

## Chapter 4

# Prices and Monetary Management

In comparison with previous years, inflation showed signs of receding with average wholesale price index (WPI) inflation falling to a three-year low of 5.98 per cent during 2013-14. Consumer price inflation, though higher than the WPI, has also exhibited signs of moderation with CPI (new-series) inflation declining from 10.21 per cent during 2012-13 to about 9.49 per cent in 2013-14. Food inflation, however, remained stubbornly high during FY 2013-14. As inflation remained above the comfort level of the Reserve Bank of India (RBI), the tight monetary policy stance was maintained by the Central Bank. The depreciation of the rupee, following the taper indication by the Federal Open Market Committee (FOMC) in May 2013, also impacted the inflation situation. The rupee went into a free fall and touched a low of ₹68 to a dollar in August end. However, the government and the RBI were quick to respond and announced immediate measures to arrest volatility and quell speculation. The RBI has since stuck to its commitment to bringing down inflation levels and maintained high rates in Q4 2013-14. Going forward, both wholesale and consumer price inflation in India is expected to inch downwards, paving the way for monetary easing, although, there are risks to the outlook for inflation from a possible sub-normal monsoon during 2014-15 as predicted by the IMD on account of El-Nino effect, possible step up in the pass-through of international crude oil prices, and exchange rate volatility.

### TREND IN INFLATION

4.2 Through 2013-14, inflation in India has remained high, and above the RBI's comfort zone, as reflected in the tight monetary policy stance. Table 4.1 shows a comparison of the different inflation indices.

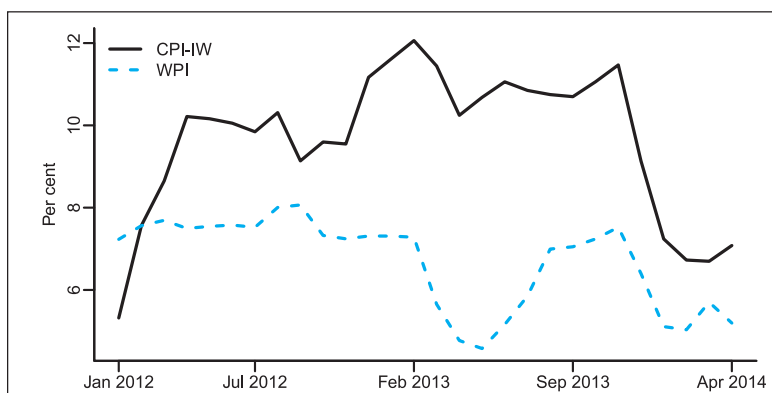
4.3 Headline WPI inflation, which reflects prices of tradeables, has moderated in 2013-14 to 5.98 per cent, falling from between

Year	WPI	CPI-IW	CPI-NS
2011-12	8.94	8.39	-
2012-13	7.35	10.44	10.21
2013-14	5.98	9.68	9.49

**Source:** Office of the Economic Adviser, Department of Industrial Policy and Promotion (DIPP), Labour Bureau, Central Statistics Office (CSO).

**Notes:** WPI is wholesale price index; CPI-IW is consumer price index-industrial workers; CPI-NS is CPI-new series.

Table 4.1 : Year-on-Year Inflation (per cent)



**Source:** Office of the Economic Adviser, DIPP and Labour Bureau.

Figure 4.1 : WPI and CPI-IW Inflation

7 and 9 per cent over the previous two years (Table 4.1). This is due to weak post-crisis global demand and lower international commodity prices, as well as a sharp seasonal correction in vegetable prices.

4.4 Retail inflation as reflected in consumer price index (CPI) inflation has remained persistently over 8 per cent since 2011, going up above 10 per cent in 2012-13. This trend is largely attributed to high and sustained food inflation, which has only moderated in Q4 2013-14 causing consumer inflation to fall marginally to between 9 and 10 per cent in late FY 2013-14. Figure 4.1 shows the gap between WPI and consumer price index-industrial workers (CPI-IW) series, and Figure 4.2 shows the inflation in consumer price index-new series (CPI-NS).

4.5 Food inflation has remained a major driver of inflation since 2011. Seasonal factors accentuated food inflation which rose to double digits in early 2013-14, before moderating to an average of 6.22 per cent (WPI) and 9.22 per cent (CPI-NS) in the last quarter, because of high growth in the agricultural sector and a normal and well-distributed monsoon. The divergence in WPI and CPI inflation is primarily on account of higher weightage given to food articles in the consumer price indices.

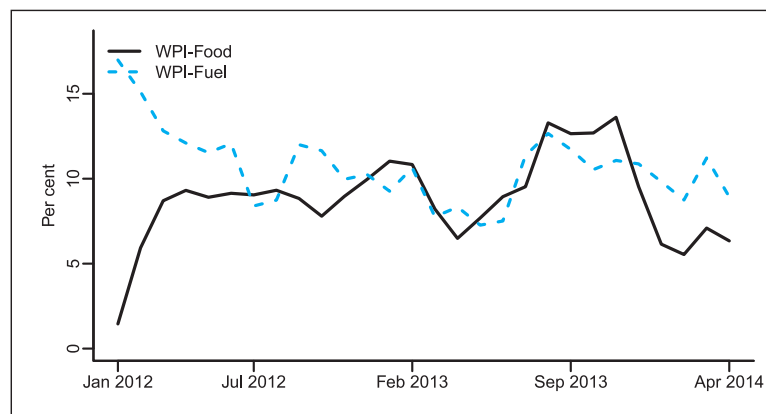
### TREND IN WHOLESALE PRICE INFLATION

4.6 Table 4.2 shows the yearly and quarterly rates of inflation in the WPI and sub-indices. In 2013-14, the largest contribution to headline WPI inflation has been from food and fuel (Figure 4.3).

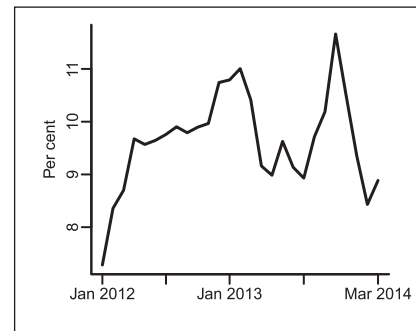
	All commodities	Food combined	NFM product (core)	Fuel & power
Weights	100	24.31	55.00	14.91
Yearly Inflation				
2011-12	8.94	7.24	7.28	13.96
Quarterly Inflation				
2012-13 Q1	7.54	9.12	5.15	11.90
2012-13 Q2	7.87	9.07	5.71	9.72
2012-13 Q3	7.29	8.89	4.70	10.62
2012-13 Q4	6.74	10.02	3.95	9.22
2013-14 Q1	4.84	7.71	2.58	7.70
2013-14 Q2	6.63	11.83	2.36	11.92
2013-14 Q3	7.05	11.95	3.08	10.83
2013-14 Q4	5.38	6.22	3.74	10.11

**Source:** Office of the Economic Adviser, DIPP.

**Note:** NFM—non-food manufactured.



**Source:** Office of the Economic Adviser, DIPP.



**Source:** CSO.

Figure 4.2 : CPI-NS (combined) inflation

Table 4.2 : Inflation in WPI and Sub-indices (per cent)

Figure 4.3 : WPI Food and Fuel Inflation

4.7 WPI food inflation has remained persistently high during 2013-14, reaching a peak of 11.95 per cent in Q3. This was led by high inflation in cereals, vegetables, and eggs, fish and meat (EFM) (Table 4.3). Spike in prices of fruits and vegetables was mainly owing to seasonal factors.

4.8 Prices of EFM reflected higher rural and urban demand. Inflation in cereals was a product of rising rural wages and costs of cultivation. Of these, the sharpest correction took place in fruits and vegetable prices in Q4 of 2013-14, pulling overall food inflation down to 6.22 per cent in that quarter. However, the structural and policy-related factors causing inflation still need to be addressed (Box 4.1).

Cereals, vegetables and eggs, fish and meat were the major drivers behind persistent food inflation during 2013-14.

	Primary food					Manufactured food	
	Cereals	Pulses	Vegetables	Milk	EFM	Sugar	Edible oils
Weights	3.37	0.72	1.74	3.24	2.41	1.74	3.04
Yearly inflation							
2011-12	3.86	2.52	-1.95	10.31	12.73	5.10	12.55
Quarterly inflation							
2012-13 Q1	6.36	16.20	53.79	11.56	17.12	5.16	10.35
2012-13 Q2	11.06	30.68	8.34	7.05	14.63	15.40	10.82
2012-13 Q3	17.73	18.30	-0.15	6.23	13.33	14.67	9.44
2012-13 Q4	18.36	13.56	14.64	4.49	11.67	9.98	6.05
2013-14 Q1	16.45	5.92	4.70	4.19	11.45	7.56	0.99
2013-14 Q2	15.53	-11.94	72.08	4.93	15.15	-3.48	-2.60
2013-14 Q3	10.91	-9.33	79.18	6.51	13.73	-7.19	-0.31
2013-14 Q4	9.08	-5.08	7.36	8.49	10.79	-5.53	-1.14

Table 4.3 : Y-o-Y inflation in sub-groups of WPI food (per cent)

Source: Office of the Economic Adviser, DIPP.

#### Box 4.1 : Priorities before Government to Contain Inflation

The strategy to control inflation has to take into account the following factors:

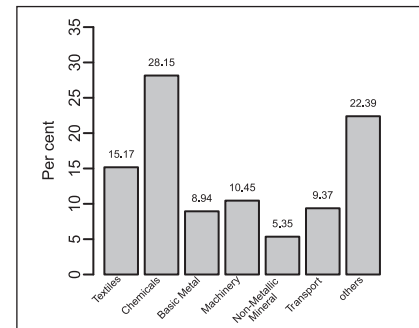
- Move to market prices:** It is important to be cognizant of the fact that deregulation of diesel prices, power-sector reforms, and generally the move from administered to market-determined prices will release suppressed inflation in the short run. Nevertheless, the consequent reduction in subsidy and fiscal deficit will have the salutary effect of reducing inflation.
- Improving efficiency of public programmes and breaking the wage-price spiral:** The projects selected for schemes like the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) do not improve the productivity of the agricultural sector commensurately. The increasing wages under such schemes have reportedly created shortage of labour in the agricultural sector as well as caused a wage-price spiral. The solution lies in selection of productivity-enhancing projects for ambitious public policy programmes like the MGNREGS.
- Rationalization of government support to farmers:** If the policy of supporting farmers through MSP and procurement is to continue, the MSP should be scrupulously linked to the cost of production. Procurement should not be open-ended, and the practice of some state governments of charging as high as 14-15 per cent mandi fee/tax and paying high bonuses over and above the MSP must be discouraged. Experience has shown that the Food Corporation of India (FCI) has not been able to release enough stocks in the market to soften cereal prices while recovering its economic cost. While farmers can be incentivized by gradually removing restrictions on exports, the FCI can learn to procure stocks from markets more efficiently and manage risks through the futures market.
- Role of APMC Acts:** The State Agricultural produce marketing committee (APMC) Acts have created monopolies and distributional inefficiencies. They constitute a major roadblock in the way of creating a national market for agricultural commodities. Apart from breaking the monopoly and dissuading state governments from treating the APMCs as liberal sources of revenue, substantive efforts have to be made to create alternative trading platforms in the private sector where it is possible to reduce the layers of intermediation. Since this may take time, fruits and vegetables should be taken out of the purview of the APMC Acts immediately. A processor should be able to buy directly from farmers without having to pay any mandi fee/tax to the APMC.
- Role of public deficits:** Fiscal deficit should be brought down by setting stringent time-bound targets under the Fiscal Responsibility and Budget Management (FRBM) Act.

## FUEL INFLATION—IMPACT OF DEREGULATION AND DEPRECIATION OF RUPEE

4.9 Fuel inflation remained in double digits in the last three quarters, largely on account of movements in global crude prices, exchange rates, and revision in the administered prices. Oil marketing companies are allowed to revise retail prices of diesel upto 50 paise per month. Electricity tariffs were revised, and raised, in several states and pass-through of both global crude prices, as well as rupee depreciation particularly after the taper announcement by the US Federal Reserve in May 2013 increased domestic prices of several sub-components such as high-speed diesel.

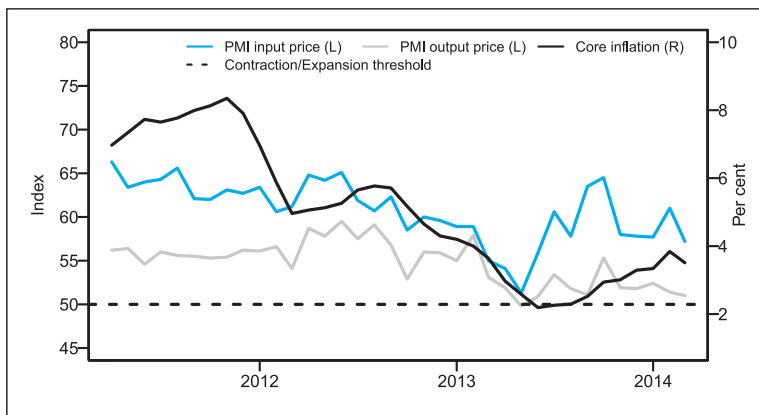
4.10 Inflation in non-food manufactured (NFM) commodities, i.e core inflation, remained benign at around 2.5-3.5 per cent throughout the year on account of lower international prices and growth slowdown. Unlike the inflation in food and fuel, inflation in NFM inched up partly on account of wearing off of base effect and inflationary pressure within the chemicals, machinery and textile groups (Figure 4.4).

4.11 The input price index, as measured by the HSBC, has shown a downward momentum after rising to a 16-month high of 64.5 in October 2013. The output price index of the purchasing managers index (PMI), which has a strong correlation with WPI core inflation, after showing moderation in the last couple of months has inched upward in May 2014, suggesting upward pressure in core inflation in coming months (Figure 4.5).



Source: Office of the Economic Adviser, DIPP.

Figure 4.4 : Contribution to WPI-core (2013-14)



Source: Office of the Economic Adviser, DIPP and HSBC.

Figure 4.5 : Input/output price indices and WPI-core

## TREND IN CONSUMER PRICE INFLATION

4.12 CPI inflation remained close to double digits during a large part of the year. The CPI-NS (combined) inflation, which reached a peak of 10.40 per cent in Q3 of 2013-14, moderated on account of a sharp correction in food prices to 8.37 per cent in Q4 (Figure 4.6). The RBI has decided to use the CPI-NS as the nominal anchor for a flexible inflation targeting framework (Box 4.2). Rural inflation has been higher than urban CPI-NS inflation since Q3 2013-14.

4.13 In general, approximately 50 per cent of CPI-NS (combined) inflation in the last three years has come from food. The drivers of CPI-NS food inflation were similar to those for the WPI, with vegetables, cereals and protein items together contributing more than 80 per cent.

While headline CPI-NS moderated in Q4 of 2013-14, core inflation remained sticky and persistent owing to pressures from services-led components.

### Box 4.2 : Urjit Patel Committee to Strengthen the Monetary Policy Framework

An expert committee headed by Urjit R. Patel, Deputy Governor of the RBI was appointed on 12 September 2013 to revise and strengthen the monetary policy framework. The main objective of the committee was to recommend what needs to be done to revise and strengthen the current monetary policy framework with a view to making it transparent and predictable. The group submitted its report in January, 2014 and inter-alia, made the following recommendations with regard to managing inflation in the country:

1. CPI (combined) should be used as the nominal anchor for a flexible inflation targeting (FIT) framework. The choice of CPI as nominal anchor was mainly on account of the fact that the CPI closely reflects cost of living and has larger influences on inflationary expectations than other anchors.
2. Target rate of inflation should be 4 per cent with a tolerance band of 2 per cent to be achieved in a two-year time frame.
3. The transition path to the target zone should be graduated to bring down inflation from the current level of around 10 per cent to 8 per cent over a period not exceeding 12 months and to 6 per cent over a period not exceeding the next 24 months.
4. Administered prices and interest rates should be eliminated as they act as impediments to monetary policy transmission and achievement of price stability.

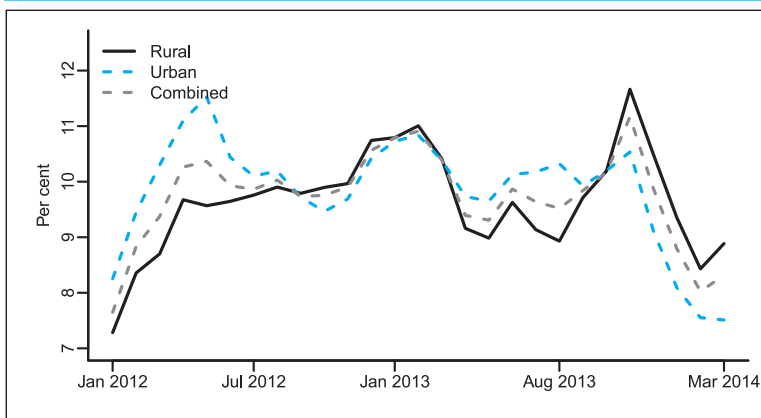


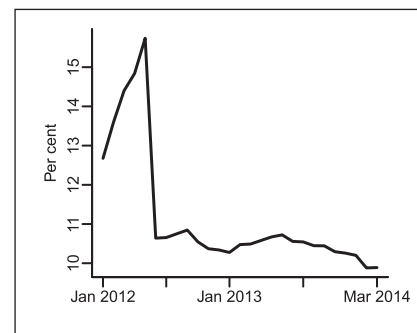
Figure 4.6 : Inflation in CPI-NS: Rural, urban, and combined

Source: CSO.

4.14 CPI-NS inflation excluding food and fuel, i.e. core, remained sticky and persistent owing to pressures from services-led components such as medical, education, household requisites, and 'others'. High inflation in respect of CPI services reflected the role of wage pressures and other second-round effects.

### RESIDEX

4.15 Housing, which contributes almost 10 per cent to overall consumer inflation, has shown some moderation in recent months (Figure 4.7). The National Housing Bank (NHB) RESIDEX, which is a quarterly index of residential prices, shows a mixed trend.



Source: CSO.

Figure 4.7 : CPI-NS housing inflation

### INFLATION EXPECTATIONS

4.16 The quarterly Inflation Expectations Survey of Households conducted by the RBI captures the inflation expectations of households for 3-month ahead and 1-year ahead periods. This

Category	3-months		1-year	
	Sep. 2013	Mar. 2014	Sep. 2013	Mar. 2014
General	87.3	89.2	92.5	94.1
Food products	84.3	88.6	89.0	93.8
Non-food products	77.5	80.6	80.9	87.5
Household durables	73.6	70.5	80.1	81.5
Housing	81.9	85.5	87.3	91.6
Services	74.9	83.1	82.8	90.4

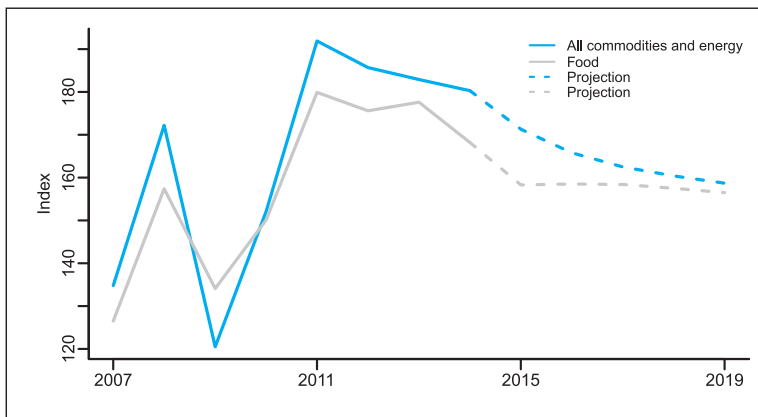
Source: RBI.

Table 4.4 : Inflation expectations

provides useful information on the direction of short-term inflationary pressures as it is based on individual consumption baskets. Table 4.4 shows that the percentage of respondents with expectations of price rise in 3 months and 1 year has increased moderately in the 6-month period between September 2013 and March 2014.

### GLOBAL COMMODITY PRICES ARE EXPECTED TO REMAIN FLAT

4.17 The global recovery has continued during 2013-14 and it is likely to improve further during 2014-15. However, large output gaps and the fragile nature of recovery in many parts of the world has led to recent decline in global commodity prices. Futures markets show most commodity prices declining or remaining flat over the



Source: IMF.

next 12 months (Figure 4.8), with the exception of wheat, coffee and corn. Similar observations are made in the Commodity Price Outlook and Risk released by the International Monetary Fund (IMF) in May 2014. There are prospects of a downward trend in fuel prices owing to ample supplies, while gold futures prices remain flat. Copper prices are expected to decline slightly over the next year amid concerns of slowing Chinese demand.

4.18 The World Economic Outlook (WEO) released by the IMF in April 2014 has projected consumer price inflation at 1.5 per cent and 1.6 per cent in advanced economies during 2014 and 2015 respectively (compared to 1.4 per cent in 2013) while inflation in emerging market and developing economies (EMDE) is expected to remain around 5.5 per cent and 5.2 per cent during 2014 and 2015 respectively (compared to 5.8 per cent in 2013). The easing of commodity prices including food and fuel is expected to augur well for inflation in emerging market and developing countries including India.

### OUTLOOK FOR INFLATION

4.19 The RBI has targeted bringing down CPI inflation to around 8 per cent by January 2015 and 6 per cent by January 2016. As regards the WPI, though headline inflation has inched up to 6 per cent in May 2014 led by an increase in prices of some food articles and global commodity prices (crude oil, oilseeds), it is expected to moderate by the end of 2014.

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As per the IMF's projection, most of the global commodity prices are expected to remain flat during 2014-15, which augurs well for inflation in emerging market and developing countries including India.

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Figure 4.8 : IMF Commodity Forecasts

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Headline WPI inflation is expected to moderate by the end of 2014. However, risks to the outlook stem from possible sub-normal monsoon and higher crude oil prices.

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4.20 As inflation eases, it is expected that the RBI would adopt a more accommodative stance and undertake monetary easing. However, the most prominent risk to this outlook is the possibility of sub-normal monsoon during 2014-15 and impact on crude oil prices on account of the crisis in Iraq. The Meteorological Department has predicted below-normal rainfall at 93 per cent of the long period average with 70 per cent probability of an El Nino occurring.

## MONETARY MANAGEMENT

4.21 The course of gradual monetary easing that had started alongside some moderation of inflationary pressures at the beginning of FY 2013-14 was disrupted by the overriding need to stabilize the exchange market. The RBI started FY 2013-14 with a 25 basis point (bps) cut in the policy repo rate. There was a sharp depreciation of the rupee due to the sudden surge in capital outflows in May 2013, following indications of possible tapering of the US Fed's quantitative easing (QE) programme. Consequently, the RBI hiked short-term interest rates in July and compressed domestic money market liquidity in order to restore stability to the foreign exchange market (Figure 4.9).

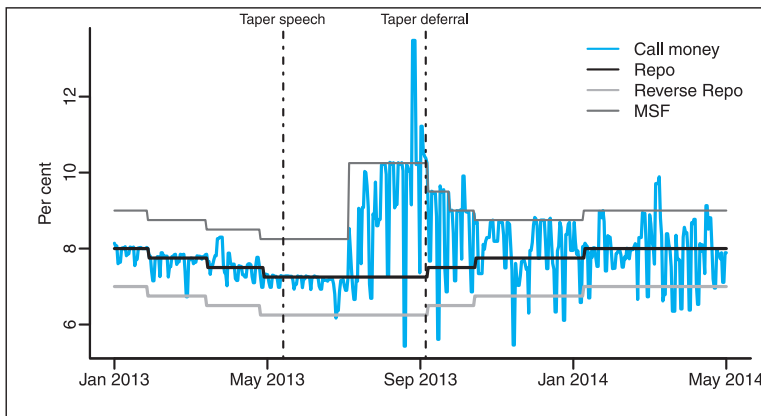


Figure 4.9 : Key Policy Rates at a Glance

Source: RBI.

4.22 The major measures taken in mid-July 2013 were as follows:

1. Marginal standing facility (MSF) rates were hiked by 200 bps to 10.25 per cent, increasing the width of the repo-MSF corridor to 300 bps.
2. Daily MSF borrowing was restricted to 0.5 per cent of the net demand and time liability (NDTL) of respective banks as against the earlier practice of unlimited access against excess statutory liquidity ratio (SLR) holdings.
3. Minimum daily cash reserve ratio (CRR) requirement for banks was hiked from 70 per cent to 90 per cent of the requirement.
4. Weekly auctions of cash management bills (CMB) were also conducted to drain out liquidity from money markets.

4.23 These measures moved up the call rate to MSF rate, making the latter the effective policy rate in line with policy intent. Following the ebbing of volatility in the foreign exchange market, the Reserve Bank initiated normalization of the exceptional



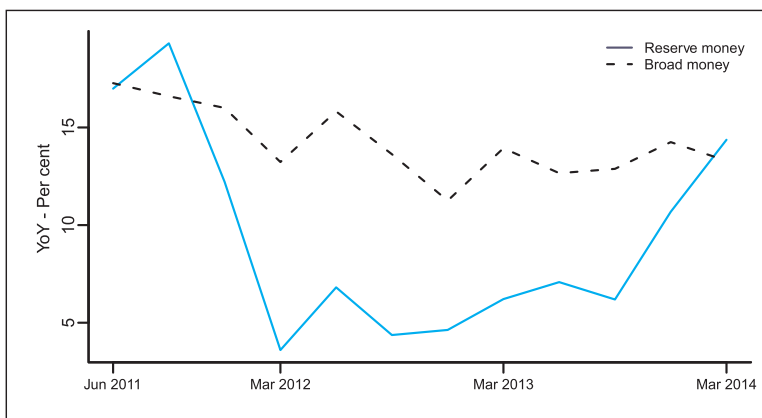
measures in a calibrated manner after the FOMC decided not to taper the QE programme as expected in September. The interest rate corridor was realigned to normal monetary policy operations with the MSF rate being reduced in three steps to 8.75 per cent between 20 September 2013 and 29 October 2013, even as the repo rate was increased in two steps of 25 bps each to 7.75 per cent with a view to containing inflation and inflation expectations.

4.24 The minimum daily CRR balance maintained by banks was reduced to 95 per cent of the requirement from 99 per cent to provide them with the flexibility to better manage their liquidity situation. As an additional liquidity-enhancing measure and for developing the term money market, the RBI introduced weekly variable rate term repos of 7-day and 14-day tenors in October 2013 for an amount equivalent to 0.25 per cent of the NDTL of the banking system. The CRR and SLR rates remained unchanged throughout the year (Table 4.5).

4.25 The RBI hiked the repo rate by 25 bps to 8 per cent on account of upside risks to inflation as part of its third quarterly review, to anchor inflation expectations and to contain second-round effects. The move was intended to set the economy securely on the disinflationary path.

### TRENDS IN MONETARY AGGREGATES

4.26 During 2013-14, reflecting the policy-induced liquidity measures, net domestic assets registered a pick-up. In view of the swap facility extended to banks, the foreign currency non-resident (bank) (FCNR (B)) deposit mobilization increased, thereby boosting the aggregate deposit growth. As at end March 2014, reserve money ( $M_0$ ) growth accelerated to 14.4 per cent, while broad money ( $M_3$ ) increased by 13.3 per cent (Figure 4.10).



Source: RBI.

### RESERVE MONEY ( $M_0$ )

4.27  $M_0$  grew by 14.4 per cent in 2013-14 as compared to 6.2 per cent in the previous year. The main driver of increase in reserve money during 2013-14 was net RBI credit to the centre. This expansion was mainly on account of increase in variable-rate term repos (which were introduced in October 2013), MSF and net purchases through open market operations (OMOs), partially offset

Instrument	2012-13	2013-14
		In per cent
CRR	4.0	4.0
SLR	23.0	23.0

Source: RBI.

Table 4.5 : CRR and SLR Rates

Figure 4.10 : Quarterly growth of  $M_0$  and  $M_3$



by a decrease in operations under the liquidity adjustment facility (LAF) following the cap on LAF borrowing and build-up in government balance with the Reserve Bank.

4.28 This expansion in net domestic assets (NDA) was also complemented by a pick-up in net foreign assets (NFA) on account of revaluation gain (Figure 4.11). This helped restore a more balanced NDA-NFA mix-led expansion in *Mo*. Adjusted for revaluation, the NFA increased by more than 3.5 times in 2013-14 as compared to 2012-13.

### BROAD MONEY ( $M_3$ )

Indicator	Per cent change in 2013-14
<b><math>M_3</math></b>	<b>13.3</b>
Currency with the public	9.4
Demand deposits with banks	6.9
Time deposits with banks	14.7
'Other' deposits with the RBI	-41.2
<b>Sources of change in <math>M_3</math></b>	
Net bank credit to government	12.6
Bank credit to commercial sector	13.9
Net foreign exchange assets of the banking sector	16.1
Government's currency liabilities to the public	11.9
Banking sector's net non-monetary liabilities	12.3
<b>Memo items</b>	
Velocity of money	1.2
Net domestic assets	12.6
Net domestic credit	13.4

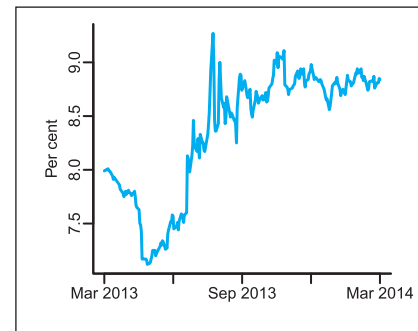
Source: RBI.

4.29 Growth rate in  $M_3$  during 2013-14 at 13.3 per cent was largely in line with the indicative projection of 13.0 per cent growth in the Annual Policy Statement of the RBI for 2013-14. However, it was marginally lower than the 13.6 per cent growth registered during the previous year. The deceleration in growth of broad money compared to last year was primarily on account of lower growth in currency with public and time deposits on the components side.

4.30 During 2013-14, growth in currency with the public decelerated to 9.4 per cent as compared to 11.5 per cent during the previous year. The demand deposits with banks increased by 6.9 per cent during 2013-14 as against a growth of 6.0 per cent during the previous year whereas growth rate of time deposits decelerated marginally to 13.9 per cent compared to 14.0 per cent. On the sources side of  $M_3$ , the growth in bank credit to the commercial sector during 2013-14 showed an improvement to 13.9 per cent from 13.5 per cent in the previous year (Table 4.6).

### MONEY MULTIPLIER

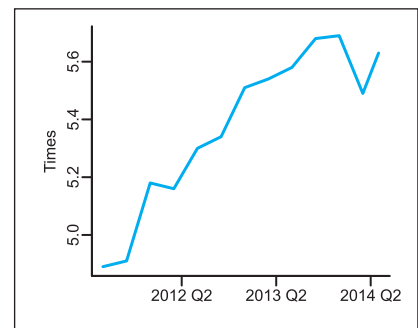
4.31 The money multiplier (ratio of  $M_3$  to  $M_0$ ) at end March 2014 (Figure 4.12) remained unchanged at 5.5 as compared to March 2013. There was an increase in monetary deepening as well, as measured by the ratio of  $M_3$  to gross domestic product (GDP) which increased from 78.2 per cent in 2012-13 to 79.2 per cent in 2013-14 (Figure 4.13). This consistent improvement could be attributed to the spread of banking services in the country and development of the financial sector.



Source: RBI.

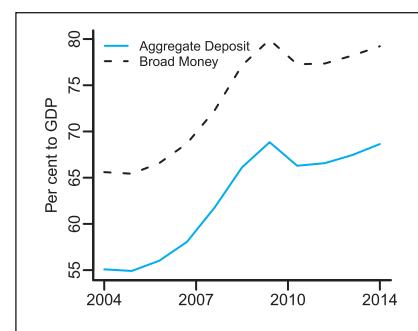
Figure 4.11: Growth in Net Foreign Assets

Table 4.6: Sources of  $M_3$  Growth



Source: RBI.

Figure 4.12 : Money Multiplier



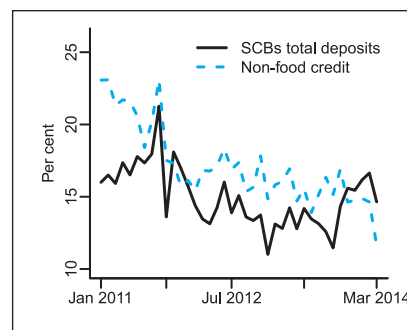
Source: RBI.

Figure 4.13 : Select Monetary Aggregates to GDP

## LIQUIDITY CONDITIONS IN 2013-14

4.32 Liquidity conditions remained tight during the first half of 2013-14, mainly reflecting policy intent to stabilize the exchange market pressures. However, the elevated central government cash balances with the Reserve Bank, quarterly advance tax outflows, and festival induced increase in currency in circulation also contributed towards the tight liquidity phases in 2013-14. In order to prevent excessive worsening of liquidity conditions, which would have impacted financing conditions, the Reserve Bank undertook measures to inject liquidity through OMO purchase auctions, overnight repo, MSF and variable rate term repos.

4.33 As such, total access to funds from the Reserve Bank was augmented to 1.5 per cent of the NDTL comprising 0.5 per cent of NDTL under the overnight repo, 0.5 per cent of NDTL under term repo, and export credit refinance limits of about 0.5 per cent of NDTL. The banks could also meet any further liquidity deficit through the MSF in 2013-14. The buoyant capital inflows under the RBI's swap facilities for banks' overseas borrowings and non-resident deposit funds (operational till 30 November 2013), also significantly helped ease domestic liquidity. The narrowing of the wedge between credit and deposit growth also contributed to improving the liquidity situation (Figure 4.14).



Source: RBI.

Figure 4.14 : Non-food Credit and Scheduled Commercial Bank Deposit Growth

## LIQUIDITY MANAGEMENT

4.34 The RBI actively managed liquidity during 2013-14 consistent with the stance of the monetary policy. The management of liquidity was pursued carefully through appropriate use of the LAF, OMOs, and CRR. During 2013-14, net liquidity to the tune of about ₹ 52,000 crore was injected through outright OMOs, besides an average daily net liquidity injection of ₹ 91,800 crore through the LAF, MSF, and term repos (Table 4.7).

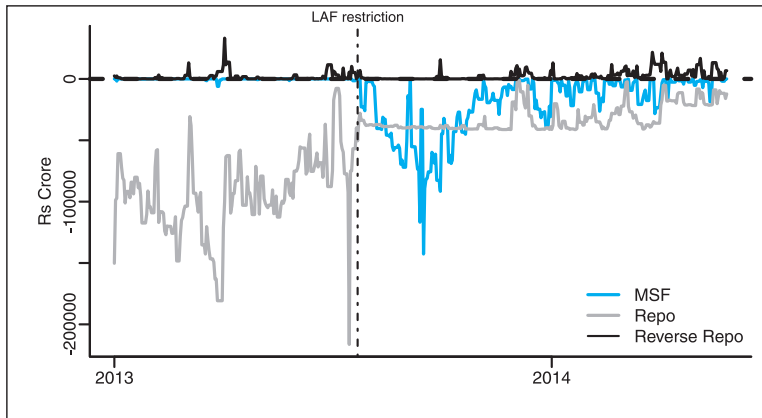
Outstanding on last Friday	Liquidity injection	Centre's surplus	Total
(in ₹ thousand crore)			
2013-14 Q1	-76.19	-1.47	-77.66
2013-14 Q2	-121.04	31.34	-89.70
2013-14 Q3	-117.19	100.83	-16.36
2013-14 Q4	-218.0	109.40	-108.59

Source: RBI.

4.35 The liquidity situation improved in Q1 of 2013-14 as compared to Q4 of 2012-13 on the back of a draw-down in government cash balances maintained with the RBI, especially in June 2013, and significant narrowing of the wedge between deposit and credit growth. During Q2 of 2013-14, the liquidity situation remained comfortable in the first half of July 2013 with the liquidity deficit staying within the Reserve Bank's comfort zone.

4.36 However, in the face of heightened volatility in the domestic forex market, which was, to an extent, facilitated by easy liquidity conditions in the market, the Reserve Bank announced certain liquidity tightening measures, such as a cap on borrowing under the LAF (Figure 4.15), hike in MSF rate, and hike in the minimum

Table 4.7 : Summary of Liquidity Operations



Source: RBI.

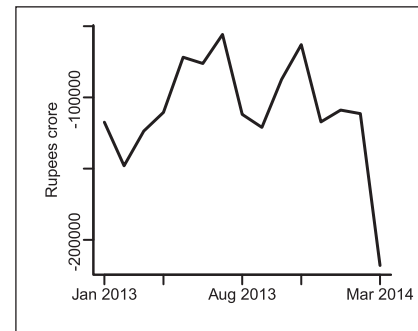
daily CRR requirement, that impacted inter-bank liquidity and led to hardening of money market rates and increased recourse by the banks to the MSF.

4.37 As a result of these measures, average daily liquidity injection under the LAF increased from July 2013 to September 2013 mainly on the back of banks' increased recourse to the MSF. The increase in government cash balances with the RBI and advance tax outflows also contributed towards the increase in liquidity stress in the system in September 2013. In order to manage liquidity pressure arising from advance tax outflows, the Reserve Bank offered two-day funds to banks through the MSF (Figure 4.16).

4.38 The policy-induced tight liquidity conditions during Q2 of 2013-14 eased considerably in October 2013 with the gradual normalization of exceptional monetary measures. Although the festival-induced increase in currency in circulation kept the liquidity situation generally tight in November 2013, capital inflows and slowing credit growth eased domestic liquidity significantly. The major pressures on liquidity in money markets after November were mostly seasonal. Advance tax inflows tightened liquidity conditions in December 2013 and March 2014, whereas excess government balances with the RBI tightened liquidity conditions in February 2014 (Figure 4.17).

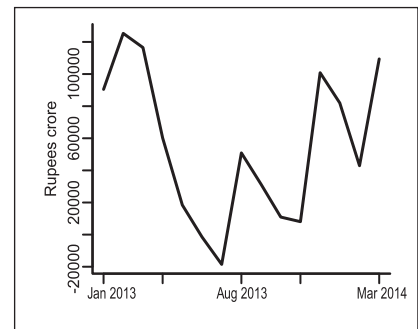
4.39 The RBI responded to the tight liquidity conditions by conducting term repo operations in February and March 2014. The RBI has shown intent to switch the operational procedure of

Figure 4.15 : Switch to MSF after Restriction on LAF



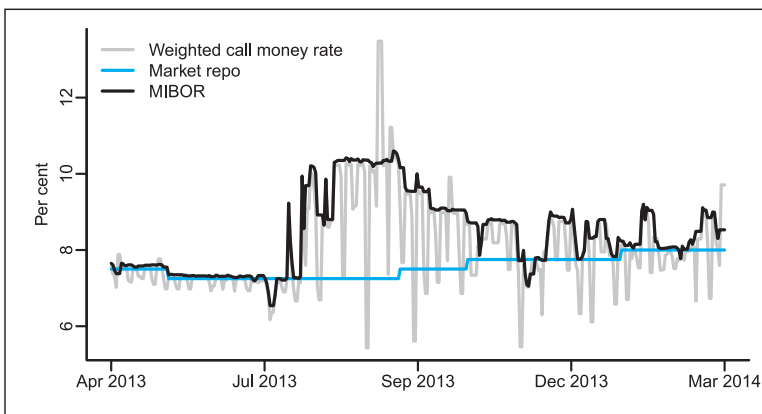
Source: RBI.

Figure 4.16 : Monthly Liquidity Injections through MSF



Source: RBI.

Figure 4.17 : Monthly Central Government Surplus with the RBI



Source: RBI.

Figure 4.18 : Money Market Rates

monetary policy from overnight repo operations to term repos. The Urjit Patel Committee report also recommends this change in operational procedure and this move should help banks plan their liquidity requirements and aid in building a robust term money market, further enhancing monetary policy transmission.

### MONEY MARKET RATES

4.40 Money market rates (Figure 4.18) in India track the weighted average call money rate and are market-based proxies for the prevailing policy rates. Given this correlation, money market rates reflect the prevailing liquidity conditions with the rates being inversely related to the level of liquidity. Money market rates have softened during April 2014, reflecting easy liquidity conditions.

### CENTRAL GOVERNMENT'S MARKET BORROWING

4.41 The gross market borrowings by the Government of India (GoI) through dated securities were budgeted at ₹ 5,79,009 crore against which ₹ 5,63,500 crore, 97.32 per cent of the budgeted borrowing programme, was raised. The RBI initiated the policy of active consolidation of dated securities during 2013-14. To ease out the redemption pressure in FY 2014-15, switch operations in government securities (G-Sec) were carried out with institutional investors for ₹ 31,672 crore.

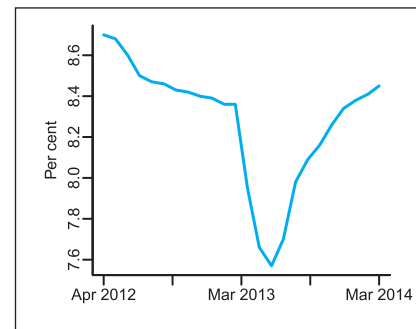
4.42 Two buyback auctions amounting to ₹ 15,590 crore were conducted in March 2014. The buybacks and switches are undertaken for the purpose of bringing down elevated redemption pressure in the near term and are expected to have salutary effect on the borrowing programme besides consolidation of debt. The weighted average yield of dated securities during 2013-14 stood at 8.45 per cent as compared to 8.36 per cent during 2012-13. The month-wise cumulative weighted average yield of primary issuances of GoI dated securities is given in Figure 4.19.

4.43 The weighted average maturity of the dated securities during 2013-14 increased to 15.05 years from 13.50 years during the previous year. During 2013-14, there was devolvement in 26 issuances of ₹ 17,451 crore as against devolvement in 3 issuances of ₹ 1,828 crore in 2012-13, indicating a volatile G-Sec market in 2013-14, particularly during July-September 2013.

### TREASURY BILLS

4.44 The outstanding amounts of 91-day, 82-day and 364-day Treasury Bills stood at ₹ 1,25,761 crore, ₹ 76,417 crore and ₹ 1,36,956 crore respectively as in end March 2014. The net issuance (notified) of treasury bills during 2013-14 was ₹ 39,371 crore as compared to ₹ 32,771 crore in 2012-13.

4.45 The average of the implicit yield for 91-day, 182-day and 364-day treasury bills during 2013-14 increased by an average of 90 bps to the comparable period of the previous year as shown in Table 4.8. Cash Management Bills (CMBs) were issued for ₹ 107,195 crore during July-September 2013 on 13 occasions to curtail exchange rate volatility. The yield on CMBs ranged from 10.36 per cent to 12.28 per cent.



Source: RBI.

Figure 4.19 : Cumulative Weighted Average Yield of Primary Issuances

T-bill	2012-13	2013-14
In per cent		
91 day	8.19	8.86
182 day	8.01	8.86
364 day	7.79	8.89

Source: RBI.

Table 4.8 : Average Implicit Yields for Treasury Bills

## Market Borrowing by State Governments

4.46 State governments raised an amount of ₹ 1,96,664 crore on a gross basis during 2013-14 as compared to ₹ 1,77,239 crore during the previous year. The net market borrowing stood at ₹ 1,64,585 crore in 2013-14 as against ₹ 1,46,451 crore in the previous year. The weighted average yield and weighted average spread for state borrowings increased marginally in 2013-14 (Table 4.9).

## CASH MANAGEMENT

### Central Government

4.47 The central government started the year 2013-14 with a surplus cash balance of ₹ 1,16,604 crore, but soon, by 12 June 2013, took recourse to ways and means advances (WMA) owing to its expenditure commitments. The cash balances remained positive from 7 December 2013 till 31 March 2014. During 2013-14, the GoI was in WMA for 42 days and availed of overdraft (OD) on 3 occasions for 9 days as compared to WMA for 40 days and no OD in the previous year. The GoI ended the fiscal year with cash balances at ₹ 128,442 crore.

### State Government

4.48 The aggregate normal WMA limit for states was placed at ₹ 10,240 crore for 2013-14 as in the previous year. The normal WMA limit has been revised by 50 per cent of the existing limit to ₹ 15,360 crore from 11 November 2013. During 2013-14, 13 states resorted to WMA as against 8 in 2012-13, 12 states resorted to special ways and means advances (SWMA) as against 9 in 2012-13 and 8 resorted to OD as against 6 in 2012-13.

## DEVELOPMENTS IN GOVERNMENT SECURITIES MARKET

4.49 The 10-year treasury bill reflects the long end of the yield curve. The 10-year rates also proxy credit risk of the sovereign. The benchmark 10-year yield (Figure 4.20) started hardening towards end May 2013 on concerns about high current account deficit as well as retail inflation.

4.50 The indication by the FOMC on 22 May 2013 regarding early tapering of the bond-buying programme resulted in some sell-off in G-Secs leading to hardening of yields. The 10-year yield touched a high of 9.27 per cent on 19 August 2013 and continued to remain at elevated levels, despite announcement of OMO purchase auction, on account of higher than expected WPI inflation for the months of July and August 2013. The yields hardened further on account of tightening of the repo rate in September 2013. The 10-year yield stood at 8.83 per cent at end September 2013 after which it has remained range bound between 8.5 and 9.0 per cent.

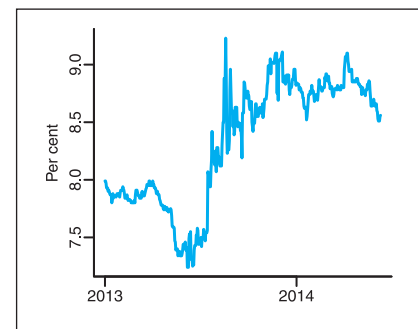
## OUTLOOK FOR MONETARY MANAGEMENT

4.51 The RBI has followed a calibrated approach aimed at striking a balance between growth and management of inflation. Given the softening of global price pressures on tradeable commodities and reduction in exchange rate volatility, inflation is expected to moderate in the coming fiscal year. The monetary management challenge will also be helped by fiscal consolidation and the addressing of supply-side constraints that exacerbate food inflation. All these factors, in tandem, are expected to create room for monetary easing later this fiscal year.

	2012-13	2013-14
	In per cent	
WA yield	8.84	9.18
WA spread	0.71	0.75

Source: RBI.

Table 4.9 : Weighted Average Yield and Spread for State Borrowings



Source: RBI.

Figure 4.20 : Yield on 10-year Treasury Bill