)	5.75	
April 20, 2010	3.75	(+0.25)	5.25	(+0.25)	5.75	
April 24, 2010	3.75		5.25		6.00	(+0.25)
July 2, 2010	4.00	(+0.25)	5.50	(+0.25)	6.00	
July 27, 2010	4.50	(+0.50)	5.75	(+0.25)	6.00	
September 16, 2010	5.00	(+0.50)	6.00	(+0.25)	6.00	
November 2, 2010	5.25	(+0.25)	6.25	(+0.25)	6.00	
January 25, 2011	5.50	(+0.25)	6.50	(+0.25)	6.00	
March 17, 2011	5.75	(+0.25)	6.75	(+0.25)	6.00	

Note: 1. Reverse repo indicates absorption of liquidity and repo indicates injection of liquidity.
2. Figures in parentheses indicate change in policy rates in percentage points.

Liquidity conditions soften as structural and frictional liquidity drivers ease

IV.3 After a phase of significant tightness, both structural and frictional drivers of deficit liquidity conditions softened relatively during the fourth quarter of 2010-11 (Table IV.2). Liquidity conditions had switched to deficit mode since end-May 2010, due to large increase in government balances with the Reserve Bank (resulting from 3G/BWA auctions and the first installment of quarterly advance tax payments). The Reserve Bank initiated several policy measures to ease the liquidity pressure *viz.*, allowing SCBs to avail of additional liquidity support under the LAF and conducting second LAF (SLAF) on a daily basis.

Table IV.2: Liquidity Position

(₹ crore)

Outstanding as on Last Friday	LAF	MSS	Centre's Surplus@	Total
1	2	3	4	5=(2+3+4)
2009				
April	1,08,430	70,216	-40,412	1,38,234
May	1,10,685	39,890	-6,114	1,44,461
June	1,31,505	22,890	12,837	1,67,232
July	1,39,690	21,063	26,440	1,87,193
August	1,53,795	18,773	45,127	2,17,695
September	1,06,115	18,773	80,775	2,05,663
October	84,450	18,773	69,391	1,72,614
November	94,070	18,773	58,460	1,71,303
December	19,785	18,773	1,03,438	1,41,996
2010				
January	88,290	7,737	54,111	1,50,138
February	47,430	7,737	33,834	89,001
March*	990	2,737	18,182	21,909
April	35,720	2,737	-28,868	9,589
May	6,215	317	-7,531	-999
June	-74,795	317	76,431	1,953
July	1,775	0	16,688	18,463
August	11,815	0	20,054	31,869
September	-30,250	0	65,477	35,227
October	-1,17,660	0	86,459	-31,201
November	-1,03,090	0	93,425	-9,665
December	-1,13,415	0	1,44,437	31,022
2011				
January	-76,730	0	1,18,371	41,641
February	-72,005	0	77,397	5,392
March*	-1,06,005	0	16,416	-89,589
April 22	-16,405	0	-48,401	-64,806

@ : Excludes minimum cash balances with the Reserve Bank in case of surplus.
* : Data pertain to March 31.
Note: 1. Negative sign in column 2 indicates injection of liquidity through LAF.
2. Negative sign in column 4 indicates WMA /OD availed by the central government.

IV.4 Liquidity conditions eased in August 2010, mainly on account of large pre-scheduled public debt redemptions. After a brief period of surplus liquidity, the LAF again switched to deficit mode from the second week of September 2010 on account of quarterly advance tax payments. Structural factors like imbalances between deposit and credit growth coupled with high currency demand added to the pressure on liquidity. During the third quarter, the Reserve Bank undertook open market operation (OMO) purchases and other measures to ease the liquidity pressures.

IV.5 Liquidity conditions eased marginally during the last quarter of 2010-11 due to pick-up in government spending and staggered OMOs carried out by the Reserve Bank since mid-December (Table IV.3). During 2010-11, the Reserve Bank purchased government securities of around ₹67,000 crore under OMO auctions. Notwithstanding the quarterly advance tax payouts in mid-March 2011, which again contributed to temporary tightness, the liquidity deficit remained capped on account of higher government expenditure during the month.

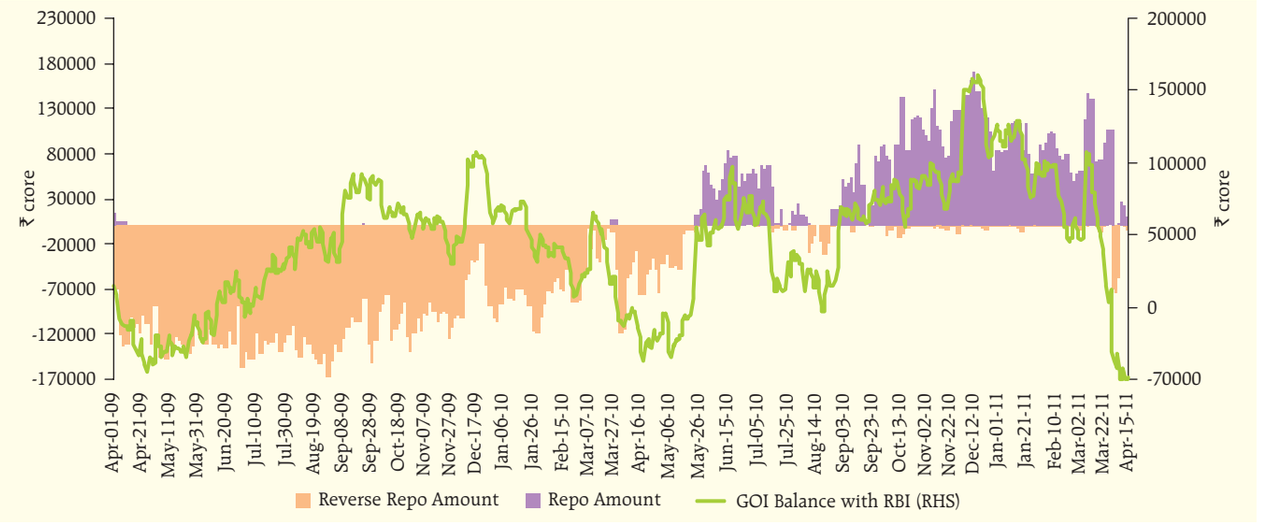
Table IV.3: Reserve Bank's Liquidity Management Operations

(₹ crore)

Item	2009-10				2010-11			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9
A. Drivers of Liquidity (1+2+3+4)	**-45,110**	**-44,513**	**-66,785**	**55,055**	**-1,05,124**	**26,981**	**-1,12,597**	**73,540**
1. RBI's net Purchase from Authorised Dealers	-15,874	2,523	436	910	816	751	5,991	0
2. Currency with the Public	-18,690	-9,020	-43,224	-31,109	-58,757	180	-42,613	-45,487
3. a. Centre's surplus balances with RBI	3,382	-67,938	-22,663	85,257	-58,249	10,953	-78,960	1,28,021
3. b. WMA and OD	0	0	0	0	0	0	0	0
4. Others (residual)	-13,928	29,922	-1,334	-3	-8,994	15,097	2,985	-8,994
B. Management of Liquidity (5+6+7+8)	**-21,674**	**62,376**	**89,870**	**1,618**	**67,255**	**-41,456**	**1,34,075**	**15,771**
5. Liquidity impact of LAF	-1,30,020	25,390	86,330	18,795	75,785	-44,545	83,165	-7,410
6. Liquidity impact of OMO* (net)	43,159	32,869	3,540	2,787	1,550	2,772	50,910	23,181
7. Liquidity impact of MSS	65,187	4,117	0	16,036	2,420	317	0	0
8. First round impact of CRR change	0	0	0	-36,000	-12,500	0	0	0
C. Bank Reserves # (A+B)	**-66,784**	**17,863**	**23,085**	**56,673**	**-37,869**	**-14,475**	**21,478**	**89,311**

(+) : Injection of liquidity into the banking system.
(-) : Absorption of liquidity from the banking system.
* : Includes oil bonds but excludes purchases of government securities on behalf of State Governments.
# : Includes vault cash with banks and adjusted for first round liquidity impact due to CRR change.
Note: Data pertain to March 31 for Q4 and last Friday for all other quarters.

Chart IV.1: LAF Volumes and GoI Balances



IV.6 During first week of April 2011, the LAF was in reverse repo mode, partly reflecting increased government spending. However, since April 11, it has reverted to deficit mode.

IV.7 The monetary transmission is usually substantially more effective in a deficit liquidity situation than in a surplus liquidity situation. An empirical exercise carried out by the Working Group on Operating Procedures of Monetary Policy (Chairman: Shri Deepak Mohanty) suggests that under deficit liquidity conditions, money market rates respond immediately to policy shock.

IV.8 The recent episodes of large government surplus cash balances emerging as a major autonomous factor influencing the liquidity points towards a need for better cash management by the government (Chart IV.1). In this context, the above Working Group suggested a scheme of auctioning of government surplus cash balances at the discretion of the Reserve Bank to be put in place in consultation with the government.

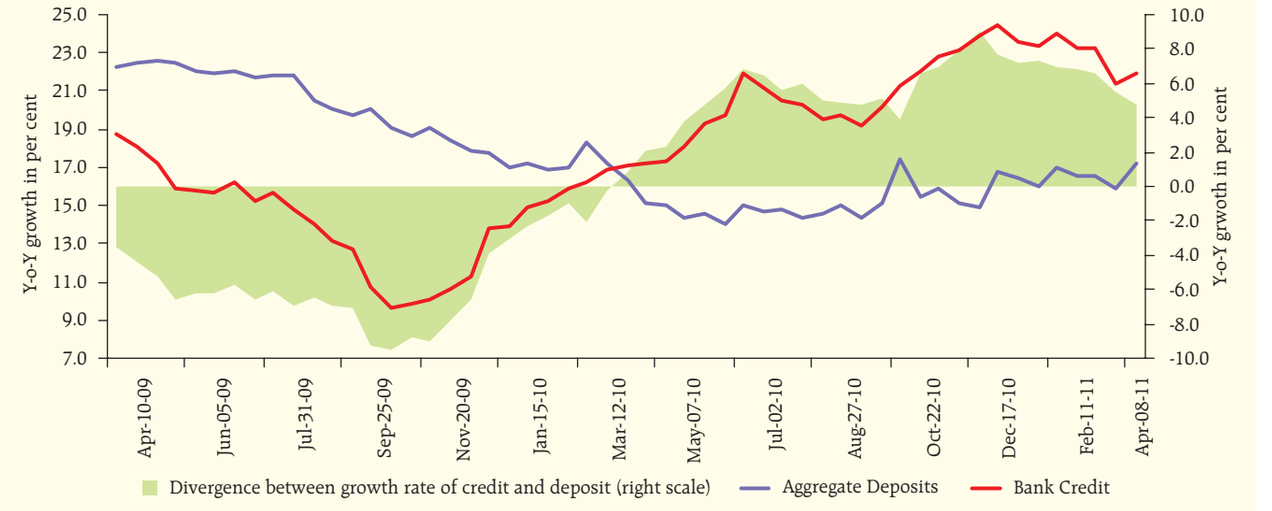
Structural drivers respond to policy signals amidst tight liquidity

IV.9 The monetary policy transmission was weak till May 2010 due to overhang of large surplus liquidity that had to be infused following the global financial crisis. The anti-inflationary policy actions of the Reserve Bank that operated through raising the policy rates contributed to keeping liquidity and monetary conditions in line with the policy objective. In a tight liquidity environment, it was expected that higher deposit rates would improve the growth of deposits while higher lending rates would moderate the demand for credit. During Q4 of 2010-11, effective transmission of monetary policy was reflected in higher deposit as well as lending rates of banks and higher issuances of bulk deposits by way of CDs. As a result, credit growth decelerated, while deposit growth accelerated, thereby narrowing the divergence between credit and deposit growth rates (Chart IV.2). The easing of liquidity conditions was reflected in the decline in the LAF injection.

Money supply growth remains below the indicative trajectory

IV.10 Even as reserve money growth remained strong, the money supply (M_3) growth during 2010-11 generally remained below the indicative trajectory set out in the Annual Policy Statement for 2010-11 (Table IV.4). This was due to lower growth in aggregate deposits and reduction in money multiplier emanating from higher currency demand.

Chart IV.2: Aggregate Deposits and Bank Credit



IV.11 Money supply growth is largely influenced by the trend in aggregate deposits, as these account for over 85 per cent of the money stock. During the first three quarters of 2010-11, term deposits appeared relatively unattractive as a store of value, in view of the modest rise in deposit rates relative to high inflationary expectations. During the last quarter of the year, however, as deposit rates were raised sharply, deposit mobilisation gathered momentum, which also helped in the pick-up in money supply growth. As a result of a sharper increase in deposit interest rates during the quarter as also the deceleration in industrial activity and the underperformance of equity market, a shift from low interest bearing demand deposits to more lucrative time deposits became evident (Chart IV.3).

Table IV.4: Monetary Indicators

(Y-o-Y growth in per cent)

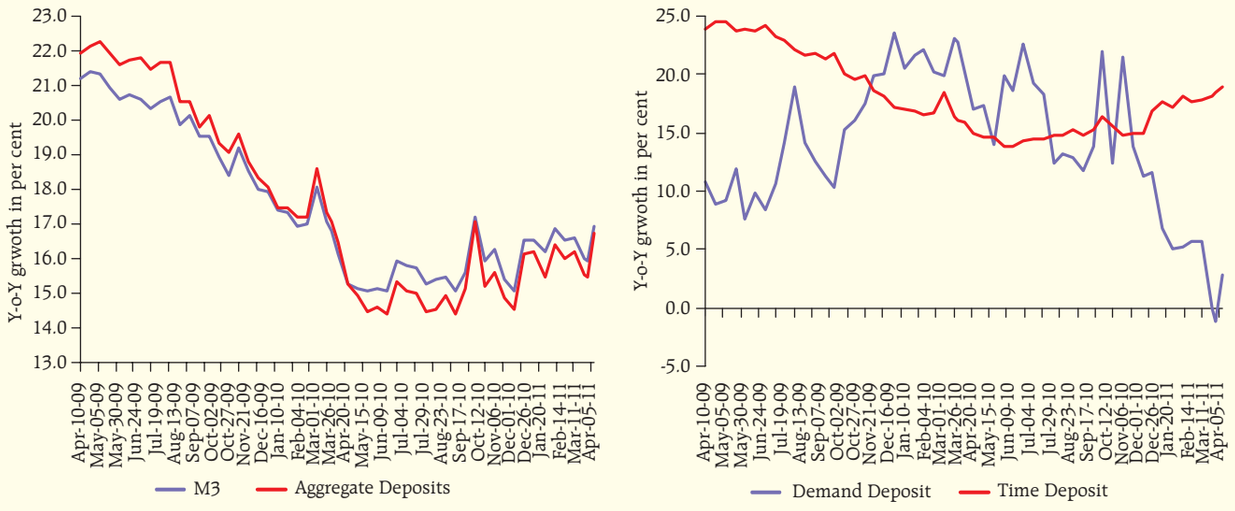
Item	2009-10	2010-11
1	2	3
Broad Money (M_3)	16.8	15.9
Narrow Money (M_1)	18.2	9.6
Main Components of M_3		
Currency with the Public	15.3	19.1
Aggregate Deposits	17.2	15.4
of which: Demand Deposits	22.0	-0.6
Time Deposits	16.4	18.2
Main Sources of M_3		
Net Bank Credit to the Government	30.7	18.2
Bank Credit to the Commercial Sector	15.8	20.6
Net Foreign Assets of the Banking Sector	-5.2	7.4
Reserve Money	17.0	19.1
Reserve Money adjusted for CRR changes	13.0	18.2
Scheduled Commercial Banks		
Non-food Credit	17.1	21.2
Aggregate Deposits	17.2	15.8

Note: 1. Data are provisional.
2. Data pertain to March 31, except for SCBs, which pertain to March 25 for 2010-11 and March 26 for 2009-10.

Strong currency demand aided tight liquidity and decline in money multiplier

IV.12 Stronger growth in demand for currency during 2010-11 contributed to both tightness in liquidity and subdued growth in broad money. The growth in currency demand, which generally remains below money supply growth, witnessed a spurt in 2010-11 partly reflecting stronger GDP growth and persistent high inflation. During the year 2010-11, the real elasticity of demand for currency remained close to unity, indicating the predominant role that inflation played in generating high currency demand (Chart IV.4). The rise in currency demand, coupled with deceleration in the growth of aggregate deposits resulted in a higher currency-deposit ratio, and hence, a decline in the money multiplier.

Chart IV.3: Money Supply and Deposits



Consequently, even with high base money growth, due mainly to injection of primary liquidity through repo and OMOs, the money supply growth remained lower than the indicative trajectory (Chart IV.5).

Income velocity of money recovers from the post-crisis dip

IV.13 There was a sharp fall in the velocity of money (M_3) during 2008-09 and 2009-10 reflecting post-global crisis uncertainties in the financial system. With consolidation of growth and normal financial conditions, the income velocity of money reverted to its long-term path, involving a pick-up in 2010-11 (Chart IV.6).

Credit growth remains above trajectory but has started moderating

IV.14 Credit growth remained above the indicative trajectory, but with some moderation seen in the recent period. After witnessing an acceleration in non-food credit growth over the indicative trajectory of

Chart IV.4: Trend in Currency Demand

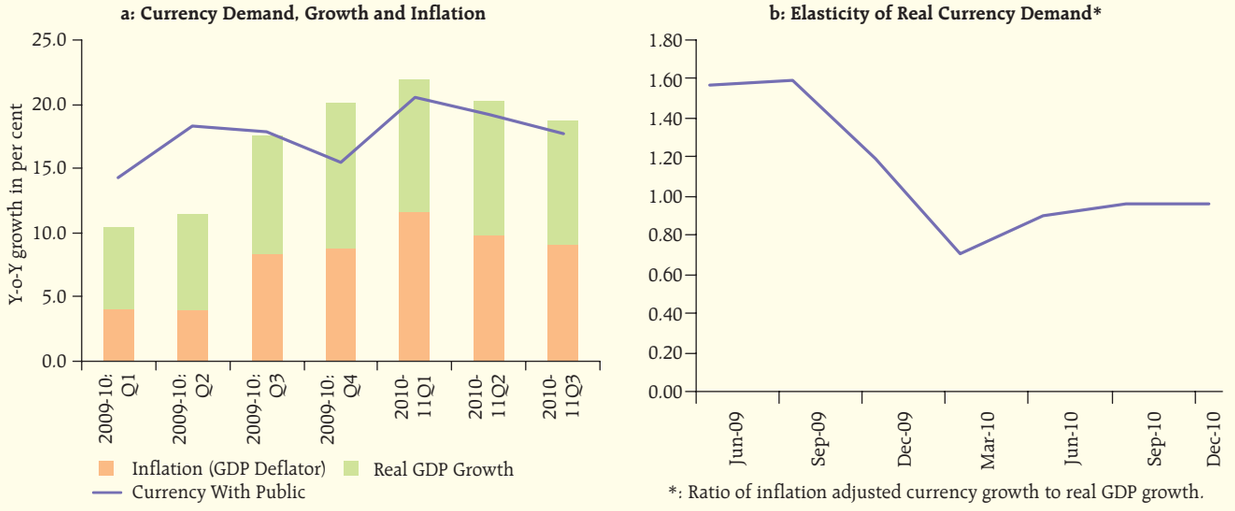
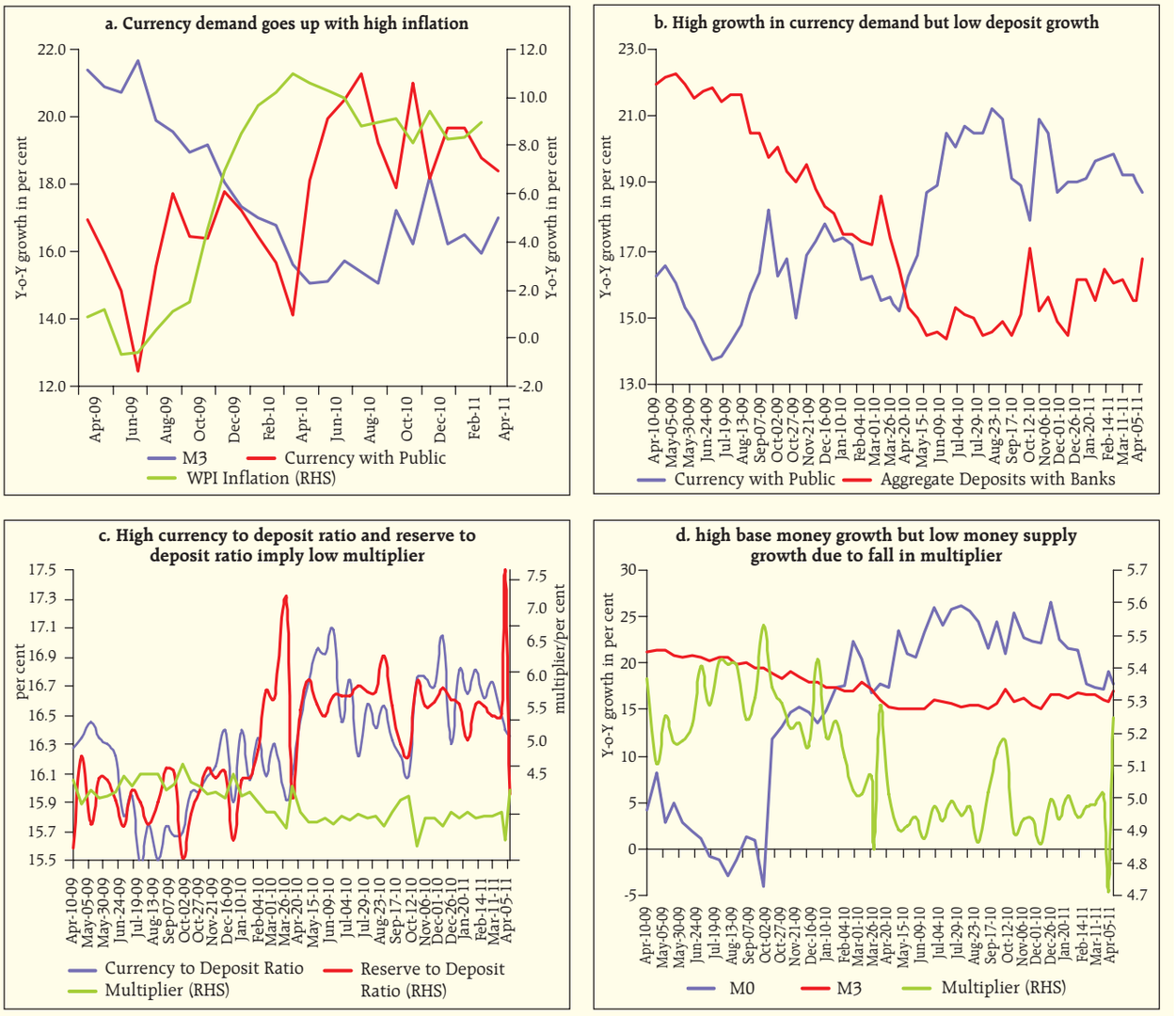


Chart IV.5: Decline In Money Multiplier Constrains Money Supply Growth



20 per cent, there had been some moderation since the beginning of Q4 of 2010-11. In response to higher interest rates, the non-food credit growth decelerated and deposit growth accelerated. Consequently, the incremental credit-deposit ratio moderated (Chart IV.7).

IV.15 The moderation in credit growth on a y-o-y basis was especially evident in the case of public sector banks, even though the credit conditions generally remained supportive of economic activity (Table IV.5).

IV.16 The sectoral deployment of credit continued to remain broad-based, with high growth in flow of credit to services and personal loans (Table IV.6). Disaggregated analysis suggests that credit to the industrial sector continued to be led by credit to infrastructure, metal and metal products, textiles, engineering, food processing and gems and jewellery. The high growth in credit to infrastructure is especially noteworthy as it is on a high base. The bank credit to NBFCs also witnessed a sharp rise.

Chart IV.6: Quarterly Trends in Velocity of Money

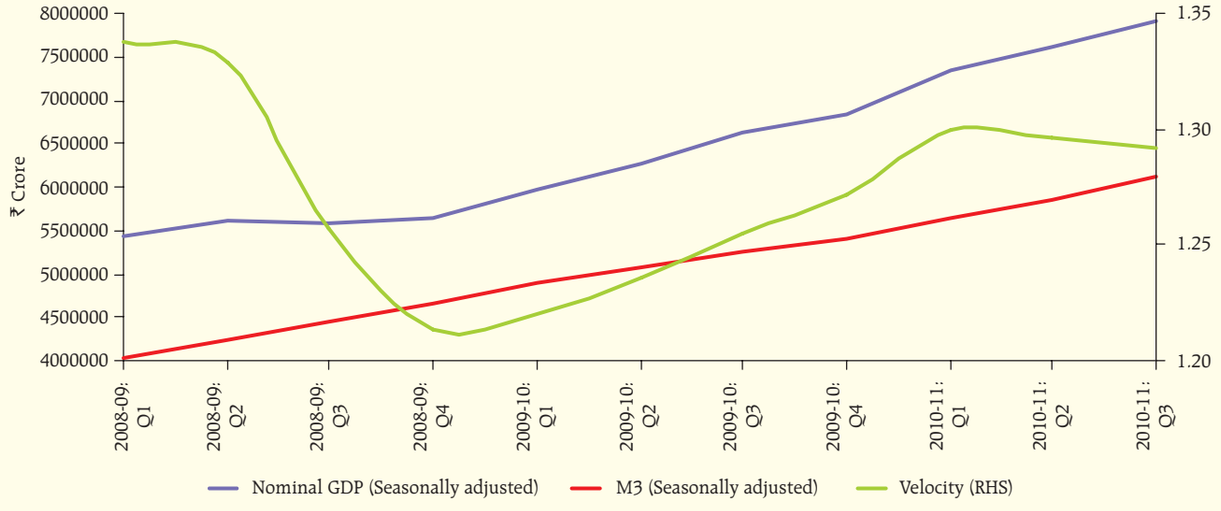


Chart IV.7: Credit Indicators

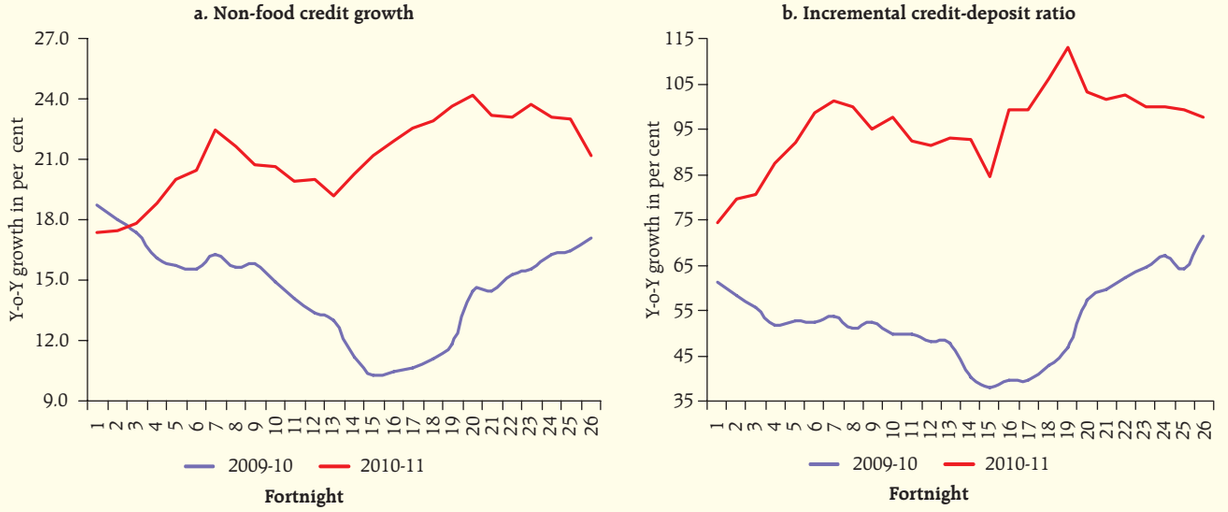


Table IV.5: Credit Flow from Scheduled Commercial Banks

(Amount in ₹ crore)

Bank Groups	Outstanding as on Mar 25, 2011	Year-on-Year Variation as on			
		Mar 26, 2010		Mar 25, 2011	
		Amount	Per cent	Amount	Per cent
1	2	3	4	5	6
1. Public Sector Banks	29,19,923	3,95,427	19.6	5,05,785	21.0
2. Foreign Banks	1,97,893	-2474	-1.5	31,032	18.6
3. Private Banks	7,28,029	61,212	11.7	1,43,325	24.5
4. All Scheduled Commercial Banks*	39,38,659	4,69,240	16.9	6,93,870	21.4

Note: 1. Data as on Mar 25, 2011 are provisional.
2. * Including Regional Rural Banks.

Table IV.6: Sectoral Deployment of Credit

(Per cent)

Sector	Q-o-Q Variation		Y-o-Y variation	
	Mar.26, 2010 over Dec. 18, 2009	Mar.25, 2011 over Dec. 17, 2010	Mar. 26, 2010 over Mar. 27, 2009	Mar. 25, 2011 over Mar. 26, 2010
1	2	3	4	5
Non-food credit	**10.4**	**8.1**	**16.8**	**20.6**
Agriculture and allied activities	**19.5**	**9.3**	**22.9**	**10.6**
Industry	**11.3**	**8.0**	**24.4**	**23.6**
of which, Infrastructure	11.8	8.3	40.7	38.6
Basic metal & metal products	8.5	8.7	26.5	28.8
Textiles,	9.0	11.1	18.2	19.2
Engineering	9.6	4.8	12.2	26.3
Food processing	18.0	15.0	22.1	29.3
Gems & Jewellery	5.9	8.6	11.3	24.2
Services	**9.8**	**8.9**	**12.5**	**23.9**
of which, tourism, hotels, restaurants	16.4	2.9	42.5	42.9
Professional services	2.6	7.1	-1.9	38.9
Commercial real estate	5.2	6.1	-0.3	21.4
NBFCs	10.2	22.9	14.8	54.8
Personal Loans	**3.4**	**6.8**	**4.1**	**17.0**
of which, consumer durables	5.2	12.4	1.3	22.4
Housing	2.5	4.1	7.7	15.0
Vehicle Loans	7.6	5.4	2.9	24.3

Note: Based on data collected from select SCBs that account for 95 per cent of the total non-food credit extended by all SCBs. These data are being disseminated every month from November 2010.

IV.17 Banks continued to be the major source of finance for the commercial sector. During 2010-11, funding from non-bank sources registered a marginal decline as compared to the previous year (Table IV.7). In the case of foreign sources of funding, external commercial borrowings /FCCBs have registered

Table IV.7: Flow of Financial Resources to the Commercial Sector

(₹ crore)

Item	April-March		
	2008-09	2009-10	2010-11
1	2	3	4
A. Adjusted Non-food Bank Credit (NFC)	**4,21,921**	**4,78,614**	**7,06,949**
i) Non-Food Credit	4,11,824	4,66,960	6,78,078
of which petroleum and fertilizer credit	31,159	10,014	-24,236
ii) Non-SLR Investment by SCBs	10,097	11,654	28,871
B. Flow from Non-banks (B1+B2)	**4,51,399**	**6,04,303**	**5,09,432**
B1. Domestic Sources	**2,58,132**	**3,80,733**	**3,08,619**
1. Public issues by non-financial entities	14,205	31,956	28,520
2. Gross private placements by non-financial entities	77,856	1,41,964	63,874 #
3. Net issuance of CPs subscribed to by non-banks	4,936	41,667	33,546 *
4. Net credit by housing finance companies	25,876	28,485	35,325 +
5. Total gross accommodation by the four RBI regulated AIFIs - NABARD, NHB, SIDBI & EXIM Bank	31,408	33,783	40,007
6. Systemically important non-deposit taking NBFCs (net of bank credit)	42,277	60,663	71,267 +
7. LIC's gross investment in corporate debt, infrastructure and social sector	61,574	42,215	36,080
B2. Foreign Sources	**1,93,267**	**2,23,570**	**2,00,813**
1. External Commercial Borrowings / FCCBs	30,948	15,674	59,545
2. ADR/GDR Issues excluding banks and financial institutions	4,788	15,124	9,441
3. Short-term credit from abroad	-13,288	34,878	38,854 #
4. FDI to India	1,70,819	1,57,894	92,973 +
C. Total Flow of Resources (A+B)	**8,73,320**	**10,82,917**	**12,16,381**
Memo Item:			
Net resource mobilisation by Mutual Funds through Debt (non-Gilt) Schemes	-32,168	96,578	-36,707

*: Up to March 15, 2011 +: Up to February 2011 #: April-December 2010

Note: FDI data for April-February include equity capital for April-February and reinvested earnings, other capital and equity capital for unincorporated bodies for April-December.

robust rise, partly reflecting the soft interest rate regime prevalent in most of the advanced economies. The decline in foreign direct investment (FDI) was substantially offset by the rise in ECBs/ FCCBs.

Monetary policy to factor risks to growth from high inflation

IV.18 The Reserve Bank's anti-inflationary policy has been calibrated with a view to containing inflationary expectations, while being non-disruptive to the overall growth process. The deficit liquidity conditions helped in strengthening the monetary transmission further in Q4 of 2010-11 as reflected in higher deposit and lending rates, which helped in easing the structural stress on liquidity. The growth momentum has continued so far. However, inflation remains elevated, despite the 350 bps effective increase in policy rates. Risk to growth from sustained high inflation could condition the stance of the monetary policy in near-term. Since high inflation itself could disrupt growth, it is important for the monetary policy to ensure a low inflation environment as a pre-condition for sustained high growth.