

# Prices and Monetary Management

## 4

### CHAPTER

*The movements in the rate of inflation reflect changes in demand and supply conditions in the economy. Inflation management therefore, involves controlling the demand situation as well as reining in inflationary expectations through various monetary measures. On the supply side it would encompass various administrative and fiscal measures. The first half of the financial year 2008-09 was marked by high wholesale price index (WPI)-based inflation, primarily due to the rise in global commodity and fuel prices. The subsequent global economic meltdown starting September 2008 reversed the trend and WPI inflation slipped into negative territory during June to August 2009. This was due to the decline in commodity prices globally and the base effect. As regards food inflation, the upswing noticed in the first quarter of 2008-09, continued during 2009-10 due to unfavourable south-west monsoon, the worst since 1972. Though the current spectre of double-digit inflation in food articles is ascribable to supply-side constraints, it is necessary to ensure that the monetary policy stance does not lead to pressure on prices. The RBI has, therefore, initiated calibrated changes in rates to mop up the prevalent excess liquidity in the system through the second and third quarter reviews wherein increases in statutory liquidity ratio (SLR) and cash reserve ratio (CRR) respectively were announced. Suitable fiscal and administrative measures are also being taken by the Government to contain the food price inflation and preventing it from spilling over to generalised inflation.*

## PRICES

4.2 Monthly changes in headline inflation, year-on-year, measured in terms of the wholesale price index (WPI) exhibited significant volatility during financial year 2008-09 and varied from 1.20 per cent in March 2009 to 12.82 per cent in August 2008. The volatility continues during the current financial year (2009-10). There is, however, fundamental difference in the reasons for volatility observed last year and those seen this year. The volatility observed in the first half of 2008-09 was due to increasing international fuel and commodity prices which pushed WPI inflation to a high of 12.8 per cent. The subsequent decline in WPI inflation in the second half of 2008-09 was due to falling international fuel and commodity prices. International fuel and commodity prices stabilized in the first half of 2009-10 but at a relatively lower level than in the

corresponding period of the last year. WPI inflation, however, continued to fall during the first half of 2009-10 due to the high base achieved last year during this period, and moved to negative zone from July to August 2009. From September, 2009 onwards WPI inflation has been rising at a very fast clip largely because of increase in the prices of food items, both primary and manufactured, and non-food agricultural items. Apprehensions of shortages in agricultural production due to a deficient south-west monsoon this year are mainly responsible for increasing inflation. Average food inflation which was 7.56 per cent during fiscal 2008-09 increased to 13.54 per cent in the period April to December 2009. Overall food inflation in December 2009 was 19.77 per cent. However, it appears to have reached its peak in December 2009 and is expected to moderate herefrom and also stabilize overall WPI on account of the likely impact of several measures

taken by the Government to contain food price inflation.

### Average annual trends in WPI inflation

4.3 The years of relatively high average annual inflation, above 5.5 per cent, in this decade have been 2000-01, 2004-05 and 2008-09. All these were years of high fuel prices. The year 2004-05, however, also witnessed high inflation in manufactured products because of high growth in the gross domestic product (GDP) in this sector leading to high demand and high prices of raw materials such as basic metal alloys and metal products, non-metallic mineral products and machinery and machine tools. The year 2008-09 was different from the earlier two years as high inflation was witnessed in all the three sectors primarily because of high international fuel and commodity prices including of food items, reflective of gradual linking of the Indian economy with the world (Table 4.1). The year 2009-10 is totally out of sync with the trends seen in earlier years with overall average inflation (April to December) being low at 1.63 per cent and average inflation in the primary and fuel groups being 8.78 per cent and -6.35 per cent respectively.

### Recent monthly trends in WPI inflation

4.4 Based on rising international fuel and commodity prices and high domestic demand, inflation in the fuel and manufactured groups started accelerating from November 2007. The year 2008-09 started with 8.0 per cent WPI inflation, reached a peak of 12.8 per cent in August 2008 and declined thereafter due to falling international commodity prices. The year 2009-10 started with a low headline WPI inflation of 1.3 per cent in April 2009, which moved into the negative zone during June to August 2009 and was reported to be 7.31 per cent in December 2009 (Table 4.2). The increase in overall inflation since September 2009 is primarily due to rise in prices of primary articles, particularly food items, due to a deficient monsoon and expectations of shortage. Lately, a rising trend in food prices has also been observed in the global market, particularly in prices of sugar, palm oil, soyabean and tea.

### Disaggregated analysis of WPI average inflation

4.5 Each major group in the WPI commodity basket is further disaggregated on the basis of use. Analysis at this level has assumed importance in

**Table 4.1 : Annual average inflation rate based WPI (per cent)**

Year	Primary articles	Fuel, power, light & lubri.	Manufactured products	All commodities
<b>Weights (%)</b>	<b>22.02</b>	<b>14.23</b>	<b>63.75</b>	<b>100.00</b>
2000-01	2.8	28.5	3.3	7.2
2001-02	3.6	8.9	1.8	3.6
2002-03	3.3	5.5	2.6	3.4
2003-04	4.3	6.4	5.7	5.5
2004-05	3.7	10.1	6.3	6.5
2005-06	2.9	9.5	3.1	4.4
2006-07	7.9	5.6	4.4	5.4
2007-08	7.6	0.9	5.0	4.7
2008-09	10.1	7.5	8.1	8.4
<b>2008-09(Apr.-Dec.)</b>	<b>10.93</b>	<b>11.32</b>	<b>9.47</b>	<b>10.20</b>
<b>2009-10(Apr.-Dec.)<sup>P</sup></b>	<b>8.78</b>	<b>-6.35</b>	<b>1.77</b>	<b>1.63</b>

Source : Department of Industrial Policy & Promotion.

<sup>P</sup> : Provisional.

**Table 4.2 : WPI inflation during 2008-09 and 2009-10 (per cent)**

	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
2008-09	8.0	8.9	11.8	12.4	12.8	12.3	11.1	8.5	6.2	4.9	3.5	1.2
2009-10	1.3	1.4	-1.0	-0.5	-0.2	0.5	1.5	4.8	7.3			

Source : Department of Industrial Policy & Promotion.

Note: WPI is provisional for November and December 2009.

view of the fact that the current phase of relatively high inflation is concentrated in food items which is a subset of the primary group. Table 4.3 provides trends in disaggregated annual inflation at sub-sector level based on use. The high food inflation during the current financial year, both in the primary and manufactured groups, is marked. Another apparent fact that emerges is the relatively high inflation observed during the last five years in the minerals group. This indicates a demand-supply mismatch in the mining sector fuelled by rise in international prices of minerals and high growth rates achieved. The moderation in prices in this sector during the current financial year is because of the slowdown in domestic and international demand.

### Food Inflation

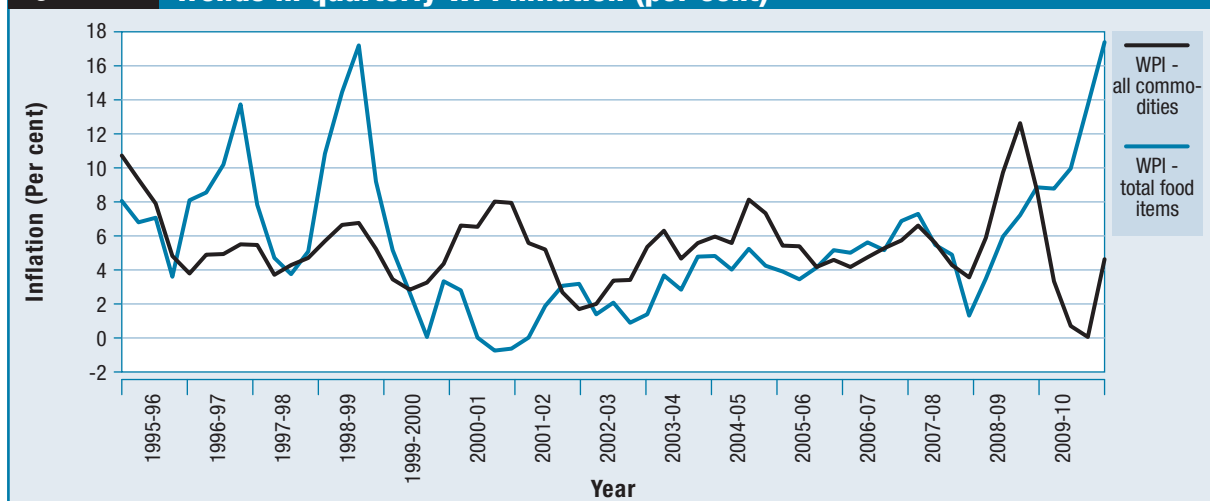
4.6 For purposes of computing the food index, the components of food articles in the primary articles group and manufactured food products in the manufactured products group are clubbed. The overall weight of the composite food index in the WPI is 25.43 per cent, which comprises primary

food articles with a weight of 15.40 per cent and manufactured food products with a weight of 10.03 per cent (after adjusting for oil cakes, weight= 1.42 per cent, and cattle feed, weight= 0.01 per cent). A quarter-wise analysis of food inflation in the current WPI series (Base Year 1993-94=100), during the last 15 years, reveals that before the current spell of high food inflation, there were two earlier episodes in the fourth quarter (Q4) of 1996-97 (13.6 per cent) and third quarter Q3 of 1998-99 (17.1 per cent). The high inflation in 1996-97 was due to increase in prices of rice, wheat, gram and fruits & vegetables. High fuel prices in the international market also contributed to the higher food prices by increasing transportation costs. The spike in food prices in 1998-99 was in the aftermath of implementation of the Fourth Pay Commission recommendations leading to a demand-supply gap. During this year, High inflation was reported in the case of onions and potatoes among vegetables, pulses, rice and wheat. Among manufactured products high prices were reported in the case of edible oils but sugar prices were stable. The current spell of high food

**Table 4.3 : Annual average inflation by major heads in WPI (per cent)**

Commodities	Weight (%)	2004-05	2005-06	2006-07	2007-08	2008-09	2008-09 (Apr.-Dec.)	2009-10 (Apr.-Dec.) <sup>P</sup>
<b>All Commodities</b>	<b>100.00</b>	<b>6.48</b>	<b>4.43</b>	<b>5.42</b>	<b>4.66</b>	<b>8.39</b>	<b>10.20</b>	<b>1.63</b>
<b>I Primary Articles</b>	<b>22.03</b>	<b>3.69</b>	<b>2.87</b>	<b>7.85</b>	<b>7.61</b>	<b>10.06</b>	<b>10.93</b>	<b>8.78</b>
A. Food Articles	15.40	2.70	4.83	7.78	5.46	8.02	7.57	13.31
B. Non-Food Articles	6.14	0.70	-4.48	5.14	12.64	11.17	14.24	0.43
C Minerals	0.48	110.31	26.54	28.13	13.20	34.90	45.53	-5.51
<b>II Fuel, Power, Light &amp; Lubricants</b>	<b>14.23</b>	<b>10.14</b>	<b>9.49</b>	<b>5.61</b>	<b>0.93</b>	<b>7.46</b>	<b>11.32</b>	<b>-6.35</b>
A. Coal Mining	1.75	15.34	3.72	0.00	2.68	6.60	9.08	-0.91
B. Minerals Oils	6.99	15.17	13.93	7.87	0.95	11.08	17.17	-10.12
C. Electricity	5.48	1.73	4.07	3.15	0.48	1.06	1.40	-0.08
<b>III Manufactured Products</b>	<b>63.75</b>	<b>6.26</b>	<b>3.07</b>	<b>4.43</b>	<b>4.97</b>	<b>8.09</b>	<b>9.47</b>	<b>1.77</b>
A. Food Products	11.54	4.98	1.09	3.22	4.27	10.04	10.59	15.49
B. Beverages, Tobacco & its Products	1.34	5.26	4.85	7.36	10.27	9.50	9.53	5.25
C. Textiles	9.80	3.04	-4.50	2.16	-0.98	5.95	4.96	4.18
D. Wood & Wood Products	0.17	0.06	8.41	6.01	4.65	8.34	8.30	1.62
E. Paper & Paper Products	2.04	0.75	2.23	6.83	1.84	4.38	4.23	1.04
F. Leather & Leather Products	1.02	5.99	7.13	-4.38	4.14	1.08	0.83	-0.99
G. Rubber & Plastic Products	2.39	-0.37	3.42	6.61	7.15	4.66	5.47	1.79
H. Chemicals & their Products	11.93	2.54	3.58	3.03	5.57	7.23	8.85	3.20
I. Non-Metallic Mineral Products	2.52	6.34	7.80	12.82	8.86	3.74	4.32	3.27
J. Basic Metal Alloys & Products	8.34	21.16	7.43	6.82	6.86	14.44	19.65	-12.67
K. Machinery & Machine Tools	8.36	5.65	5.14	5.56	7.07	4.74	5.44	-1.34
L. Transport Equipment & Parts	4.29	4.68	3.63	1.56	2.71	5.22	6.09	0.05

Source: Department of Industrial Policy & Promotion.  
P: Provisional.

**Figure 4.1 Trends in quarterly WPI inflation (per cent)**

inflation is across board for all food items except edible oils (Figure 4.1). Specifically, very high inflation can be observed in the case of sugar, pulses, vegetable & fruits and cereals.

#### Annual inflation as per different price indices

4.7 Inflation measured in terms of the consumer price indices (CPIs), has remained higher than WPI inflation in the last 14 months (November 2008-December 2009) (Table 4.4). The divergence between the WPI and CPI (IW) still continues but is

declining after reaching its peak in July 2009. (Figure 4.2)

#### Food inflation in CPIs and WPI

4.8 Food inflation based on WPI and CPIs has been rising since April 2009 (Table 4.5) and does not reflect any significant divergence (Figure 4.3).

#### Main drivers of inflation

4.9 Besides the commodity-wise figures, the weight contributions of different commodities to total inflation also give an indication of the drivers of

**Table 4.4 : Annual inflation as per different price indices (per cent)**

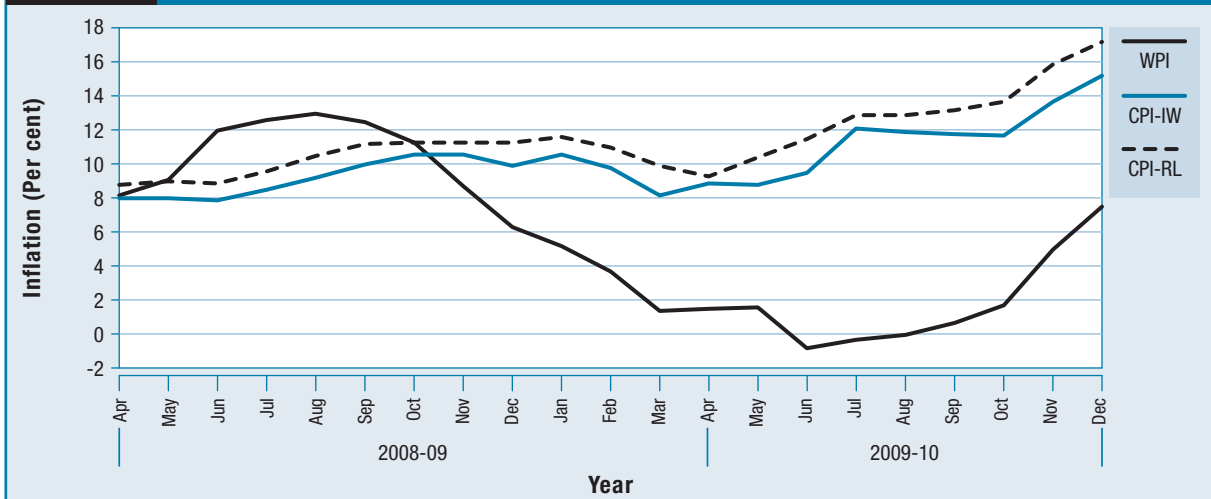
Month	WPI		CPI-IW		CPI-UNME		CPI-AL		CPI-RL	
	2008-09	2009-10	2008-09	2009-10	2008-09	2009-10	2008-09	2009-10	2008-09	2009-10
April	8.0	1.3	7.8	8.7	7.0	8.8	8.9	9.1	8.6	9.1
May	8.9	1.4	7.8	8.6	6.8	9.7	9.1	10.2	8.8	10.2
June	11.8	-1.0	7.7	9.3	7.3	9.6	8.8	11.5	8.7	11.3
July	12.4	-0.5	8.3	11.9	7.4	13.0	9.4	12.9	9.4	12.7
August	12.8	-0.2	9.0	11.7	8.5	12.9	10.3	12.9	10.3	12.7
September	12.3	0.5	9.8	11.6	9.5	12.4	11.0	13.2	11.0	13.0
October	11.1	1.5	10.4	11.5	10.4	12.0	11.1	13.7	11.1	13.5
November	8.5	<b>4.8 P</b>	10.4	13.5	10.8	13.9	11.1	15.7	11.1	15.7
December	6.1	<b>7.3 P</b>	9.7	15.0	9.8	-	11.1	17.2	11.1	17.0
January	5.0		10.4		10.4		11.6		11.4	
February	3.5		9.6		9.9		10.8		10.8	
March	1.2		8.0		9.3		9.5		9.7	
<b>Average</b>	<b>8.4</b>		<b>9.1</b>		<b>8.9</b>		<b>10.2</b>		<b>10.2</b>	

Source : Department of Industrial Policy and Promotion, Labour Bureau and Central Statistical Organization (CSO).

P : Provisional.

IW: Industrial Workers, UNME: Urban Non-Manual Employees, AL: Agricultural Labourer, RL: Rural Labour

**Figure 4.2 Trends in inflation based on WPI and CPIs**

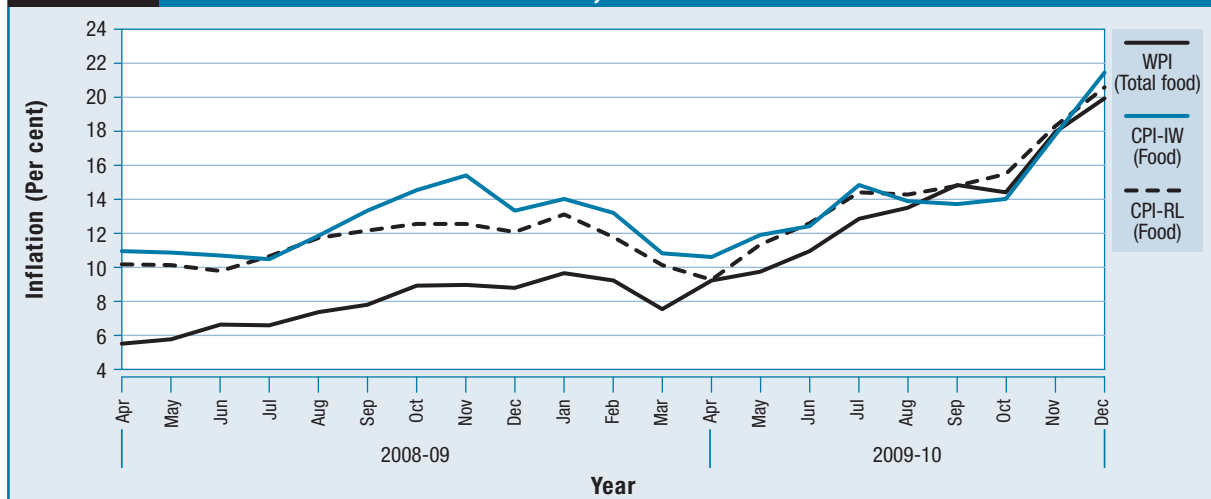


**Table 4.5 : Food inflation based on WPI, CPI-IW and CPI-AL/RL (per cent)**

	Weight (%)	Apr. 2009	May 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Nov. 2009	Dec. 2009
Food (CPI_IW)	46.20	10.42	11.72	12.24	14.67	13.73	13.55	13.84	17.61	21.29
Food (CPI_AL)	69.15	9.09	11.16	12.44	13.96	14.13	14.63	15.33	18.14	20.22
Food (CPI_RL)	66.77	9.09	11.16	12.44	14.22	14.13	14.63	15.33	18.14	20.43
Food (WPI)	25.43	9.04	9.56	10.80	12.67	13.32	14.67	14.24	17.78 <sup>P</sup>	19.77 <sup>P</sup>

Source : Department of Industrial Policy and Promotion, Labour Bureau  
<sup>P</sup>: Provisional

**Figure 4.3 Trends in food inflation in WPI, CPI-IW and CPI-RL**



inflation. In December 2009, thirty essential commodities with a weight of 17.63 per cent and annual inflation of 21.89 per cent contributed 51.88 per cent to overall inflation. Food combined (comprising primary and manufactured food) with a weight of 25.43 per cent and annual inflation of 19.77 per cent contributed 66.56 per cent towards overall

inflation. Table 4.6 identifies items which have contributed significantly towards overall inflation in December 2009. These are rice, wheat, pulses, vegetables and fruits, milk, fish and meat and tea in primary articles; non-administered mineral oils in the fuel group; and sugar/gur and oil cakes in manufactured products.

**Table 4.6 : Weighted contribution and inflation in WPI (per cent)**

	Weight (%)	Weighted contribution			Inflation		
		Oct-09	Nov-09 <sup>P</sup>	Dec-09 <sup>P</sup>	Oct-09	Nov-09 <sup>P</sup>	Dec-09 <sup>P</sup>
<b>All Commodities</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>1.46</b>	<b>4.78</b>	<b>7.31</b>
<b>Primary Articles</b>	<b>22.02</b>	<b>137.15</b>	<b>58.39</b>	<b>48.23</b>	<b>8.67</b>	<b>11.84</b>	<b>14.88</b>
Food combin	25.43	232.53	90.68	66.56	14.24	17.78	19.77
Food Articles	15.40	140.38	56.52	42.54	12.99	16.71	19.17
Food MP	10.03	92.14	34.16	24.02	16.68	19.88	20.93
Essential Commodities	17.63	209.39	75.00	51.88	18.53	21.15	21.89
Rice	2.45	21.48	6.19	3.99	14.29	12.95	12.33
Wheat	1.38	8.78	3.74	2.39	9.31	12.66	12.04
Pulses	0.60	11.44	5.04	3.95	25.08	35.22	41.58
Vegetables	1.46	7.67	5.98	7.28	7.06	16.92	39.22
Potatoes	0.26	17.60	5.60	3.70	98.60	101.58	123.85
Onions	0.09	2.03	0.70	0.42	33.10	32.41	27.41
Fruits	1.46	7.21	3.96	2.43	5.90	10.64	9.83
Milk	4.37	28.70	10.33	8.06	10.03	11.49	13.36
Eggs,Meat & Fish	2.21	36.96	14.55	9.03	23.37	29.75	27.16
Tea	0.16	0.29	0.43	0.37	2.96	15.30	21.45
<b>Fuel and Power</b>	<b>14.23</b>	<b>-100.02</b>	<b>-3.94</b>	<b>12.03</b>	<b>-6.66</b>	<b>-0.89</b>	<b>4.29</b>
Rest mineral oils	1.55	-66.59	6.46	13.77	-21.96	9.53	38.18
<b>Manufactured Products</b>	<b>63.75</b>	<b>60.11</b>	<b>46.10</b>	<b>39.46</b>	<b>1.60</b>	<b>3.99</b>	<b>5.17</b>
Food Products	11.54	117.69	51.30	36.33	17.33	24.70	26.40
Sugar	3.62	76.82	27.95	18.72	46.26	53.76	53.98
Gur	0.06	1.40	0.37	0.28	40.02	32.60	37.23
Oil Cakes	1.42	25.52	17.14	12.31	21.14	50.39	56.87

Source : Department of Industrial Policy & Promotion.

<sup>P</sup>: Provisions

## Sugar

4.10 Sugar production in India is cyclical in nature. Two to three years of high production are followed by two to three years of low production. The estimated area under sugarcane and sugarcane production fell significantly from the 2007-08 sugar crop year to 2009-10 sugar crop year (first advance estimates). Sugar production fell from 263 lakh tonnes in the 2007-08 sugar season to 146 lakh tonnes in the 2008-09 sugar season (provisional). Further, in years of shortage of sugarcane, the amount of cane available for crushing by sugar mills (termed draw rate) is much lower with higher levels of diversion for other uses like production of gur and khandsari sugar. The sugar industry is envisaging production of 160 lakh tonnes in the 2009-10 sugar season. The estimated demand for the 2009-10 sugar season is 230 lakh tonnes. Domestic production may meet only about two-thirds this demand. This is putting tremendous pressure on sugar prices. Further, based on expectations of large sugar imports by

India, international sugar prices are also hardening in recent months. This is also influencing sugar prices in India. Table 4.7 provides monthly changes in the sugar price index which shows monthly as well as annual fluctuations in sugar prices.

## Pulses

4.11 India has been a net importer of pulses. Domestic production of pulses has been around 14-14.8 million tonnes during the last three years while the demand is estimated at around 17-18 million tonnes. The gap between demand and supply is met by import of a variety of pulses from different countries depending upon their availability. In view of limited sources for different varieties of pulses, domestic prices fluctuate according to availability and prices in the international market. Kharif pulse production reached a peak in 2007-08 at 6.4 million tonnes and declined to 4.78 million tonnes in 2008-09 (fourth advance estimates). In 2009-10 it is estimated to further fall to 4.42 million tonnes (first advance estimates). Apprehensions of shortages

**Table 4.7 : Sugar (weight: 3.62 per cent ): month-on-month percentage change in the WPI**

Month	1996-97	1997-98	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Apr.	0.54	1.26	0.70	0.22	-0.25	0.00	-0.74	1.84	5.99
May	1.35	2.33	0.17	4.56	-0.75	0.81	-2.97	-0.33	2.46
Jun.	1.77	0.76	0.69	0.93	-0.69	-0.06	-1.88	-0.67	3.06
Jul.	-1.39	0.53	3.88	-0.14	1.96	-0.92	-0.14	1.15	0.35
Aug.	1.41	0.07	4.81	2.27	1.24	-0.58	-0.50	5.67	7.31
Sep.	-0.61	0.82	0.24	2.77	-0.67	-0.94	0.71	1.45	7.23
Oct.	-1.57	0.15	0.79	-0.54	0.43	-1.42	0.21	0.00	0.82
Nov.	3.11	0.22	0.16	0.07	1.17	-1.08	-0.42	0.19	5.32 <sup>P</sup>
Dec.	3.10	0.07	-1.41	1.49	-1.21	-2.00	-0.21	0.06	0.20 <sup>P</sup>
Jan.	-0.08	-0.44	-1.35	8.54	2.09	-3.90	1.85	3.98	
Feb.	1.42	-0.07	8.13	-1.35	4.27	-1.87	0.84	7.05	
Mar.	5.03	-0.22	-0.60	0.37	-0.87	-1.97	1.73	0.61	
<b>Total (Apr.-Mar.)</b>	<b>14.08</b>	<b>5.47</b>	<b>16.22</b>	<b>19.19</b>	<b>6.71</b>	<b>-13.93</b>	<b>-1.51</b>	<b>21.00</b>	
<b>Apr.-Dec.</b>	<b>7.71</b>	<b>6.21</b>	<b>10.04</b>	<b>11.63</b>	<b>1.22</b>	<b>-6.19</b>	<b>-5.93</b>	<b>9.36</b>	<b>32.73<sup>P</sup></b>

Source : Department of Industrial Policy and Promotion

<sup>P</sup>: Provisions

may be the reason for high inflation in pulses. The progress in sowing of rabi pulses during the current crop year has so far been quite encouraging. A significant increase of about 7.806 lakh ha in the area under pulses (on February 4, 2010 compared to February 4, 2009) is expected to help in dampening prices.

### Rice

4.12 According to first advance estimates released by the Ministry of Agriculture, rice production in the 2009-10 kharif marketing season (KMS) is 71.65 million tonnes. The production target in the rabi season is 14.5 million tonnes. Thus the total production of rice in 2009-10 is estimated at 86.15 million tonnes. Rice production in 2008-09 was 99.15 million tonnes (fourth advance estimates). Lower production by about 12.93 million tonnes may be the reason for the current phase of inflation in rice. However, market arrivals of paddy in Punjab and Haryana this year are higher than the market arrivals during the corresponding period last year. Rice procurement in the present marketing season as on February 3, 2010 has touched 20.14 million tonnes. This is only 3 per cent lower than last year's procurement as of date despite severe drought in the kharif season this year. Punjab has contributed 9.27 million tonnes followed by Chhattisgarh 2.51 million tonnes, Andhra Pradesh 2.12 million tonnes, Uttar Pradesh 2.11 million tonnes, Haryana 1.81 million tonnes and Orissa 1.05 million tonnes. These developments are expected to contain inflation in rice in the coming months.

### Wheat

4.13 In rabi marketing season (RMS) 2009-10 a total of 25.38 million tonnes of wheat has been procured as against 22.69 million tonnes in RMS 2008-09. The year is expected to end with sufficient stocks--more than the buffer norms. Further, the progress of wheat sowing in the rabi season during the current crop year (2009-10) has so far been quite encouraging. The area under wheat is estimated to increase by 1.71 lakh ha from 275.87 lakh ha on February 4, 2009 to 277.58 lakh ha on February 4, 2010. Expectation of a better wheat harvest is likely to moderate wheat prices.

### Vegetables

4.14 Average WPI inflation in vegetables (weight:1.46 per cent in the WPI) from April to December 2009 was more than 52 per cent, which is significantly higher than the 9 per cent recorded during the same period last year. Month-on-month changes in the WPI index for vegetables displayed a relatively high increase in the months of April, June, July and November 2009. Potatoes, onions, tapioca, tomatoes, peas green and brinjal were the highest contributors to the inflation in vegetables. The increase in vegetable prices could be attributed to the failure of monsoon followed by floods in some of the southern states. With the arrival of the winter crop, vegetable prices have started to moderate and are expected to further fall. Table 4.8 gives month-on-month changes in the WPI index for vegetables.

**Table 4.8 : Vegetables (weight: 1.46 per cent) : Month-on-month percentage change in the WPI**

Month	1996-97	1998-99	2001-02	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Apr.	35.44	22.90	25.38	33.28	29.48	20.87	20.56	11.13	36.56
May	6.50	7.58	12.22	7.72	3.64	3.14	3.59	-0.93	3.01
Jun.	8.84	19.95	12.85	9.36	3.95	22.49	6.25	7.61	10.72
Jul.	0.53	6.01	14.25	-1.74	16.64	0.18	15.66	8.02	13.29
Aug.	12.34	-4.17	3.53	11.57	-5.39	-3.67	-1.65	-5.39	-10.67
Sep.	-5.90	4.22	-14.89	-9.59	0.00	4.15	-3.61	2.56	-3.56
Oct.	0.87	25.22	7.19	14.56	7.13	4.12	-10.69	3.45	-4.48
Nov.	1.60	3.68	6.65	-8.38	4.42	-4.84	-5.71	3.99	13.57 <sup>P</sup>
Dec.	0.12	-23.96	-10.33	-26.42	-17.46	-11.55	-8.90	-21.13	-6.09 <sup>P</sup>
Jan.	-16.65	-42.81	-22.39	-8.84	-10.06	-4.34	-5.99	0.75	
Feb.	0.22	-24.85	-10.36	-4.77	-17.46	-8.08	-2.78	-10.21	
Mar.	-9.71	5.17	6.95	7.96	-0.63	5.76	11.78	-0.62	
<b>Total (Apr.-Mar.)</b>	<b>34.20</b>	<b>-1.06</b>	<b>31.04</b>	<b>24.69</b>	<b>14.27</b>	<b>28.24</b>	<b>18.52</b>	<b>-0.76</b>	
<b>Apr.-Dec.</b>	<b>60.34</b>	<b>61.42</b>	<b>56.84</b>	<b>30.35</b>	<b>42.42</b>	<b>34.89</b>	<b>15.51</b>	<b>9.32</b>	<b>52.35<sup>P</sup></b>

Source : Department of Industrial Policy and Promotion.

<sup>P</sup>: Provisions

### Milk

4.15 There is no apparent shortage of milk in the market. However, one of the reasons for increase in inflation in milk and milk products could be inflation in coarse cereals and oil cakes, which is used as feed for animals.

### Tea

4.16 There is shortfall in production of tea in India and other tea-producing countries. WPI-based domestic inflation in tea is 21 per cent in December 2009. The price of tea in the international market in December 2009 has risen by about 55 per cent over the price in the same month last year.

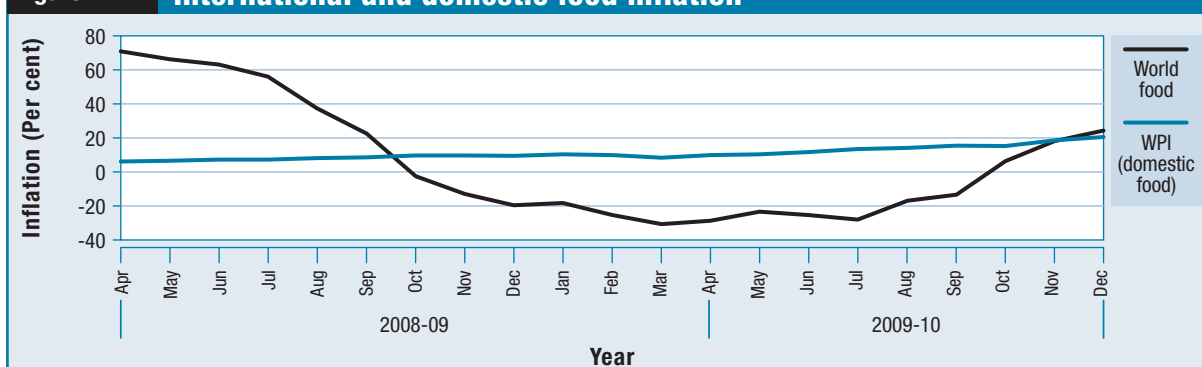
### Non-administered petro products

4.17 The inflation in non-administered petro products is linked to international crude oil prices.

WPI inflation in this group was negative in October 2009 and has moved to the positive zone from November 2009 and is currently at 38.2 per cent. Its weighted contribution to overall inflation is much higher than its weight in the commodity basket and therefore makes it a commodity to watch. Average international crude oil prices increased from 44.11\$/bbl in January-March 2009 to 75.5\$/bbl in October-December 2009. This contributed to increase in inflation in non-administered petro products.

### World food inflation

4.18 A comparison of the food index published by the World Bank and WPI-based domestic food inflation reveals that since April 2008 world food prices reflected much higher volatility compared to the WPI food index (Figure 4.4). Further,

**Figure 4.4 International and domestic food inflation**



**Table 4.9 : WPI based domestic year-on-year inflation (per cent)**

Period	Energy	Non-energy commodities	Agriculture	Beverages	Food	Fats and oils	Grains	Other food	Raw materials	Timber	Other raw materials	Fertilizers	Metals and Minerals
Jan. 2009	-1.70	6.81	9.79	8.91	9.37	0.60	11.25	32.73	9.98	10.05	0.19	8.38	9.54
Feb. 2009	-3.40	5.41	7.32	10.08	9.32	-3.01	13.14	25.52	1.76	7.69	-2.69	8.54	1.88
Mar. 2009	-6.00	3.17	5.14	9.34	8.07	-6.96	11.61	20.37	0.56	7.74	-12.90	5.43	-7.47
Apr. 2009	-5.69	3.21	6.71	5.88	10.14	-4.05	11.92	15.66	2.55	10.05	-16.35	4.03	-12.11
May 2009	-6.14	3.43	6.91	5.60	10.62	-2.14	14.14	36.27	1.86	3.57	-15.77	-0.60	-12.19
Jun. 2009	-12.53	2.32	7.74	5.99	11.13	-7.85	14.39	26.50	-2.20	0.25	-18.08	-1.46	-13.95
Jul. 2009	-10.37	2.29	9.03	5.45	12.36	-9.38	13.90	18.88	-5.18	0.25	-18.69	-3.19	-15.03
Aug. 2009	-9.26	2.44	9.08	5.14	12.98	-7.29	14.19	13.90	-4.22	0.25	-17.04	-3.03	-13.46
Sep. 2009	-8.18	2.91	9.08	4.75	13.75	-5.59	16.10	7.19	-3.57	0.25	-16.76	-2.68	-12.74
Oct. 2009	-6.66	3.75	9.35	4.75	14.67	-3.93	14.75	4.83	-0.66	0.25	-14.47	-2.28	-11.68
Nov. 2009 <sup>P</sup>	-0.89	6.30	12.61	4.47	19.75	-1.38	16.46	12.50	1.17	0.25	-6.18	-2.03	-8.28
Dec. 2009 <sup>P</sup>	4.29	8.09	16.01	5.29	21.94	0.18	16.86	16.30	5.62	0.25	-2.31	-3.52	-6.93

Source : Department of Industrial Policy and Promotion.

<sup>P</sup> : Provisions

Note : Categorisation of WPI items/groups as compared to items stock groups in the world Bank Inksheet. used in Table 4.10 (Figures in brackets are items/groups in WPI basket): Energy (Fuel group); Non Energy Commodities (All commodities excluding energy); Agriculture (Food Articles and Non-Food Articles); Beverages (Beverages, Tobacco & Tobacco Products); Food (Food Articles and Food Products); Fats and Oils (Edible Oils, Butter and Ghee); Grains (Cereals and Pulses); Other Food (Other Food Articles); Raw Materials (Non-Food Articles and Minerals); Timber (Wood & Wood Products); Other Raw Materials (Naphtha and Basic Metals Alloys & Metals Products); Fertilizers (Fertilizers); Metals and Minerals (Basic Metals, Alloys & Metals Products and Minerals)

a higher volatility was seen in the international market in almost all commodity groups compared to the domestic market in India (Tables 4.9 and 4.10).

**Table 4.10 : Inflation in world commodity price indices (per cent)**

Period	Energy	Non-energy commodities	Agriculture	Beverages	Food	Fats and oils	Grains	Other food	Raw materials	Timber	Other raw materials	Fertilizers	Metals and Minerals
Jan. 2009	-45.48	-23.64	-16.56	3.41	-19.07	-33.25	-7.57	-0.79	-19.25	4.08	-33.60	14.39	-37.75
Feb. 2009	-51.58	-30.29	-23.60	-7.26	-26.35	-38.60	-20.59	-5.15	-23.94	-1.71	-37.50	-4.71	-42.46
Mar. 2009	-52.00	-34.12	-28.39	-13.24	-31.61	-43.36	-26.51	-11.64	-26.16	-6.28	-38.52	-26.80	-42.95
Apr. 2009	-52.87	-32.04	-25.79	-5.53	-29.51	-33.62	-36.31	-8.67	-24.11	-11.08	-32.60	-45.23	-38.33
May 2009	-52.31	-29.14	-22.00	-4.97	-24.33	-26.81	-31.51	-7.19	-23.27	-5.99	-33.79	-53.57	-34.49
Jun. 2009	-48.37	-31.14	-24.55	-7.92	-26.27	-30.98	-30.42	-8.66	-27.96	-9.27	-38.49	-55.93	-36.04
Jul. 2009	-52.48	-32.31	-26.17	-8.10	-28.90	-34.68	-33.02	-10.17	-27.35	-14.23	-34.92	-61.46	-34.86
Aug. 2009	-39.69	-22.70	-15.67	-0.06	-17.84	-17.95	-31.87	2.03	-17.86	-9.50	-22.76	-68.29	-21.27
Sep. 2009	-35.07	-19.00	-11.59	7.77	-14.17	-15.06	-31.78	12.90	-14.74	-9.44	-17.97	-68.09	-16.97
Oct. 2009	-6.15	0.74	9.13	32.28	5.40	10.90	-14.37	22.27	6.80	-7.18	18.25	-59.72	4.10
Nov. 2009	26.21	14.78	20.09	41.26	17.13	25.37	-0.02	25.65	16.77	-7.83	39.49	-52.05	23.12
Dec. 2009	55.23	27.65	28.22	37.30	23.49	34.59	5.02	29.63	36.25	-9.21	87.74	-41.70	42.79

Source : World bank pink sheet.

## Inflation: Private Final Consumption Expenditure (PFCE) Deflator versus WPI and CPI-IW

4.19 The PFCE measures the average change over time in the price paid for all consumer purchases. For this reason, the PFCE deflator measures changes in the cost of living, and because it measures the price paid for all consumer purchases, versus just a basket of goods, it is considered a more accurate measure of inflation than the CPI. Table 4.11 provides annual inflation trends in PFCE deflator, based on new series of data released by the CSO with 2004-05=100, and its comparison with WPI and CPI-IW inflation. PFCE-based inflation is at a lower level than CPI-IW inflation during all the four years (2005-06 to 2008-09) (Figure 4.5).

### Housing Price Index

4.20 The importance of the construction and real estate sector in creation of both physical and financial assets has been growing. The share of the construction sector in the GDP at constant prices (2004-05) has increased from 7.7 per cent in 2004-05 to 8.0 per cent in 2008-09 (quick estimates). Similarly, the share of real estate, ownership of

dwelling and business services (in the financial sector) in overall GDP has increased from 8.9 per cent in 2004-05 to 9.2 per cent in 2008-09 (quick estimates). Both these sectors have grown at an average of 9.7 per cent (construction) and 9.6 per cent (real estate, ownership of dwelling and business services) during 2004-05 to 2008-09.

4.21 The launch of the National Housing Bank (NHB) RESIDEX in India in 2007 was a maiden effort to capture the trend of price movements in residential property on a comprehensive scale. Initially 2001 was taken as the base year for the NHB RESIDEX and price movements during the period 2001-05 were captured for five cities (Bangalore, Bhopal, Delhi, Kolkata and Mumbai). Subsequently, based on data from the housing finance companies (HFCs) and National Council of Applied Economic Research (NCAER) the NHB RESIDEX was updated for two years, 2006 and 2007.

4.22 The NHB RESIDEX has now been expanded to fifteen cities, namely Bangalore, Bhopal, Delhi, Kolkata, Mumbai, Ahmedabad, Faridabad, Chennai, Kochi, Hyderabad, Jaipur, Patna, Lucknow, Pune and Surat and updated up to December 2008 with 2007 as the new base year. From 2008 the NHB

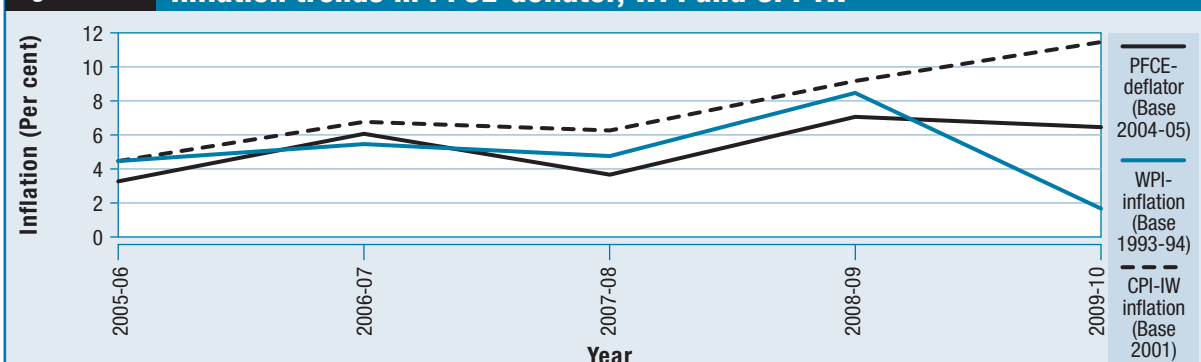
**Table 4.11 : Annual trends in PFCE deflator, WPI, and CPI-IW inflation**

(per cent).

Year	PFCE deflator(Base: 2004-05)	WPI inflation(Base: 1993-94)	CPI-IW inflation(Base: 2001)
2005-06	3.2	4.4	4.4
2006-07	6.0	5.4	6.7
2007-08	3.6	4.7	6.2
2008-09 (QE)	7.0	8.4	9.1
2009-10 (AE)	6.4	1.6*	11.4*

Source: Department of Industrial Policy & Promotion, CSO and Labour Bureau.  
QE—quick estimates; AE—advance estimates; \* Average April- December

**Figure 4.5 Inflation trends in PFCE-deflator, WPI and CPI-IW**



Note: 1. WPI and CPI-IW for 2009-10 are average of Apr-Dec 2009. 2. PFCE for 2008-09 is quick estimate (QE) and for 2009-10 is advanced estimate (AE)

Table 4.12 : City-wise RESIDEX (Base 2007)

Cities	2007	2008 Jan.- June	2008 July- Dec.	2009 Jan.-June
Delhi	100	124	130	121
Bengaluru	100	73	76	58
Mumbai	100	112	117	124
Kolkata	100	114	140	159
Bhopal	100	139	151	139
Hyderabad	100	96	92	65
Faridabad	100	100	121	136
Patna	100	103	100	107
Ahmedabad	100	106	100	127
Chennai	100	104	95	120
Jaipur	100	119	115	71
Lucknow	100	103	102	104
Pune	100	101	97	103
Surat	100	101	98	111
Kochi	100	106	95	90

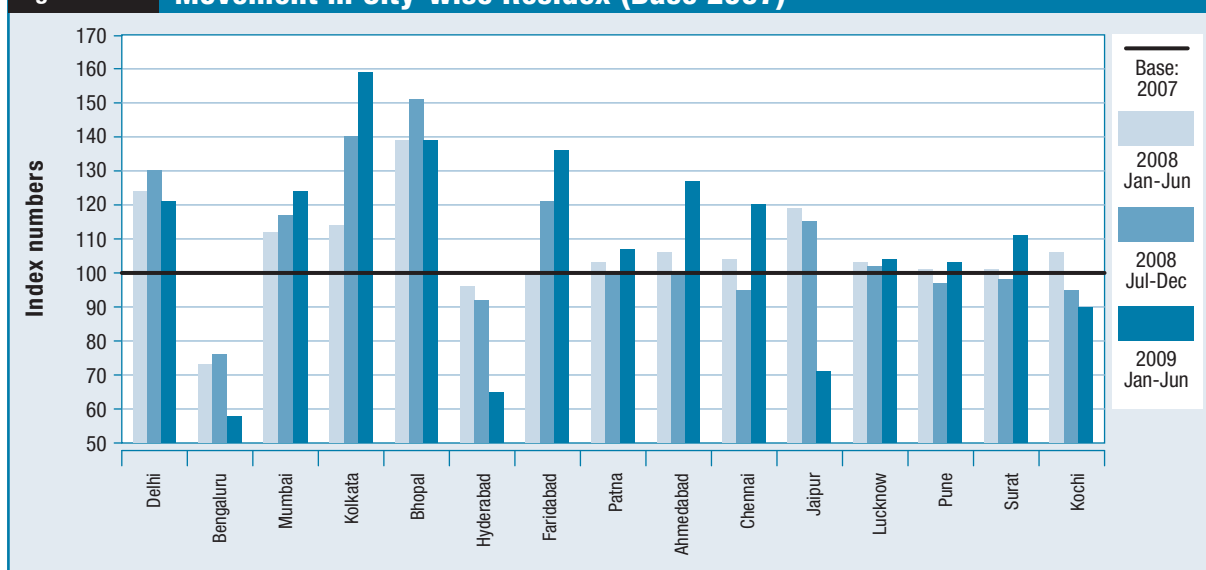
Source : National Housing Bank.

RESIDEX is being updated on half-yearly basis. The last update is for the period January–June 2009. In order to make it a truly national index the intention is to extend the NHB RESIDEX to 63 cities which are covered under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM).

4.23 The movement in prices of residential houses has shown a mixed trend in the 15 cities covered under the NHB RESIDEX (base 2007) (Table 4.12 and Figure 4.6). During the first half of 2008 (January to June), out of 15 cities, residential housing prices in 12 showed an increasing trend, 2 cities reported a declining trend and there was no change in case

of 1 city over the base year (2007). In the second half of 2008 (July to December), nine cities reported a decline in prices and there was an increase in the case of six cities over the previous half year figures. The first half of 2009 (January to June), however, shows some revival in housing prices over the previous half-year period (July-December 2008) with a higher price index reported in the case of nine cities, namely Ahmedabad (27 per cent), Chennai (26 per cent), Kolkata (14 per cent), Surat (13 per cent), Faridabad (12 per cent), Patna (7 per cent), Mumbai (6 per cent), Pune (6 per cent) and Lucknow (2 per cent). During the same period, the remaining

Figure 4.6 Movement in City-wise Residex (Base 2007)



six cities, namely, Jaipur (-38 per cent), Hyderabad (-30 per cent), Bengaluru (-24 per cent), Bhopal (-8 per cent), Delhi (-7 per cent) and Kochi (-5 per cent) showed correction in prices. Three cities, namely Hyderabad, Jaipur and Kochi have shown correction in prices both in the second half of 2008 and first half of 2009.

### Anti-inflationary measures

4.24 The Government has taken a number of short- and medium-term measures to improve domestic availability of essential commodities and moderate inflation. Procurement of rice as on February 3, 2010 (KMS 2009-10) is 20.14 million tonnes as against 33.60 million tonnes procured during the entire KMS 2008-09. Procurement of wheat as on November 1, (RMS 2009-10) is 25.3 million tonnes against 22.7 million tonnes last year. The total stock of rice and

wheat held by the FCI in January 2010 is 47.4 million tonnes comprising 24.3 million tonnes of rice and 23.1 million tonnes of wheat. Even after keeping the minimum buffer stock (8.2 million tonnes of wheat and 11.8 million tonnes of rice in January), there are enough foodgrains to intervene in the market to keep prices at a reasonable level. A strategic reserve of 5 million tonnes of wheat and rice has also been created. This is in addition to the buffer stock held by the FCI every year. However, the Central issue price (CIP) for rice at Rs 5.65 per kg for below poverty line (BPL) and Rs 3 per kg for Antyodaya Anna Yojana (AAY) and wheat at Rs 4.15 per kg for BPL and Rs 2 per kg for AAY since July 2002 has also been maintained to protect the interests of BPL families and AAY beneficiaries. Box 4.1 lists some of the anti-inflationary measures taken by the Government.

#### Box 4.1 : Measures to contain inflation, particularly food inflation

##### (a) Monetary Measures taken by the RBI in the current fiscal year

- (i) The monetary policy stance for 2009-10, *inter alia*, has been to maintain a monetary and interest rate regime consistent with price stability and financial stability, and supportive of the growth process.
- (ii) The RBI in its **Second Quarter Review** of monetary policy on October 27, 2009 made a minor modification in the statutory liquidity ratio (SLR) and restored it to 25 per cent of net demand and time liabilities (NDTL) with effect from the fortnight beginning November 7, 2009.
- (iii) In the **Third Quarter Review** of the RBI's monetary policy on January 29, 2010, the CRR of scheduled banks was raised by 75 basis points from 5.0 per cent to 5.75 per cent of their NDTL in two stages; the first stage of increase of 50 basis points will be effective the fortnight beginning February 13, 2010, followed by the next stage of increase of 25 basis points effective the fortnight beginning February 27, 2010.

##### (b) Fiscal Measures

- (i) Reducing import duties to zero—for rice, wheat, pulses, edible oils (crude) and sugar; and for maize (under TRQ of 5 lakh tonnes per annum, beyond which 15 per cent duty will apply);
- (ii) Reducing import duties on refined and hydrogenated oils and vegetable oils to 7.5 per cent;
- (iii) Allowing import by sugar mills of raw sugar at zero duty under open general licence (OGL) up to August 1, 2009 (notified on April 17, 2009). This has since been extended to December 31, 2010.
- (iv) Allowing import of white/ refined sugar by STC/MMTC/PEC and NAFED up to 1 million tonnes by August 1, 2009 under OGL at zero duty (notified on April 17, 2009). This has since been extended up to March 31, 2010. Furthermore, the duty-free import of white/ refined sugar under OGL has been opened to other Central/ State Government agencies and to private trade in addition to existing designated agencies.
- (v) Removing levy obligation in respect of all imported raw sugar and white/ refined sugar.

##### (c) Administrative Measures

- (i) 2 million tonnes of wheat and 1 million tonnes of rice have been allocated to States for distribution to retail consumers over and above normal public distribution system (PDS) allocation for the period October 2009 to March 2010.
- (ii) One million tonnes of wheat has been allocated for release by the FCI in the open market through OMSS for the period October 2009 to March 2010.
- (iii) The National Agricultural co-operative Marketing Federation (NAFED) has been allocated 37,400 metric tonnes of wheat and 15,500 metric tonnes of rice for distribution through its outlets at the same rate at which allocations are made to State governments under OMSS (D).

(Contd....)

*Box 4.1: Contd. ...)*

- (iv) The National Cooperative Consumers Federation (NCCF) has been allocated 32,684 metric tonnes of wheat and 11,000 metric tonnes of rice for distribution through its outlets at the same rate at which allocations are made to State Governments under OMSS (D).
- (v) Export of non-basmati rice, edible oils and pulses (except kabuli chana) has been banned.
- (vi) Effected no changes in Tariff Rate Values of edible oils;
- (vii) Imposed stock limit orders in the case of paddy, rice, pulses, sugar, edible oils and edible oilseeds upto 30.9.2010; In order to discourage non-household sector consumers from stockpiling sugar and to ensure adequate availability of sugar in the open market for actual consumers, the Central Government has issued a notification dated 22.08.2009 imposing stockholding limit on bulk consumers.
- (viii) Using Minimum Export Price (MEP) to regulate exports of onion (averaging at \$500 per tonne for January 2010) and basmati rice (\$900 PMT);
- (ix) Futures trading in rice, urad and tur suspended by the Forward Market Commission in the year 2007-08 and continues during 2009-10. Futures trading in sugar was suspended w.e.f. 27.5.2009 upto 31<sup>st</sup> December, 2009. This has been extended up to 30th September, 2010.
- (x) Distribution of imported edible oils to States/UTs at a subsidy of Rs.15/kg.
- (xi) To augment availability of pulses, permitted the Public Sector Undertakings (namely, STC, MMTC, and PEC) and NAFED to import and sell pulses under a scheme and the losses, if any, up to 15 per cent are reimbursed by the Government.
- (xii) Distribution of imported pulses through PDS at a subsidy of Rs.10 per kg to State Governments.
- (xiii) Permitted sugar factories to sell processed raw sugar in the domestic market and fulfill export obligation on tonne to tonne basis.
- (xiv) Proportion of sugar production requisitioned as levy sugar has been increased from 10 to 20 per cent for 2009-10 sugar season to ensure adequate levy sugar supplies under PDS.
- (xv) During 2009-10 sugar season, 19.34 lakh tonnes of raw sugar and 3.89 lakh tonnes of white/ refined sugar have arrived in the country/ would be arriving shortly.
- (xvii) Minimum Support Prices (MSPs) have been systematically increased, leading to increased acreage, production, productivity and central procurement. For the marketing season of 2008-09, the MSP of wheat was increased to Rs. 1,080. For different grades of paddy, for kharif marketing season 2009-10, the MSP has been increased to Rs.950-980 per quintal and a bonus of Rs 50 per quintal for all varieties.

## MONETARY DEVELOPMENTS DURING 2009-10

4.25 The liquidity constraint that had emerged consequent to the global financial crisis, led the RBI to maintain an accommodative monetary policy stance since September 2008 which continued during 2009-10. The slew of measures introduced after September 2008 to enhance the liquidity in the system included a series of downward revisions in policy rates covering repo rate, reverse repo rate, CRR and SLR, besides providing specified windows for accommodating distressed sectors. These measures had a salutary effect on the overall liquidity situation. Though the policy during 2009-10 continued to broadly underscore the accommodative stance, the monetary authority reviewed the emerging economic situation from time to time. Keeping in view the comfortable liquidity position, the SLR was restored to its earlier level of 25 per cent of NDTL with effect from November 7, 2009. A

few sector-specific measures provided earlier by way of accommodative windows, and whose utilization was lower than expected, were also withdrawn in the Second Quarter Review of Monetary Policy 2009-10 (October 27, 2009). In addition, in the Third Quarter Review (January 29, 2010) the RBI announced that the CRR was being raised from 5.0 per cent of NDTL to a level of 5.50 per cent effective the fortnight beginning February 13, 2010 and to 5.75 per cent effective the fortnight beginning February 27, 2010.

### Trends in Monetary Aggregates

4.26 During 2009-10, the growth rates in reserve money ( $M_0$ ) and narrow money ( $M_1$ ) have been higher as compared to the preceding year while broad money ( $M_3$ ) growth has been lower (Table 4.13). The moderation in growth of broad money is largely on account of the deceleration in growth of bank credit to the commercial sector.

Table 4.13 : Movement of select monetary parameters

Items	(per cent)					
	Growth rates (%)		Growth rates as on January 15, 2010			
	2007-08	2008-09	Financial-year basis		Year-on-year basis	
			2009-10	2008-09	2009-10	2008-09
M <sub>0</sub>	30.9	6.4	3.8	-3.7	14.8	6.6
M <sub>1</sub>	19.4	8.4	7.8	-1.1	18.2	8.6
M <sub>3</sub>	21.4	18.6	10.8	12.8	16.5	19.1

Source: RBI.

### Reserve Money (M<sub>0</sub>)

4.27 Reserve money grew by 6.4 per cent in 2008-09 as compared to 30.9 per cent during 2007-08. During 2009-10, on financial-year basis, M<sub>0</sub> increased by 3.8 per cent (up to January 15, 2010), as against a decline of 3.7 per cent during the corresponding period of the preceding year (Table 4.14).

4.28 Net foreign assets (NFA) of the RBI and net domestic assets (NDA) are the two main drivers of reserve money. On financial-year basis, the NFA declined by 0.4 per cent during end March-January 15, 2010, as against a decline of 0.9 per cent during the corresponding period of the previous year. On a year-on-year basis, as on January 15, 2010, the NFA expanded by 4.1 per cent as against a 9.7 per cent increase in the previous year (Figure 4.7).

4.29 Net RBI credit to the Central Government increased by Rs 29,638 crore during the financial year (up to January 15, 2010). This was mainly on account of unwinding of Market Stabilisation Scheme (MSS) balances and open market operations of the Reserve Bank, offset by increase in the cash balances of the Central Government and reverse repo operations. On year-on-year basis, increase in the net RBI credit to the Central Government, as on January 15, 2010, was Rs1,19,895 crore as against an increase of Rs1,27,184 crore during the corresponding period a year ago.

### Narrow Money (M<sub>1</sub>)

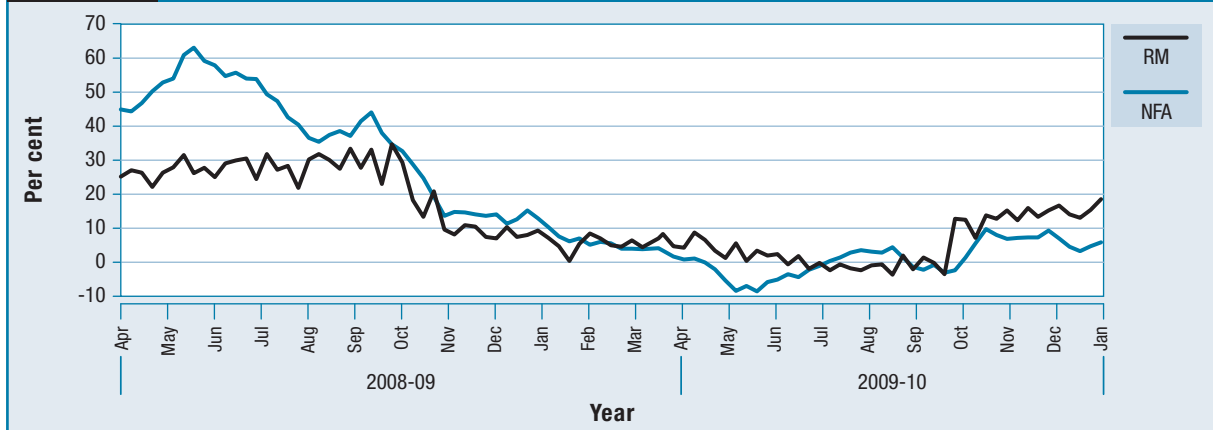
4.30 M<sub>1</sub> growth decelerated in the second half of 2008-09 and staged a recovery in 2009-10. It increased by 8.4 per cent in 2008-09 as compared

Table 4.14 : Sources of change in reserve money

1	(per cent)				
	2	Growth rate			
		Financial-year basis		Year-on-Year	
		2008-09	Jan.16 2009 over March 31, 2008	Jan.15, 2010 over March 31, 2009	Jan.16 2009 over Jan.18, 2008
<b>Reserve Money (M<sub>0</sub>)</b>	6.4	-3.7	3.8	6.6	14.8
<b>A. Components</b>					
a) Currency in Circulation	17.0	12.2	12.5	17.0	17.3
b) Bankers' Deposits with the RBI	-11.3	-31.4	-16.0	-15.6	8.6
c) "Other" Deposits with the RBI	-38.5	-42.2	-30.7	10.0	-26.2
<b>B. Select Sources of Reserve Money</b>					
1. Net Foreign Exchange Assets of the RBI	3.6	-0.9	-0.4	9.7	4.1
2. Government's Currency Liabilities to the Public	9.0	6.7	6.7	8.7	9.0
3. Net Non-monetary Liabilities of the RBI	84.5	54.9	-8.0	135.8	9.6

Source: RBI.

**Figure 4.7 Reserve money and RBI net foreign exchange assets - annual growth rate**



to an expansion of 19.4 per cent during 2007-08. During 2009-10,  $M_1$  increased by 7.8 per cent on a financial-year basis (up to January 15, 2010) as against a decline of 1.1 per cent during the corresponding period of the previous year. On year-on-year basis, as on January 15, 2010,  $M_1$  growth accelerated to 18.2 per cent as compared to 8.6 per cent a year ago (Figure 4.8).

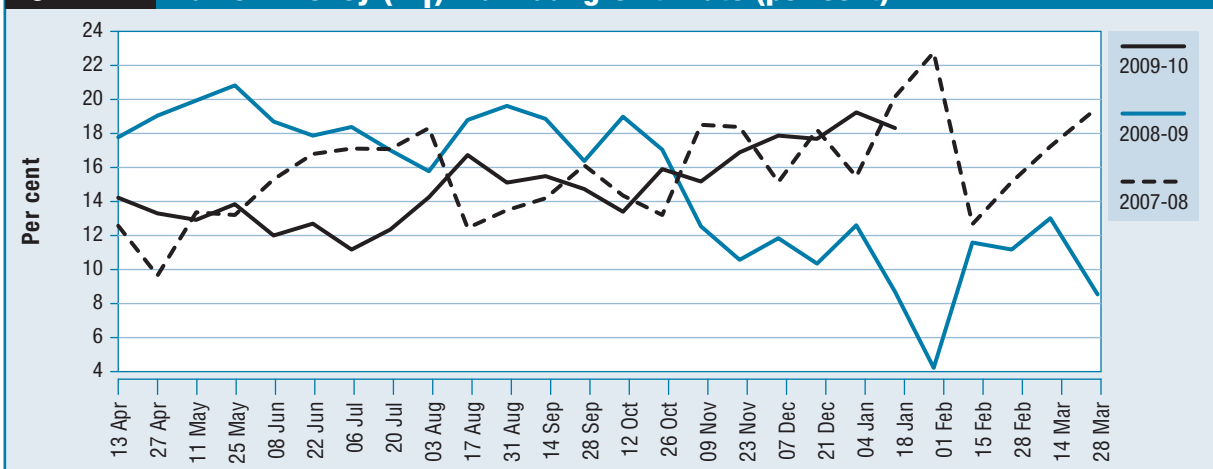
4.31 The components of narrow money are currency with the public and deposit money of the public. As on January 15, 2010, currency with the public expanded by 12.3 per cent over end-March 2009, as against an increase of 12.2 per cent during the corresponding period of the preceding year. The main element of the other components, namely demand deposits with banks, witnessed a modest increase of 3.1 per cent during the period up to January 15, 2010 as against a decline of 13.6 per cent during the corresponding period of the previous

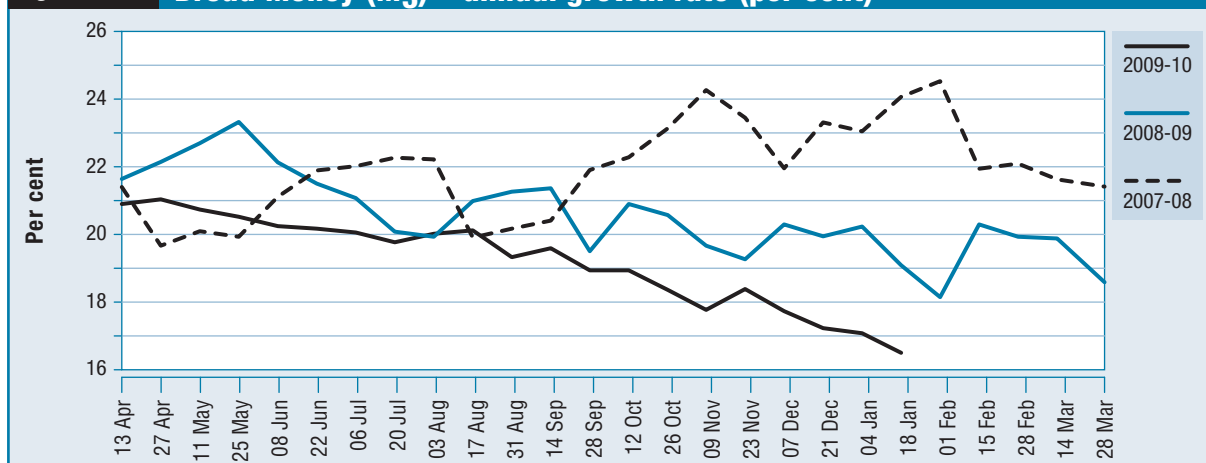
year. On year-on-year basis, as on January 15, 2010, the growth of currency with the public was marginally higher at 17.3 per cent as compared with 17.2 per cent on the corresponding date a year ago. During the same period, growth in demand deposits accelerated to 19.8 per cent as compared with a decline of 0.8 per cent a year earlier.

*Broad money ( $M_3$ )*

4.32 Broad money ( $M_3$ ) increased by 18.6 per cent during 2008-09. During the current financial year (2009-10), up to January 15, 2010, the growth in  $M_3$  was 10.8 per cent as compared to 12.8 per cent during the corresponding period of the previous year. On year-on-year basis,  $M_3$  grew by 16.5 per cent as on January 15, 2010, as compared to 19.1 per cent on the corresponding date of the previous year. (Figure 4.9)

**Figure 4.8 Narrow Money ( $M_1$ ) – annual growth rate (per cent)**



**Figure 4.9 Broad Money (M<sub>3</sub>) – annual growth rate (per cent)**

4.33 The main components and sources of broad money are indicated in Table 4.15.

4.34 The growth in M3 was primarily reflected in the expansion in aggregate deposits during this

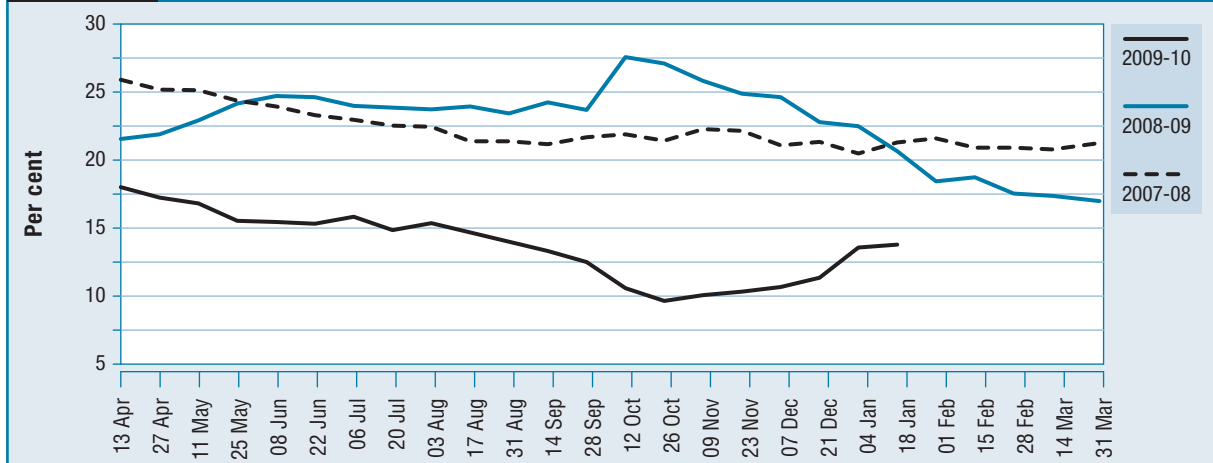
**Table 4.15 : Sources of change in money stock (M<sub>3</sub>)**

	Growth rate				
	March 31, 2008 to March 31, 2009	March 31, 2008 to January 16, 2009	March 31, 2009 to January 15, 2010	January 18, 2008 to January 16, 2009	January 16, 2009 to January 15, 2010
1	2	3	4	5	6
	Per cent				
Broad Money (M <sub>3</sub> )	18.6	12.8	10.8	19.1	16.5
I. Components of M <sub>3</sub> (1+2+3+4)					
1. Currency with the Public	17.2	12.2	12.3	17.2	17.3
2. Demand deposits with Banks	0.5	-13.6	3.1	-0.8	19.8
3. Time Deposits with Banks	22.7	18.3	11.9	23.1	16.0
4. "Other" deposits with the RBI	-38.4	-42.2	-30.7	10.0	-26.2
II. Sources of Change in Money Stock (M <sub>3</sub> )					
1. Net Bank Credit to Government of which:	42.0	28.7	19.6	38.2	31.9
Other Banks' Credit to Government	20.0	17.1	18.1	19.3	21.1
2. Bank Credit to Commercial Sector of which:	16.8	11.0	7.9	20.5	13.6
Other Banks' Credit to Commercial Sector	16.4	11.0	8.2	20.4	13.5
3. Net Foreign Exchange Assets of the Banking Sector	4.4	-2.1	-2.1	10.5	4.4
4. Government's Currency Liabilities to the Public	9.0	6.7	6.7	8.7	9.0
5. Banking sector's Net Non-monetary Liabilities Other than Time Deposits	16.2	0.5	-6.2	35.8	8.4
<b>Memo Items</b>					
1. Money Multiplier (M <sub>3</sub> /M <sub>0</sub> )	4.15				
2. Velocity of Money	1.12				
3. Net Domestic Assets	12.8	19.8	15.9	22.8	21.3
4. Net Domestic Credit	17.3	15.6	11.4	25.1	18.8

Source : RBI.



**Figure 4.10 Bank credit to commercial sector – annual growth rate (per cent)**



period. Within aggregate deposits, time deposits registered a growth (year-on-year) of 16.0 per cent as on January 15, 2010, as compared to 23.1 per cent on the corresponding date of the previous year. In 2009-10, there has been gradual deceleration in the growth of time deposits, with softening of interest rates, in contrast to the shift from demand to time deposits during the second half of 2008-09. On the other hand, demand deposits expanded by 19.8 per cent (year-on-year) as on January 15, 2010, as compared to a decline of 0.8 per cent a year ago.

4.35 During 2009-10, the banking system's credit to the Government was the major driver of growth in broad money, a trend which has persisted since the third quarter of 2008-09. The increase in Government's borrowing programme to finance the expansionary fiscal response to the economic slowdown was the underlying reason. However,  $M_3$  growth has shown signs of deceleration after

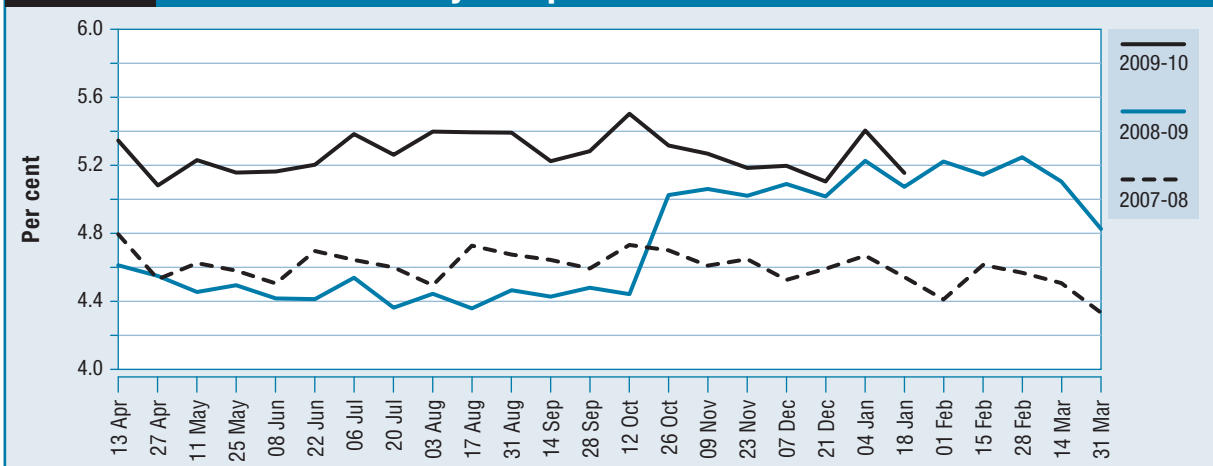
September 2009. This owes to the fact that being front loaded, the major part of the government borrowing was completed in the first half of the year.

4.36 Among the sources of  $M_3$ , bank credit to the commercial sector, which had been decelerating since October 2008, has shown a revival since November 2009 (Figure 4.10).

### Money multiplier

4.37 During 2008-09, the rate of expansion of  $M_0$  was lower than that of  $M_3$ . Accordingly, the ratio of  $M_3$  to  $M_0$  (money multiplier) showed an increase. In end-March 2009, this ratio was higher at 4.8 as compared to 4.3 in end-March 2008. During the current financial year, the increasing trend in the money multiplier continued, with reserve money registering a lower growth than broad money supply. As on January 15, 2010, the money multiplier was 5.4 (Figure 4.11).

**Figure 4.11 Movements in money multiplier**



### Movement in other monetary indicators

4.38 During 2009-10, bank credit recorded an increase of 8.4 per cent (end-March – January 15, 2010). As against this, bank deposits recorded an increase of 10.7 per cent during the same period. The lower expansion in credit relative to the expansion in deposits during 2009-10 has resulted in a decline in the credit-deposit ratio. It fell from 72.4 in end-March 2009 to 70.92 on January 15, 2010. The investment-deposit ratio increased from 30.4 per cent in end-March 2009 to 32.53 on January 15, 2010 as scheduled commercial banks (SCBs) preferred to invest a larger share of their deposits in SLR securities. Commercial banks' holdings of SLR securities were 29.9 per cent of NDTL as on January 15, 2010 as against 28.1 per cent in end-March 2009 and 28.8 per cent a year earlier. This was consistently higher than the stipulated level of 24 per cent of NDTL with effect from November 7, 2008 and 25 per cent with effect from November 7, 2009.

4.39 Monetary deepening, as measured by the ratio of average  $M_3$  to  $GDP_{MP}$  ( $GDP$  at market prices), increased from 65.5 per cent in 2004-05 to 77.8 per cent in 2008-09. This could be attributed to the

spread of banking services in the country and development of the financial sector. The monetization of the economy as measured by the ratio of average  $M_1$  to  $GDP$  has shown a marginally increasing trend during this period. In 2004-05, this ratio was 18.5 per cent, which has increased to 20.4 per cent in 2008-09 (Table 4.16 and Figure 4.12).

### Liquidity Management

4.40 The monetary easing in the aftermath of the global financial crisis constituted the main theme of liquidity management during financial year 2009-10 with periodic fluctuations in cash balances of the Central Government providing temporary variations. The Reserve Bank continued its active policy of assuring liquidity during 2009-10 through Open Market Operations (OMO), Liquidity Adjustment Facility (LAF) and also unwinding (including de-sequestering) of balances under the Market Stabilization Scheme (MSS) to maintain appropriate liquidity in the system.

4.41 As a result, liquidity conditions remained comfortable during 2009-10. In its Annual Policy Statement 2009-10, the RBI had reduced the LAF repo and reverse repo rates by 25 basis points

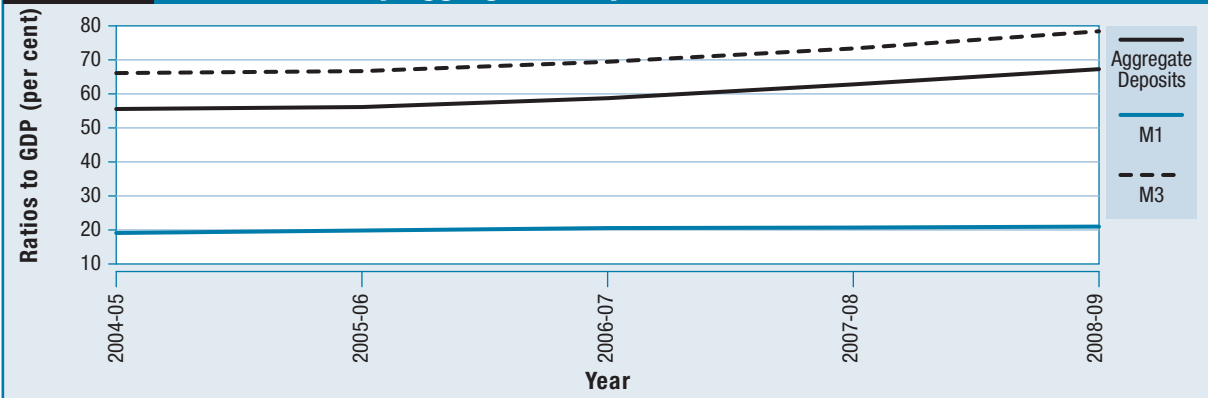
**Table 4.16 : Select monetary aggregates (ratios to GDP)**

	As per cent of $GDP_{MP}$					
	Currency with public	Demand deposits with banks	Time deposits with banks	Aggregate deposits	M1	M3
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
1999-2000	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	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*	10.4	8.0	47.0	55.0	18.5	65.5
2005-06*	10.3	8.8	46.8	55.6	19.3	66.1
2006-07*	10.5	9.4	48.8	58.2	20.0	68.9
2007-08*	10.5	9.5	52.7	62.2	20.1	72.8
2008-09*	11.0	9.3	57.4	66.7	20.4	77.8

Source : RBI.

\* Computed on revised GDP data released by the CSO (2004-05 onwards) on January 29, 2010.

**Figure 4.12 Select monetary aggregates as per cent of GDP**



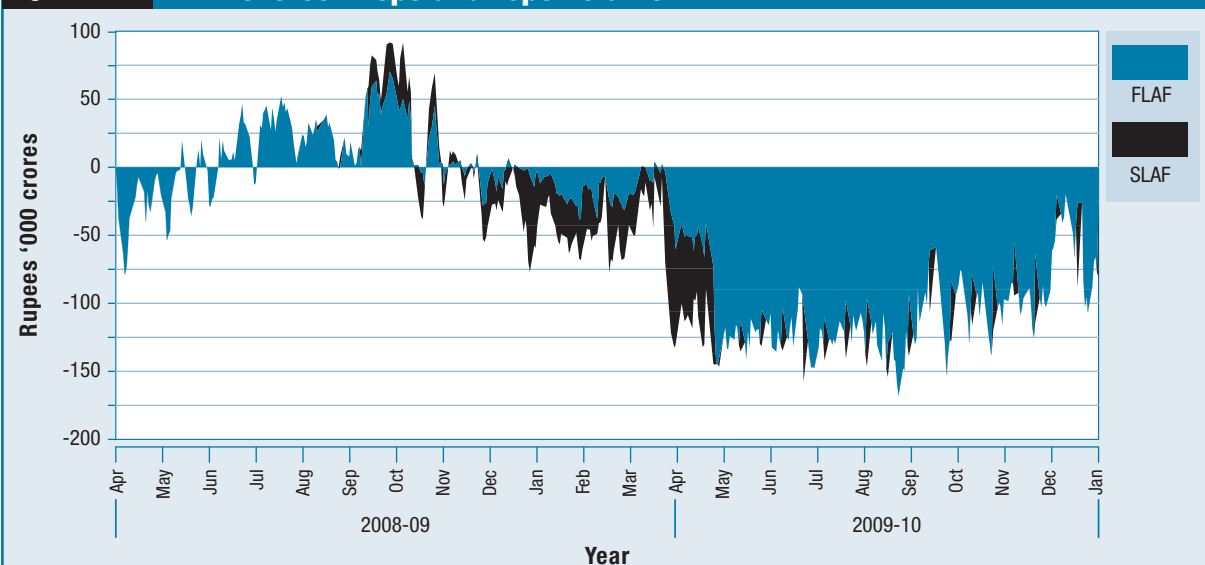
effective April 21, 2009 to 4.75 per cent and 3.25 per cent respectively. In recognition of the easing liquidity conditions, the 14-day term repo facility, a daily facility hitherto, was converted to a weekly facility effective April 27, 2009. The average daily net absorption under the LAF continued to remain over Rs1,20,000 crore during June 2009, notwithstanding advance tax collections around the middle of the month. This continued through July-August 2009 and the LAF absorption under reverse repo reached a peak of Rs1,68,215 crore on September 4, 2009. Liquidity conditions continued to remain in surplus mode in October and November 2009 with average absorption under the LAF being around Rs1,00,000 crore. However, net LAF absorption declined by end December mainly on

account of advance tax outflows (Table 4.17 and Figure 4.13)

4.42 During the year 2009-10, liquidity was also facilitated through OMOs purchased aggregating Rs 57,000 crore . Additionally, the decline in MSS balances and de-sequestering of around Rs 28,000 crore provided liquidity of around Rs 81,000 crore (Figure 4.14).

4.43 Consistent with the changed tempo of forex inflows, the ceiling for the MSS which was Rs 2,50,000 crore since November 2007 was scaled down to Rs 50,000 crore in July 2009. The average weekly outstanding on account of the MSS reflected the situation. From a level of Rs 75,146 crore in April, 2009 it steadily declined to around Rs 18,773 crore by November 2009 (Table 4.18).

**Figure 4.13 LAF reverse - repo and repo volume**



Note : 1. Repo is positive and Reverse repo is negative. 2. All additional LAF are included in first LAF (FLAF) till July 31, 2008. the second LAF (SLAF) 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.

Table 4.17 : Liquidity management

(Rupees crore)

Outstanding as on last Friday of the month	LAF	MSS	Centre's surplus@	Total
<b>2008</b>				
January	985	1,66,739	70,657	2,38,381
February	8,085	1,75,089	68,538	2,51,712
March*	-50,350	1,68,392	76,586	1,94,628
April	32,765	1,72,444	36,549	2,41,758
May	-9,600	1,75,362	17,102	1,82,864
June	-32,090	1,74,433	36,513	1,78,856
July	-43,260	1,71,327	15,043	1,43,110
August	-7,600	1,73,658	17,393	1,83,451
September	-56,480	1,73,804	40,358	1,57,682
October	-73,590	1,65,187	14,383	1,05,980
November	-9,880	1,32,531	7,981	1,30,632
December	14,630	1,20,050	3,804	1,38,484
<b>2009</b>				
January	54,605	1,08,764	-9,166	1,54,203
February	59,820	1,01,991	-9,603	1,52,208
March*	1,485	88,077	16,219	1,05,781
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

Source : RBI.

Notes : @: excludes minimum cash balance with Reserve Bank in case of surplus.

\* : As on March 31.

1. Negative sign under LAF indicates injection of liquidity and negative sign under centre's surplus indicates Ways &amp; Means Advances / Overdrafts.

Figure 4.14 Market stabilisation scheme

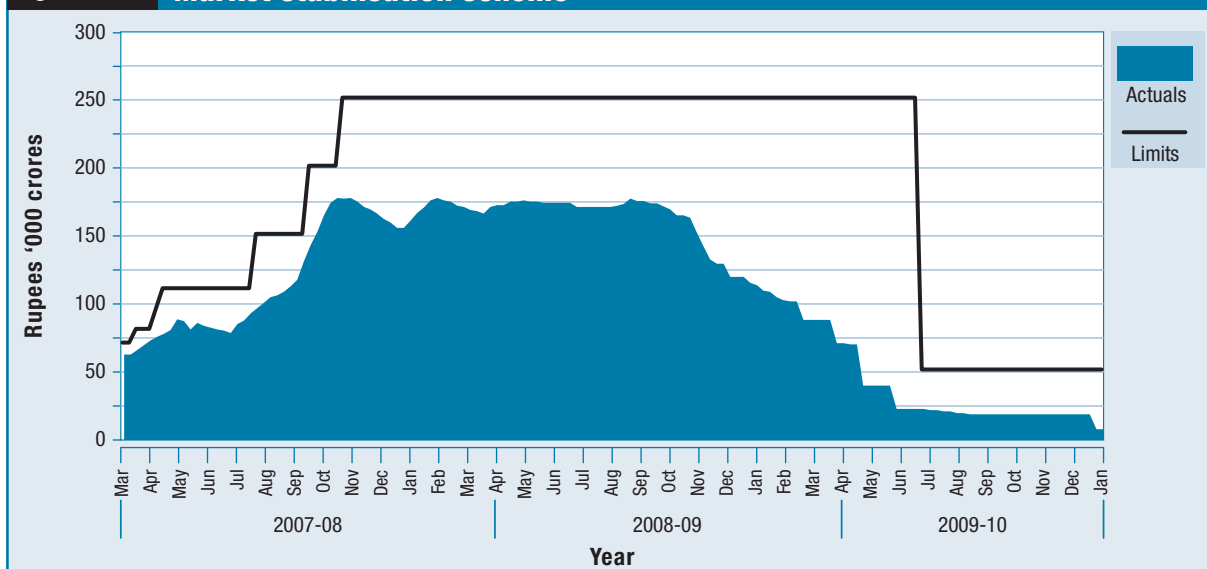


Table 4.18 : Call money market

	Call turnover (Rs crore)	Call rate <sup>^</sup> (Per cent)	LAF# (Rs crore)	Reverse repo rate (Per cent)	Repo rate (Per cent)	MSS* (Rs crore)
<b>2008-09</b>						
Apr. 2008	19,516	6.11	26,359	6.00	7.75	1,70,726
May 2008	19,481	6.62	11,841	6.00	7.75	1,75,565
Jun. 2008	21,707	7.75	-8,622	6.00	8.00/8.50	1,74,433
Jul. 2008	24,736	8.76	-27,961	6.00	8.50	1,72,169
Aug. 2008	23,408	9.1	-22,560	6.00	9.00	1,71,944
Sep. 2008	23,379	10.52	-42,591	6.00	9.00	1,75,666
Oct. 2008	28,995	9.9	-45,612	6.00	8.00	1,69,123
Nov. 2008	21,812	7.57	-8,017	6.00	7.50	1,47,648
Dec. 2008	21,641	5.92	22,294	5.00	6.50	1,24,848
Jan. 20-09	18,496	4.18	45,474	4.00	5.50	1,13,535
Feb. 2009	22,241	4.16	50,649	4.00	5.50	1,02,934
Mar. 2009	23,818	4.17	33,360	3.50	5.00	88,077
<b>2009-10</b>						
Apr. 2009	21,820	3.28	1,01,561	3.25	4.75	75,146
May 2009	19,037	3.17	1,25,728	3.25	4.75	45,955
Jun. 2009	17,921	3.21	1,23,400	3.25	4.75	27,140
Jul. 2009	14,394	3.21	1,30,891	3.25	4.75	22,159
Aug. 2009	15,137	3.22	1,28,275	3.25	4.75	19,804
Sep. 2009	16,118	3.31	1,21,083	3.25	4.75	18,773
Oct. 2009	15,776	3.17	1,01,675	3.25	4.75	18,773
Nov. 2009	13,516	3.19	1,01,719	3.25	4.75	18,773
Dec. 2009	13,302	3.24	68,522	3.25	4.75	18,773

Source: RBI.

<sup>^</sup> : Average of daily weighted call rate.

\* : Average of weekly outstanding MSS.

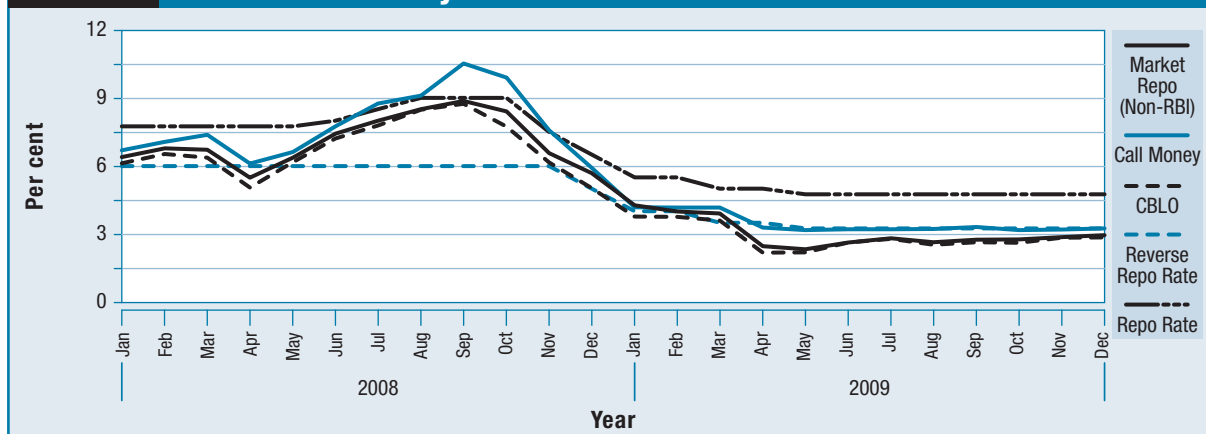
# : Average daily absorption under LAF.

## Money market

4.44 The money market remained by and large orderly during 2009-10, due to the prevailing surplus liquidity conditions. Call rate continued to hover around the reverse repo rate during Q1 of 2009-10 and averaged 3.2 per cent as compared to 4.2 per cent during the last quarter of 2008-09. During the second quarter of 2009-10, the call rate averaged 3.25 per cent. Even in the third quarter, the call rate continued to hover around the lower bound of the informal LAF corridor (Table 4.18). The average call rate was placed at 3.20 per cent during this period.

4.45 Interest rates in the collateralized segments of the money market--the market repo (outside the LAF) and the collateralized borrowing and lending

obligation (CBLO)--also moderated in tandem with the behaviour of the call rate and remained below the call rate during 2009-10. (Figure 4.15) The weighted average interest rate in the collateralized segment of the money market marginally increased from 2.4 per cent in the first quarter of 2009-10 to 2.7 per cent during the second quarter. During the third quarter of the year, it averaged 2.8 per cent. Transaction volumes in the CBLO and market repo segments remained at a relatively high level during 2009-10. Around 75 per cent of the lending in the collateralized segment was contributed by mutual funds, which reflected their enhanced lending capacity. The collateralized market remained the predominant segment of the money market and accounted for more than 80 per cent of its total volume.

**Figure 4.15** Movement of money market rates

### Certificates of Deposit

4.46 With the persistence of surplus liquidity conditions, the fortnightly average issuance of certificates of deposit (CD) also remained high during much of 2009-10. The amount of outstanding CDs issued by SCBs increased from Rs 1,92,867 crore in end-March 2009 to Rs 2,43,584 crore as on December 4, 2009. The outstanding amount constituted 7.84 per cent (as on December 4, 2009) of aggregate deposits of CD-issuing banks with significant inter-bank variation. During April–December 4, 2009, the average issuance was of the order of Rs 11,000 crore as compared to Rs 6,131 crore during the corresponding period of the previous year. Most of the CDs issued were of more than six months duration. The weighted average discount rate declined from 7.53 per cent in end-March 2009 to 4.84 per cent as on December 4, 2009.

### Commercial Paper

4.47 During 2009-10, the commercial paper (CP) market also picked up with the easing of liquidity conditions and the size of fortnightly issuance increased significantly. The outstanding amount of CP issued by corporates has shown an increasing trend from Rs 44,171 crore in end-March 2009 to Rs 1,03,915 crore as in end-November 2009, marginally coming down to a level of Rs 90,305 crore in end-December 2009. The weighted average discount rate (WADR) of CP declined from 9.79 per cent as in end-March 2009 to 4.71 per cent as in end-July 2009 and increased to 5.17 per cent in end-November 2009. The shares of “manufacturing companies” and “other financial institutions” in total outstanding CPs have increased in the recent period while the share of “leasing and finance companies”

has declined. “Manufacturing companies” accounted for 45 per cent of the share in end-November 2009. (Table 4.19).

### Treasury Bills (T-bills)

4.48 T-bills issuances during the year 2009-10 were dynamically managed, keeping in view the emerging requirements of the Government and the market conditions. The T-bills issued for enhanced amounts in 2008-09 which became due for repayment both in the first and second quarters of 2009-10 were fully rolled over. The primary market yields for TBs of different tenors (91 days, 182 days and 364 days) remained by and large stable during 2009-10 as compared to the pattern observed in 2008-09. (Figures 4.16, 4.17 and 4.18).

4.49 The introduction of a new short-term instrument, known as cash management bill (CMB), was announced in August 2009 to meet the temporary cash-flow mismatches of the Government. CMBs are non-standard, discounted instruments issued for maturities of less than 91 days. However, issuance of CMBs has not so far been resorted to during the year.

### Central Government Borrowing

4.50 The Union Budget (2009-10) placed the net market borrowings requirement of the Central Government at Rs 3,97,957 crore as against Rs 2,42,316 crore raised during the previous year. Including repayments of Rs 93,087 crore, gross market borrowing was estimated at Rs. 4, 91,044 crore (as compared to Rs 3,18,550 crore raised in the previous year). The actual issuances during the first half of the current year amounted to Rs 2,95,000 crore (as against issuances of Rs 1,06,000 crore during the corresponding period of the previous year);

Table 4.19 : Activity in money market segments

(Rupees crore)

Year/ month	Average daily volume (one leg)				Money market rate* (per cent)	Term money	Commercial paper		Certificates of deposit	
	Call	Market repo	CBLO	Total			Out- stand- ing	WADR (per- cent)	Out- stand- ing	WADR (per- cent)
Apr. 2008	9,758	14,966	38,828	63,552	5.31	374	37,584	8.85	1,50,865	8.49
May 2008	9,740	14,729	36,326	60,795	6.29	420	42,032	9.02	1,56,780	8.95
Jun. 2008	10,854	11,262	35,774	57,890	7.35	253	46,847	10.03	1,63,143	9.16
Ju l. 2008	12,368	8,591	23,669	44,628	8.09	226	51,569	10.95	1,64,892	10.23
Aug. 2008	11,704	10,454	22,110	44,268	8.65	501	55,036	11.48	1,71,966	10.98
Sep. 2008	11,690	10,654	20,547	42,891	9.26	335	52,038	12.28	1,75,522	11.56
Oct. 2008	14,497	9,591	16,818	40,906	8.66	345	48,442	14.17	1,58,562	10
Nov. 2008	10,906	15,191	24,379	50,476	6.58	319	44,487	12.42	1,51,493	10.36
Dec. 2008	10,820	16,943	32,261	60,024	5.37	415	40,391	10.7	1,51,214	8.85
Jan. 2009	9,248	18,053	31,794	59,095	3.99	454	51,668	9.48	1,64,979	7.33
Feb. 2009	11,121	19,929	38,484	69,534	3.89	669	52,560	8.93	1,75,057	6.73
Mar. 2009	11,909	21,593	48,319	81,821	3.76	451	44,171	9.79	1,92,867	7.53
Apr. 2009	10,910	20,545	43,958	75,413	2.41	332	52,881	6.29	2,10,954	6.48
May 2009	9,518	22,449	48,505	80,472	2.34	338	60,740	5.75	2,18,437	6.2
Jun. 2009	8,960	21,694	53,553	84,207	2.69	335	68,721	5	2,21,491	4.9
Jul. 2009	7,197	20,254	46,501	73,952	2.83	389	79,582	4.71	2,40,395	4.96
Aug. 2009	7,569	23,305	57,099	87,973	2.62	461	83,026	5.05	2,32,522	4.91
Sep. 2009	8,059	27,978	62,388	98,425	2.73	381	79,228	5.04	2,16,691	5.3
Oct. 2009	7,888	23,444	58,313	89,645	2.7	225	98,835	5.06	2,27,227	4.70
Nov. 2009	6,758	22,529	54,875	84,162	2.87	191	1,03,915	5.17	2,45,101	4.86
Dec. 2009	6,651	20,500	55,338	82,489	2.91	289	-	-	2,43,584+	4.84+

Source: RBI.

+ As on December 4, 2009.

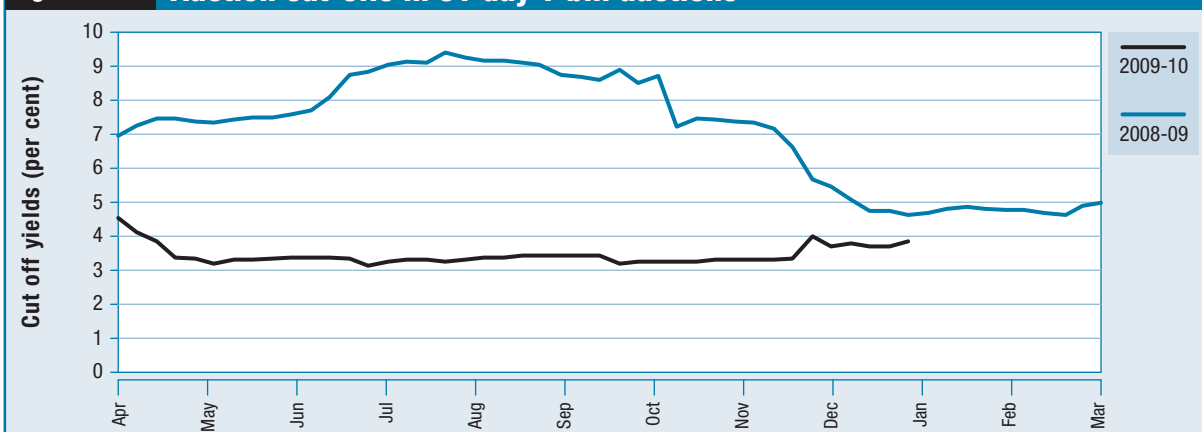
\* Weighted average rate of call, market repo and CBLO.

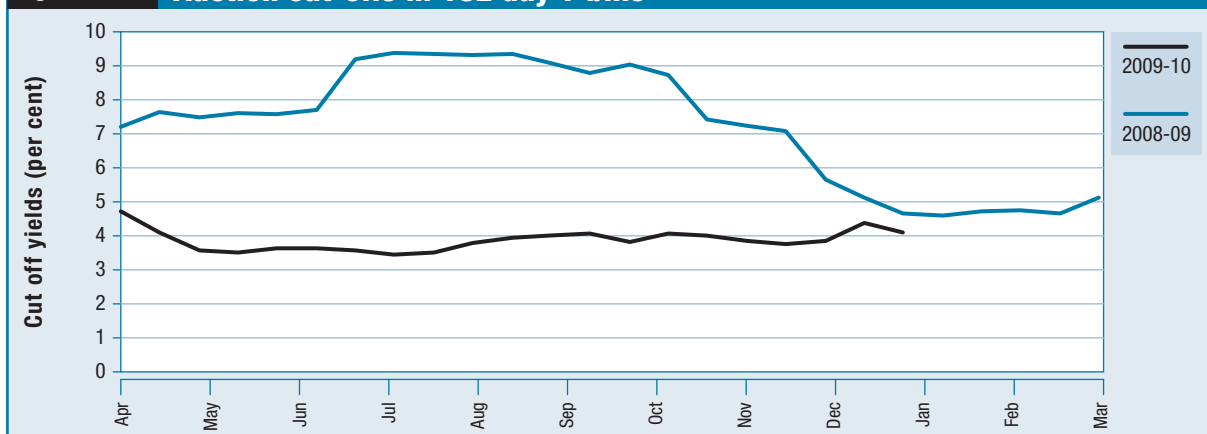
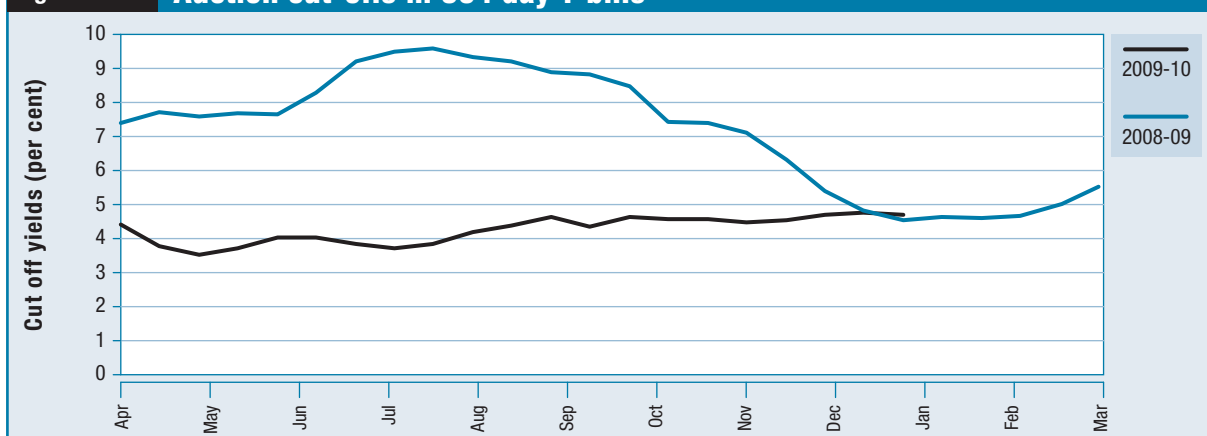
WADR: Weighted average discount rate.

the issuance calendar for dated securities released on September 29, 2009 proposed to raise Rs 1,23,000 crore during the second half of the year.

4.51 The gross borrowing requirement in 2009-10 was 54 per cent higher than in 2008-09. In order to carry out the borrowing programme in a non-disruptive

Figure 4.16 Auction cut-offs in 91 day T-bill auctions



**Figure 4.17 Auction cut-offs in 182 day T-bills****Figure 4.18 Auction cut-offs in 364 day T-bills**

manner, a number of steps were taken. First, the borrowing programme of the Central Government for 2009-10 was frontloaded as credit offtake by the private sector is usually low in the first half. Further, MSS securities of the order of Rs 28,000 crore were de-sequestered. Besides, the Reserve Bank resorted to active liquidity management by way of unwinding of MSS securities and purchase of securities through a pre-announced OMO calendar. The unwinding of MSS securities through redemption was of the order of Rs 42,000 crore during the first half of the year; as against the OMO announcement of Rs 80,000 crore through the auction route for the first half of 2009-10, the actual purchases were Rs 57,487 crore, the shortfall from the projected level being on account of easy liquidity conditions.

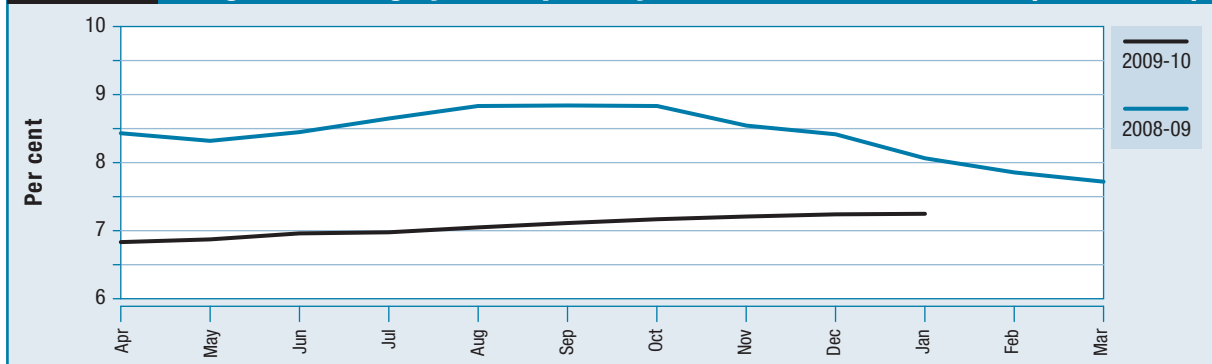
4.52 During 2009-10 (up to January 15, 2010), gross market borrowing raised through dated securities by the Central Government (excluding issuances under the MSS) was Rs 3,93,000 crore (net Rs 3,51,911 crore) as against Rs 1,80,000 crore (net Rs 1,35,972 crore) raised during the corresponding period of the previous year. This also

included floating rate bonds amounting to Rs 2,000 crore with a tenor of 11 years issued on December 18, 2009. Keeping in view market preferences, the weighted average maturity of dated securities issued during the year so far (up to January 15, 2010) worked out lower at 11.17 years as compared to 14.62 years for issues during the corresponding period of the previous year. The weighted average yield of dated securities during 2009-10 (uptil January 15, 2010) was lower at 7.22 per cent as compared to 8.15 per cent during the corresponding period of the previous year (Figure 4.19).

#### *Yields on 10-Year Government Securities (10-year G-Sec)*

4.53 The movement in yields in the 10-year G-Sec market may be categorized into three broad phases. During the first phase (April 2009), the yield on 10-year G-Sec declined from 7.01 per cent to 6.23 per cent between end-March and end-April 2009; this was due to substantial easing of liquidity conditions, decline in inflation rate, OMO purchase auctions and reduction in LAF policy interest rates.



**Figure 4.19 Weighted average yield of primary issues of dated securities (cumulative)**

4.54 During the second phase (May 2009-August 2009), the 10-year yields started rising following the increase in size of primary auctions (from Rs12,000 crore to Rs15,000 crore) as well as anticipation of overwhelming supplies in view of the large borrowing programme of the Government. The 10-year yield rose to 7.17 per cent in end-September 2009 as compared to 6.23 per cent as in end-April 2009.

4.55 During the third phase (September-December 2009), the G-sec yields traded in a broad range with a hardening bias. The yield declined on the back of the RBI's decision to hike SLR by 1 percentage point to 25 per cent (as announced in the Second Quarter Review of Annual Policy Statement for 2009-10, on October 27, 2009). However, the G-Sec yield rose subsequently on account of a host of factors including absence of announcement of the OMO purchase auction calendar during the second half of the fiscal year 2009-10, and expectation by market participants that the policy rates might be raised due to increase in the inflation level (as reflected by the increase in the WPI). The 10 year G-Sec yield was at 7.72 per cent as on January 12, 2010 as compared to 7.17 per cent as in end-September 2009.

### State Government Borrowings

4.56 In the light of the policy measures to minimize the adverse impact of the global financial crisis, the Union Budget had announced that State Governments could borrow an additional 0.5 per cent of their gross State domestic product (GSDP) up to a ceiling of 4 per cent of GSDP in 2009-10. Accordingly, the net market borrowings of the States were placed at Rs.1,40,000 crore for 2009-10 (gross : Rs 1,56,238 crore), compared to actual net market borrowings of Rs 1,03,766 crore (gross: Rs 1,18,138 crore) in 2008-09. During the current year 2009-10 (up to January 15, 2010), the amount raised by State

Governments aggregated to Rs 1,05,937.71 crore as compared to Rs 52,842.74 crore raised during the corresponding period last year. The weighted average yield of the auctions so far has been 8.03 per cent as compared to 7.74 per cent during the corresponding period last year.

### Monetary Policy Stance During 2009-10

4.57 Conditioned by the need for monetary policy to respond to the then slackening economic growth, the RBI's monetary policy stance during 2009-10 was aimed at providing a policy regime that would enable credit expansion at viable rates while preserving credit quality so as to support the return of the economy to a steady growth path. The Annual Policy Statement of the RBI for 2009-10 (April 21, 2009) clearly indicated the continuance of the policy being followed since mid-September 2008 to minimize the impact of the global financial crisis on the domestic economy and restore the economy to a high growth path consistent with price and financial stability. With the resolve to maintain a soft interest rate regime, the repo rate was further reduced from 5.00 per cent to 4.75 per cent with effect from April 21, 2009, while the reverse repo rate was reduced from 3.50 per cent to 3.25 per cent. There were no major changes in policy rates during 2009-10, except for restoration of the SLR to the earlier level of 25 per cent of NDTL (from 24 per cent ) in November 2009 and an increase of 75 basis points in CRR effective February 2010. The changes in policy rate since 2008-09 are brought out in Table 4.20.

### Quarterly Reviews

4.58 The RBI's First Quarter Review of the Monetary Policy 2009-10 (July 28, 2009) did not announce any revisions in policy rates. While continuing the accommodative monetary stance, it ,however, noted that there could be a reversal of the expansionary measures to anchor inflation

**Table 4.20 : Revision in policy rates**

Sl. no.	Date	Repo rate	Reverse repo rate	CRR
<b>2008</b>				
1.	April 26, 2008	7.75	6.00	7.75
2.	May 10, 2008	7.75	6.00	8.00
3.	May 24, 2008	7.75	6.00	8.25
4.	June 12, 2008	8.00	6.00	8.25
5.	June 25, 2008	8.50	6.00	8.25
6.	July 5, 2008	8.50	6.00	8.50
7.	July 19, 2008	8.50	6.00	8.75
8.	August 30, 2008	9.0	6.0	9.0
9.	October 11, 2008	9.0	6.0	6.5
10.	October 20, 2008	8.0	6.0	6.5
11.	October 25, 2008	8.0	6.0	6.0
12.	November 3, 2008	7.5	6.0	6.0
13.	November 8, 2008	7.5	6.0	5.5
14.	December 6, 2008	6.5	5.0	5.5
<b>2009</b>				
15.	January 5, 2009	5.5	4.0	5.5
16.	January 17, 2009	5.5	4.0	5.5
17.	March 5, 2009	5.0	3.5	5.0
18.	April 21, 2009	4.75	3.25	5.0
<b>2010</b>				
19.	February 13 2010	4.75	3.25	5.5*
20.	February 27 2010			5.75*

Source : RBI

**SLR** : The prescribed SLR as a per cent of NDTL was lowered from a level of 25 per cent to 24 per cent w.e.f. . November 8, 2008. This has been restored to 25 per cent w.e.f November 7, 2009 in the Second Quarter Review of Monetary Policy 2009-10.

\* : A two-stage increase in CRR announced in RBI's Third Quarter Review of Monetary Policy 2009-10 (January 29, 2010) effective February 13 and 27, 2010.

expectations and subdued inflationary pressures, if so warranted. The RBI's Second Quarter Review of Monetary Policy 2009-10 (October 27, 2009) made an overall assessment of the economy and indicated that the stance of monetary policy for the remaining period of 2009-10 would be to: (i) maintain a monetary and interest rate regime consistent with price stability and financial stability, and supportive of the growth process; (ii) keep a vigil on the trends in inflation and be prepared to respond swiftly and effectively through policy adjustments to stabilize inflation expectations; and (iii) monitor the liquidity situation closely and manage it actively to ensure that credit demands of productive sectors are adequately met while also securing price and financial stability.

4.59 The Second Quarter Review recognized the dilemma that while growth drivers warranted a delayed exit from the accommodative policy regime, inflation concerns called for an early exit. The RBI noted that a premature exit from the accommodative stance could derail the growth, but a delayed exit could also potentially engender inflation expectations. Therefore, while keeping the bank, repo and reverse repo rates unchanged, it announced closure of some special liquidity support measures, which were not being fully utilized, besides restoring the SLR to the earlier level of 25 per cent of NDTL. The following measures were announced in the Second Quarter Review of the Monetary Policy Statement:

- i. Taking note of the fact that the SCBs' investment in SLR securities was higher than the stipulated 24 per cent, the RBI announced that the SLR which had earlier been reduced from 25 per cent of NDTL to 24 per cent in November 2008, was being restored to 25 per cent with effect from the fortnight beginning November 7, 2009.
- ii. Liabilities of scheduled banks arising from transactions in CBLO (which were earlier exempted from CRR prescription), would be brought into the fold for maintenance of CRR with effect from the fortnight beginning November 21, 2009.
- iii. Keeping in view the large increase in credit to the commercial real estate sector, provisioning requirements to the sector classified as "standard assets" were increased from 0.40 to 1 per cent.
- iv. The limit for the export credit refinance facility [(under section 17(3A) of the RBI Act], which was raised to 50 per cent of eligible outstanding rupee export credit, was returned to the pre-crisis level of 15 per cent.
- v. The two non-standard refinance facilities: (i) special refinance facility for SCBs under section 17(3B) of the RBI Act (available up to March 31, 2010), and (ii) special term repo facility for SCBs (for funding to mutual funds, non-banking finance companies, and housing finance companies) (available up to March 31, 2010) have been discontinued.
- vi. The forex swap facility to banks for tenor up to three months (available up to March 31, 2010) has been discontinued.

**Table 4.21 : RBI'S indicative projections of macro parameters for 2009-10**

	Indicative projections for growth rates (per cent)			
	Annual Policy 2009-10 (April 21, 2009)	First Quarter Review (July 28, 2009)	Second Quarter Review (October 27, 2009)	Third Quarter Review (Jan. 29, 2010)
<b>GDP Growth</b>	6.0	6.0 with an upward bias	6.0 with an upward bias	7.5
<b>WPI Inflation</b>	4.0	5.0	6.5 with an upward bias	8.5
<b>Money Supply Growth (M<sub>3</sub>)</b>	17.0	18	17	16.5
<b>Aggregate Deposits of SCBs</b>	18.0	19.0	18.0	17
<b>Adjusted Non-food Credit</b>	20.0	20	18	16

4.60 The RBI has in its Third Quarter Review of the Monetary Policy (January 29, 2010) indicated that its stance is shaped by three important considerations ;

- i. The need to shift policy stance from “managing the crisis” to “managing the recovery” which implies reversal from the crisis-driven expansionary stance, thereby recognizing the need for carrying forward the process of exit further .
- ii. Though the inflationary pressures in the domestic economy stem predominantly from the supply side, consolidating recovery increases the risks of these pressures spilling over into a wider inflationary process.
- iii. Strong anti-inflationary measures, while addressing one problem may precipitate another by undermining the recovery, particularly by deterring private investment and consumer spending.

4.61 Based on its assessment, the RBI left the bank rate, repo and reverse repo rates and SLR unchanged ; however, it announced that the CRR was being raised by 75 basis points from 5.0 per cent to 5.75 per cent in two stages; the first stage of increase of 50 basis points to be effective the fortnight beginning February 13, 2010, followed by the next stage of increase of 25 basis points effective the fortnight beginning February 27, 2010. The hike in CRR is estimated to have potential to absorb around Rs 36,000 crore from the system which is presently witnessing surplus liquidity.

4.62 The response of the monetary authority to the changing economic environment was also reflected in the indicative projections for macro-level parameters made by the RBI for 2009-10 in the

Annual Policy Statement for the year and subsequent quarterly reviews. The revisions considered by the RBI are summarized in Table 4.21.

## CHALLENGES AND OUTLOOK

4.63 Food prices are cyclical in nature. A sharp increase in food prices during the recent period has been a cause of concern. A significant part of this inflation could be explained by supply-side bottlenecks in some of the essential commodities, precipitated by the delayed and sub-normal south-west monsoon as well as drought-like conditions in some parts of the country. However, inflation in some of the commodities, like wheat and rice, in which there is ample stock available, could have been exacerbated due to inflationary expectations. Making available adequate and timely quantities of these items and at different locations to overcome supply-demand mismatches is the real challenge.

4.64 India cannot be immune to global price situations especially when a significant proportion of our requirement of edible oils, pulses and sugar (in years of shortages) is met through imports. At the same time, for a large country like India the scope for imports for many commodities is limited. Any decision to import food items raises global prices which impacts domestic prices as well. Proper and timely assessment of the supply-demand situation and preventive action become the essence of supply-side management.

4.65 The concentrated pressure on headline inflation arising from high food prices entails the risk of getting transmitted over time to other non-food items through expectations-driven wage price revisions, and thereby manifesting into a generalized inflation.

4.66 The international crude oil prices have increased from \$ 44/bbl in January-March, 2009 to \$ 77/bbl in January, 2010. Despite this, the administered prices of petroleum products in the domestic market have been maintained at the same level since July 2009. Sustaining current levels of domestic petroleum prices in this scenario of rising international prices may not be viable for long from the fiscal side; at the same time, increase in prices would have its impact on inflation levels.

4.67 As of now, the outlook for inflation is conditioned by supply-side pressures in the near term, possible return of pricing power with stronger recovery in growth, further revival in private demand with improving consumer and business confidence, and possible spurt

in global commodity prices in response to recovery in advanced economies.

4.68 While the fiscal issues including fiscal rectitude are important, the transmission of the monetary policy stance to the monetary and real sectors is equally critical. It would therefore also be incumbent on the policy authorities not only to address the inflationary expectations but also monitor and ensure that the growth in money supply and credit to productive sectors is at the envisaged levels so that the growth prospects in the near to medium terms are sustained on an even keel, without, at the same time, jeopardizing the price scenario.

