# IV. Monetary and Liquidity Conditions

Liquidity conditions eased further during Q1 of 2011-12 while remaining in deficit mode. This brought about an adjustment in liquidity in line with the policy objective. The easing reflected mainly structural factors, as the divergent trend between credit growth and deposit growth narrowed with rising interest rates. The sharp rise in currency growth observed during 2010-11 was also reversed as the opportunity cost of holding currency increased with rise in deposit rates. Following the pick-up in the deposit growth, the money supply growth remained above the indicative trajectory. Though credit growth moderated, partly reflecting base effect, it is still above the indicative trajectory.

## Monetary conditions remain tight in line with policy stance

IV.1 Monetary conditions remained tight during Q1 of 2011-12 with interest rates firming, deposit growth picking up and credit growth decelerating. The Reserve Bank persisted with its anti-inflationary monetary policy stance during Q1 of 2011-12. As inflation became increasingly generalised, the Reserve Bank raised policy repo rate by 50 bps in May, followed by another 25 bps in June. The Reserve Bank has thus raised the reverse repo rate, repo rate and the CRR by 325 basis points (bps), 275 bps and 25 bps respectively since March 2010. Following a shift from absorption mode to injection mode in the liquidity adjustment facility (LAF), there has been, in effect, a rise in policy rates by 425 bps since February 2010 till date as the money market rate started hovering around the upper bound from the lower bound of the LAF corridor (Table IV.1).

IV.2 Based on the recommendations of the Working Group on Operating Procedures of Monetary Policy (Chairman: Shri Deepak Mohanty), the Reserve Bank in its Monetary Policy Statement for 2011-12 effected the following changes to the operating procedure of monetary policy: (i) the weighted average overnight call money rate has become the operating target of monetary policy; (ii) the reporate has become the only independently varying policy rate; (iii) the reverse reporate, pegged at 100 bps below the reporate, provides

the lower bound to the corridor of overnight interest rate and (iv) a new Marginal Standing Facility (MSF) has been instituted at 100 bps above the repo rate that provides the upper bound to the corridor. Banks can borrow overnight from the MSF up to one per cent of their respective net demand and time liabilities (NDTL). The new operating procedure became operational in May 2011.

### Liquidity conditions continue to be in deficit mode

IV.3 Liquidity conditions eased significantly during Q1 of 2011-12. The average availment of liquidity under LAF was lower at around ₹49,300 crore in Q1 of 2011-12 as compared with around ₹84,400 crore in Q4 of 2010-11. The easing was mainly on account of sharp drawdown in Government's cash balances with the Reserve Bank. With the Government transiting to Ways and Means Advances/Overdraft in early April, reflecting, *inter alia*, tax refunds, the liquidity conditions were in absorption mode for a brief period in early April 2011. As part of their usual year-end balance sheet adjustments, banks maintained higher cash reserves with the Reserve Bank, which following

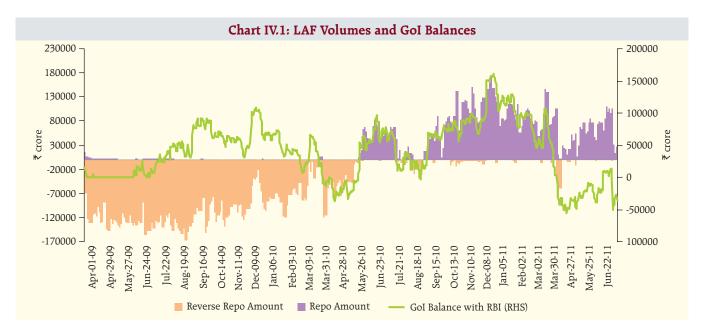
Table IV.1: Movements in Key Policy Rates in India

(Per cent)

<b>Effective Since</b>	Reverse Repo Rate	Repo Rate	Cash Reserve Ratio	
1	2	3	4	
Apr. 21, 2009	3.25 (-0.25)	4.75 (-0.25)	5.00	
Feb. 13, 2010	3.25	4.75	5.50 (+0.50)	
Feb.27, 2010	3.25	4.75	5.75 (+0.25)	
Mar. 19, 2010	3.50 (+0.25)	5.00 (+0.25)	5.75	
Apr. 20, 2010	3.75 (+0.25)	5.25 (+0.25)	5.75	
Apr. 24, 2010	3.75	5.25	6.00 (+0.25)	
Jul. 2, 2010	4.00 (+0.25)	5.50 (+0.25)	6.00	
Jul. 27, 2010	4.50 (+0.50)	5.75 (+0.25)	6.00	
Sept. 16, 2010	5.00 (+0.50)	6.00 (+0.25)	6.00	
Nov. 2, 2010	5.25 (+0.25)	6.25 (+0.25)	6.00	
Jan. 25, 2011	5.50 (+0.25)	6.50 (+0.25)	6.00	
Mar. 17, 2011	5.75 (+0.25)	6.75 (+0.25)	6.00	
May 3, 2011	6.25 (+0.50)	7.25 (+0.50)	6.00	
Jun 16, 2011	6.50 (+0.25)	7.50 (+0.25)	6.00	

**Note:** 1. Reverse repo indicates absorption of liquidity and repo indicates injection of liquidity.

Figures in parentheses indicate change in policy rates in percentage points.



their unloading, also had an easing effect on liquidity conditions in early April 2011.

IV.4 Liquidity conditions reverted to the deficit mode in the second week of April 2011. Seasonally, the month of April has mostly seen surplus liquidity in terms of the net absorption under LAF, reflecting lower credit demand and Government's cash draw-down. This year turned out to be contrarian in that April experienced liquidity deficit on an average daily basis (around ₹19,000 crore, *albeit,* lower than that of ₹81,000 crore in March 2011) (Chart IV.1). The deficit liquidity conditions were in line with stated policy objective of the Reserve Bank. With the Government substituting WMA by issuances of cash management bills (CMBs) and additional borrowing through Treasury Bills from the market, the average daily net liquidity injection under the LAF increased to around ₹55,000 crore in May 2011.

IV.5 Even as liquidity was in the surplus mode during early April 2011, the Reserve Bank had anticipated reversal in liquidity conditions based on its liquidity assessment for the subsequent period. Accordingly on April 8, 2011, the Reserve Bank had pre-emptively extended the additional liquidity support to SCBs under the LAF to the extent of up to one per cent of their NDTL till May 6, 2011. Moreover, the second LAF (SLAF) on a daily basis was also extended up to May 6, 2011. Following the introduction of MSF on May 9, 2011, where banks can submit their bids during 15.30

- 16.30 hrs, the second LAF was discontinued. Further, under the MSF scheme, banks need not seek a specific waiver for default in SLR compliance arising out of use of this facility. Till date the maximum availment of liquidity under MSF has been ₹4,105 crore

IV.6 Liquidity in the banking system remained in deficit mode in June as Government balances increased reflecting quarterly advance tax outflows (Table IV.2).

Outstanding as on	LAF	MSS	Centre's	Total		
(₹ crore)						
Table IV.2: Liquidity Position						
reflecting quarterly advance tax outflows (Table IV.2).						

(1 5555)					
Outstanding as on last Friday	LAF	MSS	Centre's Surplus@	Total	
1	2	3	4	5=(2+3+4)	
2010					
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	-39,605	0	-35,399	-75,004	
May	-75,795	0	-9,544	-85,339	
June	-96,205	0	8,339	-87,866	
July ^	-38,450 #	0	-39,232	-77,682	

 $<sup>@:</sup> Excludes \ minimum \ cash \ balances \ with \ the \ Reserve \ Bank \ in \ case \ of \ surplus.$ 

<sup>\* :</sup> Data pertain to March 31 ^ : As on July 15, 2011.

<sup># :</sup> MSF of `4,105 crore has been included in LAF figure for July 15, 2011.

Note: 1. Negative sign in column 2 indicates injection of liquidity through LAF.

<sup>2.</sup> Negative sign in column 4 indicates WMA /OD availed by the Central Government.

The average daily net outstanding liquidity injection was around ₹74,000 crore in June 2011. Liquidity conditions eased in early July reflecting drawdown of Government cash balances including, *inter alia*, redemption of a security amounting to around ₹37,000 crore on July 2, 2011. The average daily net liquidity injection is placed at around ₹41,000 crore during July 1 to 22, 2011.

#### Structural drivers ease pressure on liquidity

IV.7 During the third quarter of 2010-11, the deficit liquidity conditions were driven by structural as well as frictional factors. The structural factors included a sharp rise in currency demand and divergent trends in credit and deposit growth, while the frictional factors included maintenance of surplus cash balances by the Government with the Reserve Bank (Table IV.3). During Q4 of 2010-11, the liquidity conditions eased marginally due to pick-up in government spending, staggered OMOs carried out by the Reserve Bank and narrowing divergence between credit growth and deposit growth. The currency growth, however, continued to be strong. In contrast, the deficit liquidity conditions during the first quarter of 2011-12 were largely driven by frictional factors, i.e., Government's cash balance with the Reserve Bank. The structural drivers of liquidity responded to the monetary policy signals, thereby alleviating the pressure on liquidity.

## Narrowing divergence between credit growth and deposit growth

IV.8 During the first three quarters of 2010-11, the divergence between credit growth and deposit growth was high and growing. As the cost of funds under LAF increased progressively with the rise in the repo rate, banks raised their deposit and lending rates making the monetary policy transmission increasingly effective. This resulted in narrowing of the divergence between deposit and credit growth from 9 percentage points in mid-December to 5.6 percentage points in March and further to 1.5 percentage points in July 2011 (Chart IV.2).

### Currency growth moderates as opportunity cost of holding currency increases

IV.9 Currency growth, which had witnessed significant acceleration and remained above trend for most part of 2010-11, decelerated below the trend during the first quarter of 2011-12 (Chart IV.3). The currency growth was strong during 2010-11 mainly on account of stronger GDP growth and persistent high inflation. In addition, as deposit interest rates were low, the opportunity cost of holding currency was also low for most part of the year. The cumulative rise in the deposit rates, however, progressively raised the opportunity cost of holding idle currency; accordingly, a switch from currency holdings and demand deposits

Table IV.3: Reserve Bank's Liquidity Management Operations					
(₹ crore					
Item	2010-11				2011-12
	Q1	Q2	Q3	Q4	Q1
1	2	3	4	5	6
A. Drivers of Liquidity (1+2+3+4)  1. RBI's net Purchase from Authorised Dealers 2. Currency with the Public 3. a. Centre's surplus balances with RBI 3. b. WMA and OD 4. Others (residual)	-1,05,124 816 -58,421 -58,249 0 10,730	26,981 751 240 10,953 0 15,037	-1,12,597 5,991 -45,969 -78,960 0 6,341	79,222 0 -45,487 1,28,021 0 -3,312	-34,844 0 -39,078 8,077 0 -3,843
<ul> <li>B. Management of Liquidity (5+6+7+8)</li> <li>5. Liquidity impact of LAF</li> <li>6. Liquidity impact of OMO* (net)</li> <li>7. Liquidity impact of MSS</li> <li>8. First round impact of CRR change</li> </ul>	<b>67.255</b> 75.785 1.550 2.420 -12,500	-41,456 -44,545 2,772 317 0	1,34,075 83,165 50,910 0	10,088 -7,410 23,181 0	-8,965 -9,800 835 0
C. Bank Reserves # (A+B)	-37,869	-14,475	21,478	89,311	-43,809

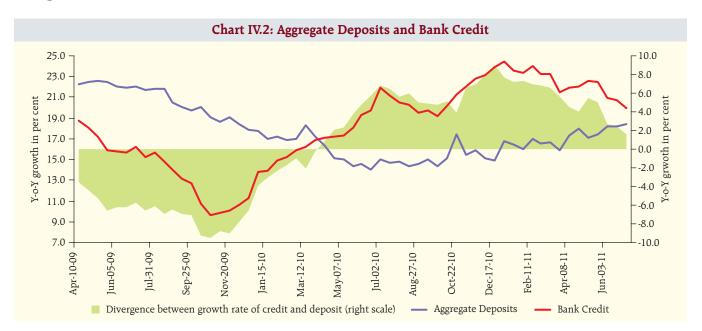
<sup>(+):</sup> Injection of liquidity into the banking system.

Note: Data pertain to March 31 for Q4 and last Friday for all other quarters.

<sup>(-):</sup> Absorption of liquidity from the banking system.

<sup>\*:</sup> Includes oil bonds but excludes purchases of government securities on behalf of State Governments.

<sup>#:</sup> Includes vault cash with banks and adjusted for first round liquidity impact due to CRR change.



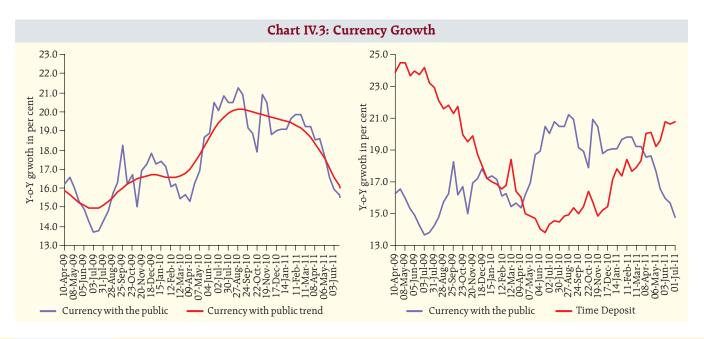
to time deposits ensued. The moderation in economic activity and correction in asset markets further aided this phenomenon.

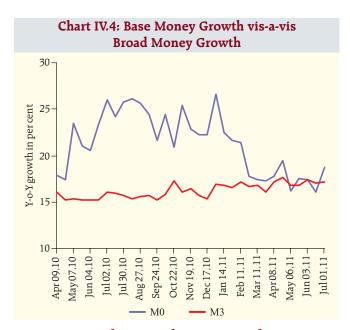
#### Reserve money growth moderates

IV.10 During the first three quarters of 2010-11, reserve money growth was high reflecting the injection of primary liquidity by the Reserve Bank in response to the tight liquidity conditions. The injection of primary liquidity was mainly through repo operations under the LAF and open market purchases. Reserve money growth also reflected the increase in CRR. During the same period however, growth in

money supply was restrained due to sharp moderation in the growth of aggregate deposits as a response to low deposit rates in an environment of high inflation.

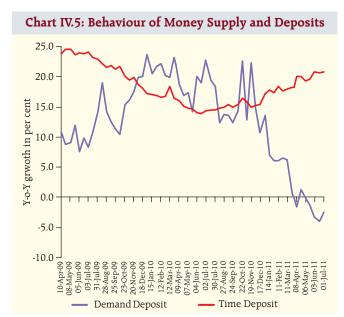
IV.11 Liquidity conditions eased during Q1 of 2011-12 as reflected in the lower average availment of LAF window by banks. No primary liquidity was added by way of the Reserve Bank's forex management. The slowdown in the injection of primary liquidity by the Reserve Bank has resulted in a deceleration in reserve money growth since the peak attained in end-December 2010 (Chart IV.4).





### Money supply growth remains above projection

IV.12 Even though reserve money growth decelerated, broad money growth increased faster in Q1 of 2011-12 as deposit growth picked-up. The broad money supply growth thus remains above the indicative trajectory of the Reserve Bank (Table IV.4). Time deposits, which account for nearly 88 per cent of aggregate deposits, have especially witnessed a strong growth as interest rates increased sharply in response to the deficit liquidity conditions coupled with steady increase in policy rates. Demand deposits declined on a year-on-year basis as the opportunity cost of holding money in low interest bearing deposits increased (Chart IV.5).



## Credit growth stays above indicative trajectory

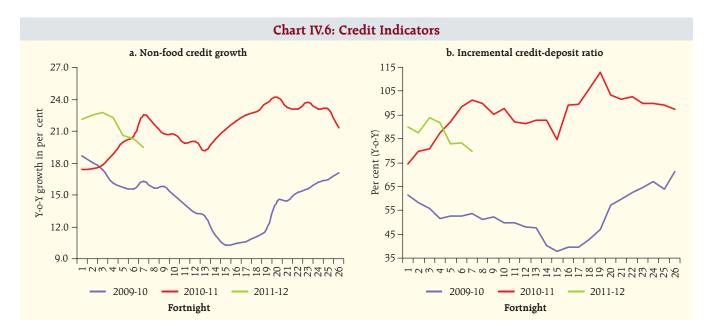
IV.13 Credit growth, which had witnessed sharp acceleration in 2010-11, moderated in the first quarter of 2011-12 on a year-on-year basis, partly reflecting transmission from higher lending rates and partly due to the base effect. Notwithstanding this deceleration, non-food credit growth remains high in the financial year so far, in contrast to the seasonal slack generally seen during this period. Currently, it is above the indicative trajectory. The higher interest rates also prompted sharper growth in deposits, especially time deposits. As a result, the incremental credit-deposit ratio moderated (Chart IV.6).

Table IV.4: Monetary Indicators

Item	Outstanding Amount (₹ crore)	FY variations (per cent)		Y-o-Y Variations (per cent)		
	July 01, 2011	2010-11	2011-12	Jul 02, 2010	Jul 01, 2011	
1	2	3	4	5	6	
Reserve Money (M <sub>0</sub> )*	13,62,693	1.5	-1.0	24.2	16.1	
Broad Money (M <sub>3</sub> )	68,12,286	3.8	4.8	16.0	17.1	
Main Components of M <sub>3</sub>						
Currency with the Public	9,41,915	6.9	3.0	20.0	14.8	
Aggregate Deposits	58,66,583	3.3	5.1	15.4	17.5	
of which: Demand Deposits	6,79,369	-2.9	-5.3	22.7	-2.5	
Time Deposits	51,87,215	4.4	6.6	14.3	20.8	
Main Sources of M <sub>3</sub>						
Net Bank Credit to Government	20,86,919	3.9	5.3	22.3	20.4	
Bank Credit to Commercial Sector	43,78,440	5.0	3.4	20.9	19.4	
Net Foreign Assets of the Banking Sector	14,43,817	2.4	3.6	-0.2	10.0	

Note: 1. Data are provisional.

2. \*: Data pertain to July 15, 2011.



#### Real rates remain positive

IV.14 With the recent acceleration in inflation, some real interest rates, measured ex post, by subtracting current inflation from the nominal interest rates are negative, giving an impression that the policy stance is not contractionary enough. The policy repo rate at 7.5 per cent seen against the current headline inflation rate of 9.4 per cent is negative. However, an appropriate way of calculation of real policy rates is by using expected inflation rate for calculations. The Reserve Bank has projected 6.0 per cent inflation rate by the end of 2011-12. Ex-ante. on this basis, the real rate is positive at the current level. However, what is important is the level of real lending rate which continues to remain positive in the various alternative ways of calculation (Chart IV.7). Taking a two-year moving average series of headline inflation rate to

represent adaptive inflation expectations, the smoothened real lending rate series reinforces the observation that real interest rates remain positive.

#### Credit expansion shows a differential trend

IV.15 The moderation in credit growth on a y-o-y basis is especially evident in the case of public sector banks, as lending rates rose. Foreign banks, which had sharply cut back on their lending during the crisis period, significantly increased their lending in the recent period (Table IV.5).

IV.16 The year-on-year flow of credit continued to register high growth to industrial, services and personal loans sectors (Table IV.6). Credit to industry was led by sectors such as mining and quarrying, infrastructure, food processing and basic metal and metal products. While bank credit to NBFC sector continues to

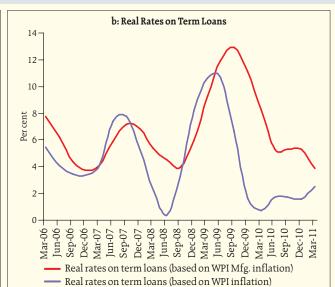
Table IV.5: Credit Flow from Scheduled Commercial Banks	
	(Amount in ₹ crore)

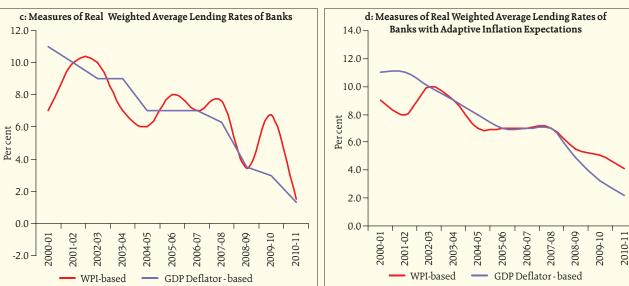
Bank Groups	Outstanding	Year-on-Year Variation as on			
	as on July 01,	July 02, 2010		July 01, 2011	
	2011	Amount	Per cent	Amount	Per cent
1	2	3	4	5	6
1. Public Sector Banks*	30,32,648	4,65,942	22.6	5,03,142	19.9
2. Foreign Banks	2,08,635	19,401	12.2	30,430	17.1
3. Private Banks	7,49,089	1,11,509	22.0	1,30,566	21.1
4. All Scheduled Commercial Banks	40,86,327	6,12,578	21.9	6,78,182	19.9

Note: 1. Data as on July 01, 2011 are provisional.

<sup>2. \*</sup> Excluding Regional Rural Banks.

Chart IV.7: Real Rate of Interest on Demand Loans and Term Loans a: Real Rates on Demand Loans 14 14 12 12 10 10 Per cent Per cent 6 2 Jun-08 Sep-08 Jun-09 Sep-09. Dec-06. Sep-06 Dec-06 Sep-07 Mar-08 Dec-08 Mar-09 Dec-06 Jun-07 Sep-07 Mar-07 Real rates on demand loans (based on WPI Mfg. inflation) Real rates on demand loans (based on WPI inflation) c: Measures of Real Weighted Average Lending Rates of Banks 12.0 12.0 10.0 10.0 8.0 8.0 cent





accelerate sharply, the sharp rise in credit to infrastructure sector is also noteworthy as it is on a high base.

IV.17 Even though banks continued to be the dominant source of finance to the commercial sector, non-bank sources also contributed significantly to the credit requirements of the economy during Q1 of 2011-12 (Table IV.7). The share of non-bank sources to total flow of financial resources increased from about 36 per cent in April-June 2010-11 to 49 per cent in April-June 2011-12, with both domestic and foreign funding increasing. Within domestic sources, net issuance

under CPs and NBFC-ND-SI, LIC and housing finance companies (HFCs) increased. The resource flow from external sources went up on account of higher mobilisation through foreign direct investment and external commercial borrowings.

#### Tight monetary conditions likely to prevail

IV.18 The Reserve Bank has been pursuing an antiinflationary monetary policy stance since October 2009, with a view to containing inflation and anchoring inflationary expectations. The steady rise in policy rates was reflected in increase in borrowing as well as lending interest rates. As a result, reserve money

Table IV.6: Sectoral Deployment of Credit						
(Per cent)						
Sector	Outstanding Credit Y-o-Y Vari		riation	Financial Year Variation		
	as on June 17, 2011 (₹ crore)	June 18, 2010/ June 19, 2009	June 17, 2011/ June 18, 2010	June 18, 2010/ March 26, 2010	June 17, 2011/ March 25, 2011	
1	2	3	4	5	6	
Non-food Credit	37,08,927	20.2	19.6	2.0	1.1	
Agriculture & Allied Activities	4,53,812	21.7	12.8	-3.3	-1.4	
Industry	16,67,577	29.2	22.0	4.2	2.9	
Of which, Mining and Quarrying (incl. Coal)	26,890	32.6	41.6	5.0	17.6	
Food Processing	86,482	26.8	24.8	5.5	1.8	
Basic Metal & Metal Product	2,14,921	28.6	25.9	4.8	2.4	
Infrastructure	5,52,682	50.0	30.2	11.8	5.0	
Of which, Power	2,92,342	52.8	39.8	11.3	8.6	
Telecommunications	94,319	72.0	16.7	36.1	-6.1	
Roads	99,038	46.7	27.9	5.2	7.0	
Services	8,92,281	16.2	20.9	1.6	-0.9	
Of which, Transport Operators	58,254	35.8	11.2	-0.3	-11.0	
Trade	1,85,142	16.3	11.4	1.0	-0.6	
Commercial Real Estate	1,13,376	-4.5	23.2	-0.1	1.4	
NBFCs	1,69,321	25.0	44.5	3.3	-3.6	
Personal Loans	6,95,257	6.6	17.3	1.2	1.4	
Of which, Housing (Including Priority Sector)	3,58,828	9.7	17.0	2.0	3.7	
Credit Card Outstanding	18,134	-27.0	-5.8	-4.4	0.2	
Vehicle Loans	82,330	11.0	22.9	5.0	3.8	

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 dissemintated every month from November 2010.

creation has been restrained. This may keep monetary conditions tight in near term. Credit and money supply

growth may decelerate further and help in sustaining monetary transmission.

Table IV.7: Flow of Financial Resources	s to the Com	mercial Sect	or	
				(₹ crore)
Item	April-Ma	arch	April-J	une
	2009-10	2010-11	2010-11	2011-12
1	2	3	4	5
Adjusted Non-food Bank Credit (NFC)     i) Non-Food Credit     of which petroleum and fertilizer credit     ii) Non-SLR Investment by SCBs	<b>4,78,614</b> 4,66,960 10,014 11,654	<b>7,11,031</b> 6,81,501 -24,236 29,530	1,67,496 1,57,396 -18,288 10,100	1,23,180+ 1,28,919+ 6,435 * -5,739+
<ul> <li>B. Flow from Non-banks (B1+B2)</li> <li>B1. Domestic Sources</li> <li>1. Public issues by non-financial entities</li> <li>2. Gross private placements by non-financial entities</li> <li>3. Net issuance of CPs subscribed to by non-banks</li> <li>4. Net credit by housing finance companies</li> <li>5. Total gross accommodation by the four RBI regulated AIFIs - NABARD, NHB, SIDBI &amp; EXIM Bank</li> <li>6. Systemically important non-deposit taking NBFCs (net of bank credit)</li> <li>7. LIC's gross investment in corporate debt, infrastructure and social sector</li> <li>B2. Foreign Sources</li> <li>1. External Commercial Borrowings / FCCBs</li> <li>2. ADR/GDR Issues excluding banks and financial institutions</li> <li>3. Short-term credit from abroad</li> <li>4. FDI to India</li> </ul>	5,88,784 3,65,214 31,956 1,41,964 26,148 28,485 33,783 60,663 42,215 2,23,570 15,674 15,124 34,878 1,57,894	5,11,006 2,92,084 28,520 63,947 17,207 38,386 40,007 67,937 36,080 2,18,922 52,899 9,248 50,177 1,06,598	95,111 60,031 5,187 - 31,795 4,028 3,281 15,122 618 35,080 10,425 4,832 - 19,823	1,16,488 69,265 1,521 - 40,846 * 6,386 * -6,732 21,701 * 5,543 * 47,223 11,196 1,237 - 34,790 *
C. Total Flow of Resources (A+B)	10,67,398	12,22,037	2,62,607	2,39,668
Memo Item:				
Net resource mobilisation by Mutual Funds through Debt (non-Gilt) Schemes	96,578	-36,707	8,335	10,186

<sup>\*:</sup> Up to May 2011 +: Up to July 1, 2011 -: Data is not available

**Note:** FDI Data include equity capital of incorporated entities for the period April-May and does not include reinvested earnings, other capital and equity capital of unincorporated entities.