Prices and Monetary Management

4

CHAPTER

Inflation is perhaps the most closely monitored economic variable in India since it has considerable impact on the average consumer. It refers to an upward movement in the general prices of goods and services and is estimated as the percentage rate of change in a price index over the reference time period. At a macro level, inflation can be traced to imbalances in aggregate demand and supply. Excess monetary growth or low interest rates can also result in excess demand, relative to supply, leading to inflation. Similarly, a fall in aggregate supply either due to a crop failure or restricted imports can lead to inflation, if the demand remains unchanged. In a globalized economy, and for those sectors where imports and exports are relatively free, such as in manufacturing and minerals, global demand-supply imbalances can and do influence domestic inflation in those sectors. The developments on the domestic prices front along with a review of the monetary management in the country are brought out in this chapter.

Prices

4.2 The fiscal year 2008-09 had been a very unusual year, marked by extremes in price movements. The question of the appropriate index to track inflation assumed importance following the noticeable difference between inflation measured by the Wholesale Price Index (WPI) versus the sectional Consumer Price Indices (CPIs). The International Monetary Fund (IMF) statistics reveals that 24 countries use WPI as the official measure to track inflation, compared to 157 countries which use CPI. CPI actually measures the increase in prices a consumer will have to pay for the designated commodity basket (which may be revised every four-five years to factor in changes in consumption pattern). India does not have an aggregate CPI, but only sectional CPIs for industrial workers (CPI-IW), agricultural labour (CPI-AL), urban non-manual workers (CPI-UNME) and rural labour (CPI-RL)

Headline (WPI) inflation by broad commodity groups

4.3 The WPI commodity basket has three constituent commodity groups: (a) primary articles, (b) fuel, power, light and lubricants, and (c) manufactured products, with respective weights of 22.02 per cent, 14.23 per cent and 63.75 per cent.

4.4 The inflation trends by broad commodity groups for each of the years beginning from 2000-01 to 2008-09 are given in Table 4.1. The 52-week averages show that inflation in 2000-01, 2004-05 and 2008-09 had been above the 6 per cent threshold with 2008-09 recording the highest average in the current decade. In contrast, annual inflation as on end-March 2009 recorded the lowest rate of 0.8 per cent overall and negative inflation of 6.1 per cent in the fuel and power group. Similarly, 2006-07 and 2007-08 stand out with inflation (at end March) in primary articles in the band of 10-11 per cent, though the 52-week average was only in the range of 5 (+)/ (-) 0.5 per cent.

4.5 Over the five-year span, 2004-05 to 2008-09, inflation remained below 7 per cent, except for two breaches. The first breach was in the second half of 2004-05, when the price of crude oil per barrel (Brent) rose from US$ 38 in 2004 to US$ 54 in 2005, coupled with an erratic, delayed and uneven spatially-spread monsoon. The second breach began from March 2008, prior to the onset of the fiscal year. Inflation, which was rising but which was in single digit up to

Table 4.1 : Annual WPI inflation rate (%) (Base: 1993-94 = 100)

Year	March end annual inflation rate (per cent)				52-week Avg (All items)	Range of inflation during 52 weeks
	Primary articles	Fuel, power, light & lubri.	Manufactured products	All commodities		
Weights (per cent)	**22.02**	**14.23**	**63.75**	**100.00**	**100.00**	**100.00**
2000-01	1.5	15.1	4.0	5.5	7.2	4.9 - 8.8
2001-02	3.9	3.9	0.0	1.6	3.6	1.1 - 5.6
2002-03	6.1	10.8	5.1	6.5	3.4	1.4 - 6.5
2003-04	1.6	2.5	6.7	4.6	5.5	3.8 - 6.9
2004-05	1.3	10.5	4.6	5.1	6.5	4.3 - 8.7
2005-06	5.4	8.9	1.7	4.1	4.4	3.3 - 6.0
2006-07	10.7	1.0	6.1	5.9	5.4	3.7 - 6.7
2007-08	9.7	6.8	7.3	7.8	4.7	3.1 - 8.0
2008-09	5.2	-6.1	1.7	0.8	8.4	0.7 - 12.9

Source : D/o Indl Policy & Promotion

end-May, reached double digits from June to mid-October and remained above 8 per cent up to end-November, with the price of crude touching US$ 147 in July 2008. On both occasions, inflation in the domestic economy was largely due to developments in the global economy, with the prime movers being the spurt in the prices of crude oil, minerals and metal related products, testifying to the growing connectivity between the domestic and the world economies. In other periods, inflationary pressures were contained below 7 per cent, facilitated not only by the liberalized domestic and foreign trade, which served to foster greater competition, but also due to the reduction and rationalization of the tax structure, which gave a fillip to cost efficiency.

4.6 Component-wise inflation rates over the period 2004-05 to 2008-09 are given in Table 4.2. The inflation rates in primary articles in 2008-09 at

Table 4.2 : Average inflation in WPI (%)

Commodities	Weight	2004-05	2005-06	2006-07	2007-08	2008-09
All commodities	**100.00**	**6.5**	**4.4**	**5.4**	**4.7**	**8.4**
Primary articles	**22.02**	**3.7**	**2.9**	**7.9**	**7.6**	**10.1**
Food articles	15.40	2.7	4.8	7.8	5.5	8.0
Non-food articles	6.14	0.7	-4.5	5.1	12.6	11.2
Minerals	0.48	110.3	26.5	28.1	13.2	34.9
Fuel, power, light, lubricants	**14.23**	**10.1**	**9.5**	**5.6**	**0.9**	**7.5**
Coal mining	1.75	15.3	3.7	0.0	2.7	6.6
Minerals oils	6.99	15.2	13.9	7.9	1.0	11.1
Electricity	5.48	1.7	4.1	3.2	0.5	1.1
Manufactured products	**63.75**	**6.3**	**3.1**	**4.4**	**5.0**	**8.1**
Food products	11.54	5.0	1.1	3.2	4.3	10.0
Beverages, tobacco & products	1.34	5.3	4.9	7.4	10.3	9.5
Textiles	9.80	3.0	-4.5	2.2	-1.0	6.0
Wood & wood products	0.17	0.1	8.4	6.0	4.7	8.5
Paper & paper products	2.04	0.8	2.2	6.8	1.8	4.4
Leather & leather products	1.02	6.0	7.1	-4.4	4.1	1.1
Rubber & plastic products	2.39	-0.4	3.4	6.6	7.1	4.7
Chemicals & chemical products	11.93	2.5	3.6	3.0	5.6	7.2
Non-metallic mineral products	2.52	6.3	7.8	12.8	8.9	3.7
Basic metals alloys & products	8.34	21.2	7.4	6.8	6.9	14.4
Machinery & machine tools	8.36	5.7	5.1	5.6	7.1	4.7
Transport equipment & parts	4.29	4.7	3.6	1.6	2.7	5.2

Source : D/o Indl Policy & Promotion

10 per cent and in manufactured products at 8.1 per cent were the highest over the five-year span. Within the commodity groups, inflation in food articles for 2008-09 was high, while inflation in minerals at 34.9 per cent was the highest in four years from 2005-06 to 2008-09 and a third of the inflation rate that prevailed in 2004-05 at 110 per cent. Likewise, inflation in coal mining at 6.6 per cent was the highest in the four-year period from 2005-06. Inflation in mineral oils was at 11 per cent. Within the commodity group of manufactured products, inflation in the food products subgroup at 10 per cent was the highest in the five-year period, 2004-05 to 2008-09, as also in textiles at 6 per cent, in wood and products at 8.5 per cent, in chemicals and chemical products at 7.2 per cent and in transport equipment and parts at 5.2 per cent. In contrast, inflation was the lowest over the five-year span in machinery and machine tools at 4.7 per cent and in non-metallic mineral products at 3.7 per cent. In basic metals, alloys and products, inflation stood at 14.4 per cent in 2008-09, lower only to the rate of 21.2 per cent that prevailed in 2004-05.

WPI inflation as on March 28, 2009

4.7 While overall inflation as at end-March 2009 registered merely 0.8 per cent, the group-wise inflation rates varied. Measuring the weighted contribution captures the extent to which the group/ commodity-wise inflation influences overall inflation. The weighted contributions of the groups to overall inflation in March 2009 were very different from those in the previous year.

Inflation in primary articles

4.8 Primary articles are subgrouped into food articles, non-food articles and minerals, with the weights of 15.40 per cent, 6.14 per cent and 0.48 per cent respectively in the commodity basket. While the group inflation rate as on end-March 2009 (Table 4.3) registered at 5.2 per cent, it was 7.0 per cent in food articles, 0.1 per cent in non-food articles and 7.2 per cent in minerals. The corresponding figures in 2007-08 were 6.5 per cent for food articles, 11.4 per cent for non-food articles and about 50 per cent in minerals in end-March 2008. As for the

Table 4.3 : WPI inflation in commodity groups (as on Mar. 28, 2009)

Items	Weight (%)	Y-o-Y Inflation (%) Inflation		Contribution	
		08-09	07-08	08-09	07-08
All Commodities	**100.00**	**0.8**	**7.7**	**100.0**	**100.0**
Primary articles	**22.02**	**5.2**	**9.7**	**141.8**	**28.2**
Food articles	15.40	7.0	6.5	129.2	13.2
Non-food articles	6.14	0.1	11.4	1.0	8.8
Minerals	0.48	7.2	49.9	11.6	6.2
Fuel and power	**14.23**	**-6.1**	**6.8**	**-156.1**	**18.9**
Coal mining	1.75	-1.0	9.8	-2.4	2.5
Minerals oils	6.99	-8.7	9.3	-133.1	15.1
(i) Administered	5.44	-1.0	2.0	-10.4	2.5
(ii) Non-administered	1.55	-26.6	30.9	-122.7	12.7
Electricity	5.48	-2.6	1.5	-21.1	1.4
Manufactured products	**63.75**	**1.7**	**7.3**	**114.3**	**52.8**
Food products	11.54	8.8	9.4	109.0	12.4
of which, edible oils	2.76	-7.6	20.0	-21.7	5.5
Beverages tobacco & products	1.34	9.3	8.0	18.2	1.7
Textiles	9.80	9.9	-4.3	65.7	-3.4
Wood & wood products	0.17	0.7	0.0	0.1	0.0
Paper & paper products	2.04	5.0	1.0	10.5	0.3
Leather & leather products	1.02	1.1	-0.2	1.0	0.0
Rubber & plastic products	2.39	2.3	5.6	4.7	1.3
Chemicals & chemical products	11.93	2.0	6.0	26.4	8.7
Non-metallic mineral products	2.52	1.9	6.4	5.4	2.0
Basic, metals alloys & metals products	8.34	-12.2	20.3	-156.2	25.2
of which, other non-ferrous metals	0.61	-10.8	-7.5	-9.4	-0.8
Machinery & machine tools	8.36	2.6	3.5	19.0	2.9
Transport equipment & parts	4.29	3.1	3.9	12.0	1.7

Source : D/o Indl Policy & Promotion

contribution to inflation, that of food articles stood at 129 per cent as of end- March, 2009.

Inflation in fuel and power

4.9 The subgroups of the fuel group are coal mining, mineral oils and electricity, with the weights of 1.75 per cent, 6.99 per cent and 5.48 per cent respectively in the commodity basket. Group inflation rate as on end-March 2009, stood at (-) 6.1 per cent in comparison with 6.8 per cent in the corresponding period of 2008. Each sub-component of the group recorded negative rates, with coal mining at (-) 1 per cent in 2008-09 compared to 9.8 per cent in 2007-08, mineral oils at (-) 8.7 per cent compared to 9.3 per cent in 2007-08 and electricity at (-) 2.6 per cent vis-à-vis 1.5 per cent in the previous year. Within mineral oils, inflation in the subgroup of administered mineral oils — including petrol, diesel, LPG and kerosene, with a combined weight of 5.44 per cent — was (-) 1 per cent in 2008-09 compared to 2 per cent in 2007-08, while in contrast, in the non-administered oils covering, among other things, aviation turbine fuel, naphtha, light diesel oil, furnace oil, bitumen, etc. and with a weight of 1.55 per cent in the basket, inflation measured (-) 27 per cent versus 31 per cent in end-March 2008. The percentage contributions of all three subgroups to inflation were negative, but the extent of negativity was pronounced in the case of mineral oils at (-) 133 per cent, of which the non-administered component accounted for (-) 123 per cent (Table 4.4).

Inflation in manufactured products

4.10 In this group, the year-on-year inflation as on end-March 2009 was 1.7 per cent vis-à-vis 7.3 per cent in the corresponding period of 2008. Out of the 12 subgroups in this group, the maximum weight in the range of 11.5-12 per cent each is of food products and of chemicals & products. Textiles, machinery and machine tools, basic metals, alloys and metal products are next in order of importance, with weights ranging from 8-10 per cent. Transport equipment & parts has a weight of 4 per cent. Non-metallic mineral products, rubber & plastic products, paper & paper products have weights between 2 per cent and 2.5 per cent. Beverages, tobacco & products, leather & products have 1 per cent weight each, with wood & products constituting just 0.2 per cent in the commodity basket.

4.11 Subgroup examination shows that in food products (in manufactured products) inflation in end-March 2009 at 8.8 per cent was lower than 9.4 per cent that prevailed in March end 2008 but its contribution to overall inflation was almost 110 per cent, owing partly to the negative contribution of the fuel group and the rising trend manifest in food as against non-food inflation. Edible oils under food products had recorded inflation of (-) 7.6 per cent compared to 20 per cent in end-March 2008. Textiles which had recorded inflation of (-) 4 per cent in end-March 2008 depicted 10 per cent inflation in end-March 2009. Another subgroup which recorded anomalous trends in the two comparable periods was that of basic metals, alloys and metal products which recorded 20 per cent inflation in end-March 2008 and (-) 12 per cent in end-March 2009. The subgroups of rubber and plastic, chemicals and non-metallic mineral products and paper also showed differing rates of inflation.

Quarter-wise inflation in 2007-08 and 2008-09

4.12 Table 4.4 provides data on the quarterly inflation in the WPI by major heads for 2007-08 and 2008-09. The uptrend in overall inflation from the third quarter of 2007-08 peaked in the second quarter of 2008-09 and declined thereafter, reaching 3 per cent in the last quarter. Within the commodity groups, inflation in primary articles peaked in the third quarter of 2008-09. Except in the last quarter of 2008-09, inflation in this group remained within 10-12 per cent. In fuel and power, inflation rose from (-) 2 per cent in the second quarter of 2007-08 to 17 per cent in the same quarter of 2008-09, while in the group of manufactured products, the uptrend in inflation followed the same pattern as overall inflation, peaking in the second quarter of 2008-09 at 11 per cent. The commodity groups/ subgroups recording two-digit inflation in 2008-09 were primary articles, mineral oils under fuel and power, food products, and basic metals, alloys & metal products in manufactured products. Groups that registered negative inflation in the last quarter included fuel and power (all three subgroups) and basic metals, alloys and products.

Month-wise inflation in 2008-09: WPI versus CPI

4.13 Measuring inflation as at the end of a fiscal year does not provide an insight into the fluctuations during the year, which can be gained by studying the month-wise trends in the price indices. In India, the weekly updated WPI continues to measure inflation since 1942. Concurrently, four CPIs are computed at the national level, viz., the CPI-IW for Industrial Workers, the CPI-AL for Agricultural Labourers, the CPI-RL for Rural Labourers and the

Table 4.4 : Quarterly inflation in WPI by major heads (%)

Major groups	Wt. (%)	2007-08 Quarter I	II	III	IV	Apr-Mar	2008-09 Quarter I	II	III	IV	Apr-Mar
All commodities	**100.00**	**5.4**	**4.1**	**3.4**	**5.8**	**4.7**	**9.6**	**12.5**	**8.6**	**3.2**	**8.4**
Primary articles	**22.02**	**9.8**	**8.9**	**4.7**	**7.3**	**7.6**	**9.7**	**11.3**	**11.8**	**7.5**	**10.1**
Food articles	15.40	8.1	7.7	2.6	3.8	5.5	5.7	6.9	10.1	9.3	8.0
Non-food articles	6.14	14.3	13.1	11.3	12.1	12.7	14.0	17.0	11.7	2.6	11.2
Minerals	0.48	13.3	2.7	0.5	36.4	13.2	46.0	48.3	42.2	10.6	34.9
Fuel, power, light, lubricants	**14.23**	**0.3**	**-2.0**	**0.5**	**5.2**	**1.0**	**10.3**	**17.0**	**6.7**	**-3.7**	**7.4**
Coal mining	1.75	0.0	0.0	1.8	9.0	2.7	9.8	9.8	7.6	-0.3	6.6
Minerals oils	6.99	-0.8	-3.9	1.4	7.4	0.9	15.4	26.8	9.4	-6.2	11.1
Electricity	5.48	2.4	1.0	-1.6	0.3	0.5	1.4	1.4	1.4	0.0	1.0
Manufactured products	**63.75**	**5.7**	**4.8**	**4.1**	**5.4**	**5.0**	**9.2**	**11.3**	**7.9**	**4.1**	**8.1**
Food products	11.54	3.5	3.1	3.0	7.4	4.3	11.7	14.2	6.1	8.4	10.0
Beverages, tobacco & products	1.34	11.6	11.1	9.6	8.8	10.2	8.9	10.7	9.0	9.4	9.5
Textiles	9.80	1.1	0.6	-2.1	-3.7	-1.0	-0.7	7.4	8.2	9.3	6.0
Wood & products	0.17	6.0	7.1	4.9	0.8	4.7	5.3	9.8	9.8	9.3	8.5
Paper & products	2.04	2.6	2.0	1.5	1.1	1.8	2.8	4.0	5.9	5.0	4.4
Leather & products	1.02	5.7	7.2	4.2	-0.1	4.2	1.3	0.6	0.6	1.8	1.1
Rubber & plastic products	2.39	8.8	6.5	5.9	7.7	7.2	5.7	6.8	4.0	2.3	4.7
Chemicals & products	11.93	4.6	4.8	6.0	6.9	5.6	8.4	10.2	7.9	2.2	7.2
Non-metallic mineral products	2.52	8.5	9.6	9.4	8.0	8.9	5.5	4.1	3.4	2.1	3.8
Basic metals alloys & products	8.34	10.7	5.6	3.6	7.8	6.9	21.1	22.4	15.6	-0.4	14.4
Machinery & machine tools	8.36	8.6	8.7	6.7	4.3	7.0	5.7	5.7	5.0	2.6	4.7
Transport equipment & parts	4.29	2.0	1.5	2.7	4.7	2.7	6.2	6.6	5.5	2.8	5.2

Source : D/o Indl Policy & Promotion

CPI-UNME for Urban Non-Manual Employees, but there is no single broad based CPI. An initiative is under way to compile CPIs (Urban) and CPIs (Rural) for all States/UTs and all-India, covering all sections of the population. Regular price collection has begun for CPI (Urban), but the modalities for collection are still being worked out for CPI (Rural).

4.14 The critical differences between the WPI and the CPI indices are brought out in Table 4.5. The WPI has the advantages of a comprehensive and economy-wide coverage and the weights in the commodity basket are based on the value of quantities traded in the domestic market. The CPIs are consumer group-specific and measure the changes over time in the general level of prices of goods and services consumed by the group, with the commodity basket being based on consumer expenditure surveys and the weights proportionate to the expenditure. The CPI-IW used for wage indexation in the organized sector, the CPI-RL and the CPI-AL (which is considered a subset of CPI-RL), are compiled by the Labour Bureau, while the CPI-UNME earlier compiled by the Central Statistical Organisation as an independent index has since been discontinued and is currently linked to the CPI-IW. As an appropriate measure of inflation, perhaps, a modified WPI is preferable because of its comprehensive coverage and the absence of a uniform CPI at present. The CPIs weighting diagram based on consumer expenditure surveys of the identified groups are not representative of the national scenario, whereas, despite limitations, the WPI diagram is more aligned with the economy. The Working Group for revision of WPI Numbers headed by Prof. Abhijit Sen, Member of the Planning Commission, submitted its technical report in May 2008. The updated WPI with 2004-05 as the proposed new base year is expected to be finalized in the near future.

4.15 The WPI inflation reached a peak of near 13 per cent in August 2008 which had come down to 1 per cent in March 2009. The corresponding peaks in the CPIs were in October 2008 in the CPI-IW at 10.5 per cent; in January 2009 in the CPI-AL at 11.6 per cent as also in the CPI-RL at 11.4 per cent; in the CPI-UNME at 10.8 per cent in November 2008.

Table 4.5 : Differences in WPI and CPI indices

Item description	WPI	CPI-IW	CPI-UNME	CPI-RL	CPI-AL
	Weighting diagrams				
Food group	25.43	46.2	47.13	66.77	69.15
Fuel, power etc	14.23	6.43	5.48	7.90	8.35
Beverages, tobacco	1.34	2.27		3.70	3.79
Clothing, bedding, footwear	10.82	6.57	7.03	9.76	6.98
Others	48.18	23.26	23.95	11.87	11.73
Housing		15.27	16.41		
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**
Non-food	73.06	53.80	52.87	33.23	30.85
	Differences of degree				
Base year	1993-94	2001	1984-85	1986-87	
No: of items covered	435	120-360	146-365	260	
No: of centres/quotations	1918*	78	59	600#	
Time lag	2 weeks	4 weeks	6 weeks	3 weeks	
Treatment of Services	Excluded	Included		Included, minus housing	
	Differences of structure				
Basis	Wholesale transactions	Consumer expenditure surveys			
Price quotations	Bulk transactions	Purchase price actually paid by the consumer			
Nature of the index	Single, national	Weighted average of the centre indices			
Weighting diagram	Country-wide, unique	Horizontal summation of weights of centre-specific indices			
Capital & intermediate goods	Included	Excluded			
Frequency	Weekly	Monthly			

*** : Indicates quotations # : Sample villages spread over 20 states.**

The troughs have not yet become evident, in view of the two to three months lag between the WPI and the CPIs (Table 4.6).

4.16 WPI inflation declined gradually from 6.3 per cent in April 2007 to 3.1 per cent in October 2007 and began to climb upwards thereafter to end at 7.5 per cent at the close of the fiscal year 2007-08. The year 2008-09 saw the uptrend continuing from 8.0 per cent in April 2008 to a peak of 12.8 per cent in August 2008, followed by a reduction to 11.0 per

Table 4.6 : Annual inflation as per different price indices (%)

Month	WPI		CPI-IW		CPI-UNME		CPI-AL		CPI-RL	
	07-08	08-09	07-08	08-09	07-08	08-09	07-08	08-09	07-08	08-09
Apr	6.3	8.0	6.7	7.8	7.7	7.0	9.4	8.9	9.1	8.6
May	5.5	8.9	6.6	7.8	6.8	6.8	8.2	9.1	7.9	8.8
June	4.5	11.8	5.7	7.7	6.1	7.3	7.8	8.8	7.5	8.8
July	4.7	12.4	6.5	8.3	6.9	7.4	8.6	9.4	8.0	9.4
Aug	4.1	12.8	7.3	9.0	6.4	8.5	8.8	10.3	8.5	10.3
Sep	3.5	12.3	6.4	9.8	5.7	9.5	7.9	11.0	7.6	11.0
Oct	3.1	11.1	5.5	10.5	5.5	10.4	7.0	11.1	6.7	11.1
Nov	3.3	8.5	5.5	10.5	5.1	10.8	6.2	11.1	5.9	11.1
Dec	3.8	6.2	5.5	9.7	5.1	9.9	5.9	11.1	5.6	11.1
Jan	4.5	4.9	5.5	10.4	4.8	10.4	5.6	11.6	5.9	11.4
Feb	5.3	3.5	5.5	9.6	5.2	9.9	6.4	10.8	6.1	10.8
Mar	7.5	1.2	7.9	8.0	6.0	9.3	7.9	9.5	7.6	9.7
Average	**4.7**	**8.4**	**6.2**	**9.1**	**5.9**	**8.9**	**7.5**	**10.2**	**7.2**	**10.2**

Source : D/o Indl. Policy and Promotion, Lab. Bureau and CSO.

cent in October 2008, 4.9 per cent in January 2009 and 1.2 per cent in March 2009. The high domestic inflation in the first half of the year 2008-09 mirrored the inflation that prevailed in the global economy, driven by progressively rising prices of crude, which touched a record US$ 147 in July 2008, as well as of metal prices. From August 2008, inflation decelerated in the global economy, triggered by the financial crisis which surfaced in September 2008 in the United States and which spread rapidly across the globe. The corresponding fall in the domestic WPI inflation began from September 2008, with the downward impetus gathering momentum with the passage of time and reaching a level of 1 per cent in March 2009.

4.17 The decelerating trend in the CPIs was noticed only in February 2009. The year-on-year inflation remained generally high for all CPIs as food articles account for relatively larger weights in these indices. Inflation as measured by CPI-IW ranged from 7.7-10.5 per cent during 2008-09. In CPI-UNME, the range was from 6.8-10.8 per cent. In CPI-AL, the monthly inflation in 2008-09 ranged from 8.8-11.6 per cent, while in CPI-RL, it was between 8.6 to 11.4 per cent (Table 4.6).

The divergence in inflation measured by WPI and CPIs

4.18 As seen from Table 4.6, WPI and CPI inflation moved in close range till October 2008, but witnessed divergence in recent months as the WPI started declining from November 2008. Figure 4.1 shows the rise and decline in the inflation measured in terms of WPI and in terms of CPIs. While WPI inflation showed a continuous decline from August 2008 on account of the base and price effects equally, the inflation in the CPIs had remained sticky.

4.19 WPI inflation rose sharply in May-June 2008, whereas the rise in CPI inflation was gradual. Similarly, WPI inflation moved from 13 per cent to 1 per cent between August 2008 and March 2009, but the decline in CPI inflation had been slow. However, past analysis shows that the inflation trends tracked by the WPI and CPI indices have not always been in conjunction with each other.

4.20 While the high WPI inflation up to August 2008 could be explained by the high oil, metal and mineral prices, the reason for higher values of CPI inflation from December 2008 owed to the higher weight of food articles in the CPIs relative to WPI. The combined index of food articles and food products in the WPI, CPI-IW and CPI-RL is around 25 per cent, 46 per cent and 67 per cent respectively. In addition, the prominent decline in inflation in the fuel group in the WPI was not reflected in the CPIs, as the weights assigned to fuel are lower and only kerosene and coking coal are included in the CPI basket. Since these are items with administered price, they remained unaffected by the high crude prices that prevailed in mid-2008. Hence, the drop in WPI and in CPI inflation differed owing to the differences in the structure of the indices.

4.21 Looking at quarterly inflation rates in CPI-IW and CPI-AL, CPI-IW inflation in food group had been in double digit from the first quarter of 2008-09, averaging 12 per cent for the year (Table 4.7). In the non-food group, the annual average was about 6 per cent. In contrast, in the WPI, the annual average inflation rate in the food group as well as non-food was about 9 per cent (not shown in the table). In the CPI-AL, food inflation was 11 per cent on the average and non-food about 8 per cent. It was observed that pan, supari, tobacco and intoxicants as well as fuel and light recorded inflation in double digits in the CPI-AL.

Figure 4.1 : Rate of inflation (Y-O-Y) for WPI, CPI-IW and CPI-RL (January-March)

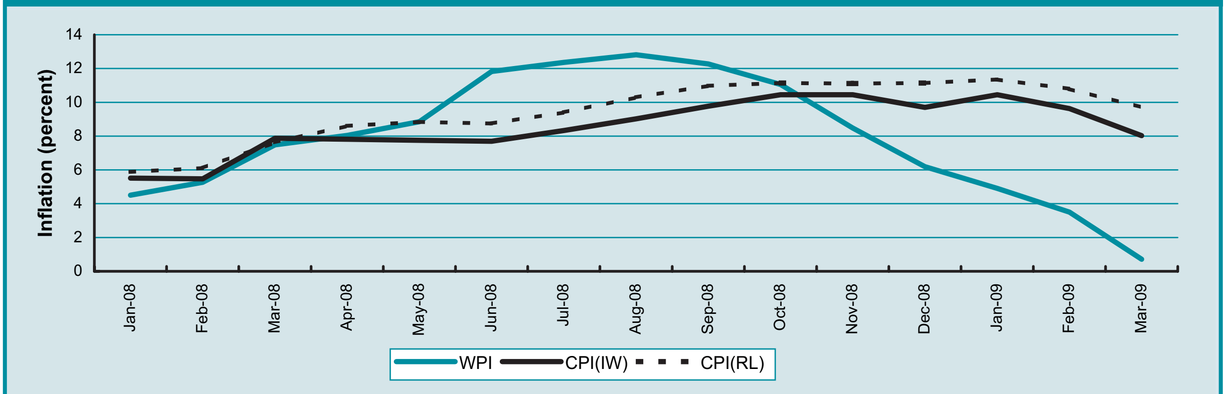


Table 4.7 : Quarterly inflation in CPI-IW and CPI-AL groups (%)

Major Groups	Wt (%)	2007-08 Apr-Jun	2007-08 Jul-Sep	2007-08 Oct-Dec	2007-08 Jan-Mar	2007-08 Apr-Mar	2008-09 Apr-Jun	2008-09 Jul-Sep	2008-09 Oct-Dec	2008-09 Jan-Mar	2008-09 Apr-Mar
	CPI for Industrial Workers										
General Index	**100.00**	**6.3**	**6.7**	**5.5**	**6.3**	**6.2**	**7.8**	**9.0**	**10.2**	**9.4**	**9.1**
Food Group	**46.20**	**9.4**	**9.6**	**7.0**	**7.8**	**8.4**	**10.7**	**11.7**	**14.5**	**12.5**	**12.4**
Non-food (composite)	**53.80**	**3.7**	**4.2**	**4.2**	**5.0**	**4.3**	**5.2**	**6.6**	**6.3**	**6.5**	**6.2**
Pan, supari, tobacco & intoxicants	2.27	9.3	10.4	10.3	11.6	10.4	7.5	6.8	9.1	7.6	7.7
Fuel & light	6.43	2.6	1.6	1.8	3.1	2.3	5.3	9.4	9.5	8.4	8.2
Housing	15.27	4.1	4.0	4.0	4.7	4.2	4.7	3.8	3.8	6.0	4.6
Clothing, bedding & footwear	6.57	3.8	4.7	4.1	3.2	4.0	2.8	2.8	3.7	3.9	3.3
Miscellaneous Group	23.26	3.8	3.5	4.8	5.8	4.4	6.0	7.7	8.6	7.9	7.6
	CPI for Agricultural Labourers										
General Index	**100.00**	**8.5**	**8.4**	**6.4**	**6.6**	**7.5**	**8.9**	**10.2**	**11.1**	**10.6**	**10.2**
Food Group	**69.15**	**9.6**	**9.5**	**6.8**	**7.0**	**8.2**	**9.9**	**11.3**	**12.0**	**11.3**	**11.2**
Non-food (composite)	**30.85**	**6.2**	**6.1**	**5.3**	**5.8**	**5.8**	**6.9**	**7.8**	**9.1**	**9.1**	**8.2**
Pan, supari, tobacco & intoxicants	3.79	8.0	11.0	11.0	10.5	10.1	11.0	11.8	13.6	15.0	12.9
Fuel & light	8.35	8.0	7.0	6.6	7.4	7.2	8.0	9.7	11.1	11.5	10.1
Clothing, bedding & footwear	6.98	3.0	2.0	1.4	1.8	2.1	2.6	4.9	6.9	7.2	5.4
Miscellaneous Group	11.73	6.6	5.6	5.3	5.9	5.8	6.4	7.0	7.1	6.6	6.8

Source : Labour Bureau, Shimla.

Inflation for common basket of goods

4.22 About 30 commodities are common between CPI-IW and WPI. Table 4.8 shows 17 commodities with higher inflation rate and 13 with lower rates in the CPI-IW in comparison to WPI. Over the year 2008-09, washing soap, sugar, masur dal, rice, fresh fish, gur, arhar dal, milk, long cloth & sheeting, soft coke, dhotis and saris, urad and gram

Table 4.8 : Difference in CPI & WPI inflation in 2008-09 for common goods (basis points)

Item	Weight CPI-IW	Weight WPI	Avg. inflation 08-09 CPI IW	Avg. inflation 08-09 WPI	%Diff (+)	Item	Weight CPI-IW	Weight WPI	Avg. inflation 08-09 CPI IW	Avg. inflation 08-09 WPI	%Diff (-)
Washing soap	1.33	0.17	27.9	8.7	19.2	Salt	0.15	0.02	13.6	13.9	-0.3
Masur dal	0.41	0.04	38.8	23.7	15.1	Wheat	4.43	1.38	5.9	6.2	-0.3
Fish fresh	1.31	0.50	13.2	-1.4	14.6	Goat meat	2.12	0.44	12.8	13.5	-0.7
Sugar	2.24	3.62	24.1	12.3	11.8	Bajra	0.16	0.11	6.0	6.8	-0.8
Rice	12.45	2.45	21.2	11.1	10.1	Moong dal	0.53	0.11	5.7	7.3	-1.6
Gur	0.47	0.06	28.1	19.8	8.3	Coconut oil	0.09	0.17	18.4	20.0	-1.6
Arhar dal	1.69	0.13	16.7	10.2	6.5	Vanaspati	0.78	0.80	5.2	7.8	-2.6
Milk	5.52	4.37	13.5	7.5	6.0	Jowar	0.46	0.22	4.3	7.2	-2.9
Long cloth	0.20	0.06	5.0	0.0	5.0	Potato	1.23	0.26	-23.1	-16.0	-7.1
Soft coke	0.80	0.24	10.8	7.0	3.8	Kerosene oil	1.82	0.69	-11.0	0.0	-11.0
Dhoti & sari	2.40	0.04	3.2	-0.5	3.7	Chillies (dry)	0.63	0.19	10.7	21.7	-11.0
Onion	0.67	0.09	2.3	-0.6	2.9	Matchbox	0.23	0.12	12.3	24.2	-11.9
Mustard oil	1.44	0.49	21.8	19.6	2.2	Tea leaves	0.82	0.16	10.6	42.9	-32.3
Groundnut oil	2.27	0.17	0.2	-1.8	2.0						
Wheat (atta)	1.75	0.21	5.0	4.0	1.0						
Urad dal	0.35	0.10	0.8	0.5	0.3						
Gram dal	0.08	0.22	4.8	4.7	0.1	**All 30 Items**	**48.83**	**17.63**	**12.2**	**8.1**	**4.1**

Source : D/o Indl Policy & Promotion

dals, mustard and groundnut oils, onion and atta, had higher inflation rate in CPI-IW as compared to WPI.

4.23 The 13 commodities which had lower inflation rate in terms of CPI-IW in comparison to WPI were moong dal, coconut oil, wheat (whole), jowar, bajra, chillies dry, matchbox, tea leaves, kerosene, vanaspati, goat meat, salt and potato. In sum, of the 30 essential commodities, 57 per cent recorded higher inflation and 43 per cent recorded lower inflation in the CPI-IW as compared to WPI (Table 4.8).

Desegregated analysis

4.24 Desegregated analysis of the WPI inflation reveals that a deceleration in inflation rate in recent months was largely due to a decline in inflation for industrial intermediates, agricultural intermediates and basic goods. In particular, metals, fuels, chemicals, oilseeds and cotton which witnessed a global deceleration in prices and inflation rates, contributed to the moderation in domestic inflation. The non-durable consumer items, particularly both industrial and primary food varieties, witnessed persistent inflation and a relatively lower level of moderation.

4.25 The global meltdown in commodity prices particularly in energy, metals and agricultural intermediates across the world, most of which are tradable, also led to a corresponding decline in domestic prices (Table 4.9). But there had still not been much of a decline in the wholesale prices of capital goods and consumer durables despite a decline in the prices of industrial intermediates and basic goods. Prices of these products remained relatively stable when those of other products witnessed an upsurge.

Food inflation

4.26 The food index is computed by clubbing the food articles of primary articles with the manufactured food products group. The primary food articles, with

Table 4.9 : WPI inflation (year-on-year % change) by major industrial product groups

	All Commo-dities	Consumer non-durables			Con-sumer Durables	Intermediates Goods			Capital Goods	Basic Goods
		Indus-trial	Primary Food	All		Indus-trial	Agri-culture	All		
Weight	**100.00**	**25.3**	**15.4**	**40.7**	**5.8**	**17.2**	**6.1**	**23.4**	**6.0**	**24.0**
Apr 08	8.0	5.2	5.6	5.3	3.2	7.1	11.0	8.3	5.2	13.0
May 08	8.9	6.2	5.7	6.0	3.3	9.0	13.9	10.5	6.3	13.2
Jun 08	11.8	10.0	5.9	8.5	3.7	16.4	17.1	16.6	6.8	15.4
Jul 08	12.4	9.2	6.0	8.0	3.7	20.3	17.0	19.3	6.4	16.2
Aug 08	12.8	9.7	6.9	8.7	4.3	21.1	16.9	19.8	6.6	16.4
Sep 08	12.3	9.8	7.7	9.0	3.8	19.5	17.0	18.7	6.3	14.9
Oct 08	11.1	7.8	9.9	8.6	3.6	15.3	13.7	14.9	6.0	14.0
Nov 08	8.5	6.3	10.3	7.8	3.4	5.2	12.1	7.3	6.3	11.4
Dec 08	6.2	5.2	10.0	7.0	2.8	0.4	9.3	3.1	4.5	7.8
Jan 09	4.9	5.9	11.0	7.8	2.3	-2.4	6.7	0.4	4.0	4.5
Feb 09	3.5	5.4	9.4	6.9	2.4	-1.2	2.2	-0.2	3.9	0.7
Mar 09	1.2	4.7	7.5	5.8	2.9	-3.1	-0.9	-2.4	3.9	-4.6

Source : D/o Indl Policy & Promotion

Figure 4.2 : Overall, food and non-food inflation (%)

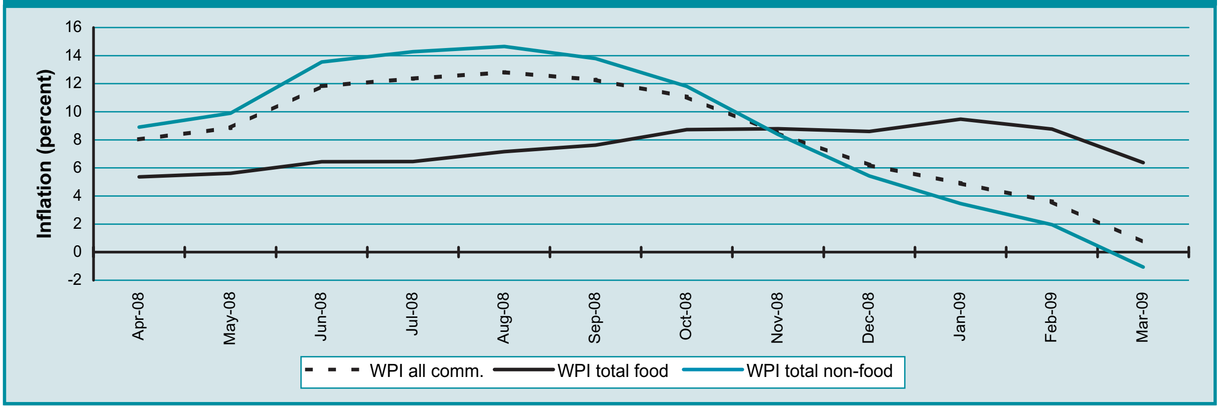


Table 4.10 : Components of food index in the WPI

Primary food articles	Weight (per cent)	Manufactured food products	Weight (per cent)
All subgroups	**15.40**	**All subgroups (excluding oil cakes, cattle feed etc.)**	**10.03**
Foodgrains	5.01	Sugar, khandsari & gur	3.93
Milk	4.37	Edible oils	2.76
Fruits & vegetables	2.92	Grain mill products	1.03
Eggs, meat & fish	2.21	Tea/coffee processing	0.97
Condiments & spices	0.66	Dairy products	0.69
Other food articles	0.24	Bakery products	0.44
		Other food products	0.15
		Cocoa & sugar confectionery	0.09
		Canning, processing of fish	0.04
		Common salt	0.02

Source : D/o Indl Policy & Promotion

Table 4.11 : Inflation in food group as on March 28, 2009

Items	Weight	Y-o-Y Inflation (per cent)			
		Inflation		Contribution	
	(per cent)	08-09	07-08	08-09	07-08
Food index combined	25.43	6.8	6.4	194.0	19.9
Food articles	15.4	7.0	6.5	128.9	13.2
Foodgrains	5.01	10.6	6.0	62.5	3.9
Fruits & vegetables	2.92	1.1	8.2	4.1	3.3
Milk	4.37	7.0	8.7	35.6	4.7
Eggs, meat & fish	2.21	3.2	2.4	8.9	0.8
Condiments & spices	0.66	15.5	4.0	12.9	0.4
Other food articles	0.24	21.9	8.7	4.5	0.2
Food products (excl oilcakes and cattle feed)	10.03	6.5	6.0	65.1	6.7
Sugar, khandsari & gur	3.93	19.2	-3.4	62.9	-1.3
Edible oils	2.76	-7.6	20.0	-21.6	5.5

Source : D/o Indl Policy & Promotion

a weight of 15.4 per cent, has six subgroups, while manufactured food products, a subgroup of manufactured products, carry a weight of 10.03 per cent in the WPI basket with ten subgroups. If de-oiled cakes (wt = 1.42) and cattle feed (under other food products, wt = 0.01) are taken out of the food index, the weight of food group would be 25.43 per cent (Table 4.10).

4.27 The inflation in the food group for the year 2007-08 and 2008-09 is brought out in Table 4.11. It is observed that the yearly inflation for 2008-09 was higher in respect of foodgrains, condiments and spices, other food articles, sugar, khandsari and gur.

4.28 Studying the ups and downs over the year, it is noticed that while 2007-08 opened with high inflation in food articles in the first half, 2008-09 closed with high inflation in the later half, with foodgrains, fruits and vegetables, other food articles, sugar and salt being the groups which registered two-digit inflation from October, 2008 onwards (Table 4.12). In pulses, fruits and sugar, the high annual inflation prevalent in 2008-09 was in sharp contrast to the negative inflation in 2007-08, though volatility is the norm in fruits & vegetables. Inflation in milk remained in the range of 7-8.5 per cent in 2008-09 as against 7-9 per cent in the previous year. In eggs, meat and fish, inflation ranged from 1.5-6.5 per cent in 2008-09, while in the previous year, it had ranged from 1.0-9.5 per cent. Condiments & spices recorded severe inflation over 10 per cent in 2008-09 in contrast to below 5 per cent in 2007-08. Similar is the case of other food articles. Among manufactured food products, inflation in sugar, khandsari and gur, which had been negative throughout 2007-08 ranged from (-) 1 to 20 per cent in 2008-09. In common salt, yearly inflation of (-)0.15 per cent in 2007-08 became 14 per cent in 2008-09. Edible oils which recorded 11-15 per cent inflation in 2007-08 continued at 15 per cent for the first two quarters of 2008-09 and decelerated to (-) 5 per cent in its last quarter.

Table 4.12 : Quarterly inflation in WPI - Food group & subgroups (%)

Group/subgroups	Wt%	2007-08					2008-09				
		I qtr	II qtr	III qtr	IV qtr	Yearly	I qtr	II qtr	III qtr	IV qtr	Yearly
(A) Food articles	**15.40**	**8.1**	**7.7**	**2.6**	**3.8**	**5.5**	**5.7**	**6.9**	**10.1**	**9.3**	**8.0**
Foodgrains	5.01	7.4	6.4	1.9	3.2	4.7	5.9	6.6	9.7	12.0	8.6
Cereals	4.41	7.9	7.5	4.5	5.1	6.2	7.3	6.8	9.5	11.8	8.9
Pulses	0.60	4.1	0.1	-12.1	-8.1	-4.3	-2.2	5.5	10.8	13.7	6.8
Fruits & Vegetables	2.92	9.1	10.1	-4.3	0.4	3.6	3.3	4.7	15.2	9.4	8.1
Vegetables	1.46	18.8	24.0	2.0	7.9	13.3	2.5	-5.4	15.1	5.2	3.7
Fruits	1.46	1.7	-2.6	-9.2	-4.4	-3.8	4.1	16.5	15.3	12.5	12.0
Milk	4.37	6.7	9.2	8.7	9.0	8.4	8.4	7.0	7.1	7.6	7.5
Eggs, meat & fish	2.21	9.6	5.3	5.0	1.2	5.2	1.7	5.7	6.5	4.9	4.7
Condiments & spices	0.66	13.0	7.3	0.2	0.4	4.9	9.7	14.9	12.5	10.2	11.8
Other food articles	0.24	0.2	1.2	-4.3	5.2	0.5	25.4	35.7	40.6	26.1	31.9
(B) Food products	**11.54**	**3.5**	**3.1**	**3.0**	**7.4**	**4.3**	**11.7**	**14.2**	**6.1**	**8.4**	**10.0**
Dairy products	0.69	4.6	6.7	6.8	9.7	7.0	9.9	7.7	6.5	27.0	12.9
Fish canning, & processing	0.05	3.8	3.8	3.8	3.0	3.6	0.0	0.0	3.5	42.8	11.6
Grain mill products	1.03	12.0	6.4	0.4	2.0	4.9	8.7	5.0	2.5	1.8	4.4
Bakery products	0.44	9.1	3.4	5.2	6.8	6.1	4.7	4.7	2.7	0.0	3.0
Sugar, khandsari & gur	3.93	-15.0	-16.1	-14.4	-8.6	-13.6	-1.4	5.6	10.2	19.8	8.5
Manufacture of common salts	0.02	-9.3	0.7	2.2	6.7	-0.1	6.4	13.9	24.2	11.1	13.9
Cocoa, chocolate & confectionery	0.09	3.6	2.9	2.8	1.8	2.8	0.0	0.0	0.0	0.0	0.0
Edible oils	2.76	14.6	13.1	10.8	14.9	13.3	14.7	14.9	6.0	-5.0	7.3
Oilcakes	1.42	24.1	27.0	33.0	36.7	30.4	42.6	49.1	5.2	12.4	26.1
Tea & coffee proccessing	0.97	11.9	14.1	4.9	2.9	8.2	3.4	0.4	-0.3	9.3	3.2
Other food products n.e.c	0.15	7.3	7.8	9.1	17.3	10.4	13.6	11.3	11.1	3.6	9.8
(C) Food combined	**25.43**	**5.3**	**4.7**	**1.2**	**3.3**	**3.6**	**5.8**	**7.1**	**8.7**	**8.7**	**7.6**

Source : D/o Indl Policy & Promotion

Domestic and global scenarios

Supply side

4.29 The third advance estimates released by the Department of Agriculture & Cooperation present the following position in respect of cereals, specifically rice & wheat and of pulses (Table 4.13).

4.30 Total domestic foodgrains production in 2008-09 has been estimated at 230 MMT, marginally lower than the 231 MMT of 2007-08 (217 MMT in 2006-07).

Table 4.13 : Estimated domestic production of crops in 2008-09 (MMT)

Food Crop	2006-07	2007-08 Final Est	2008-09 3rd Adv. Est.	% Change In 2008-09	Cash crop	2006-07	2007-08 Final Est	2008-09 3rd Adv. Est.	% Change In 2008-09
Foodgrains	217.28	230.78	229.85	-0.9	Sugarcane	355.52	348.19	289.23	-59.0
Cereals	203.08	216.02	215.68	-0.3	Edible oils*	59.00	69.64	52.79	-24.2
Rice	93.35	96.69	99.37	2.7	Groundnut	11.19	21.12	15.22	-27.9
Wheat	75.81	78.57	77.63	-0.9	Rape & mustard	23.05	18.08	21.62	19.6
Pulses	14.20	14.76	14.17	13.6	Sunflower	4.05	4.83	3.67	-24.0
Gram	6.33	5.75	6.38	0.6	Soyabean	14.16	17.55	14.47	-17.6
Tur	2.31	3.08	2.37	-0.7					
Moong	1.12	1.52	0.9	-0.6	Imports (in lakh tonnes)				
Urad	1.44	1.46	0.94	-0.5	(i) Pulses	24.91	29.52	16.92#	-42.68
Others	3.00	2.95	2.58	0.3	(ii) Edible oils	43.17	56.08	70.69	26.05

Source : D/o Agriculture & Cooperation, Reports of D/o Consumer Affairs.

*** Edible oils in lakh tonnes; #: Apr-Dec. 2008**

- Of this, cereal production in 2008-09 at 216 MMT equalled production in 2007-08 (203 MMT in 2006-07).
- Production of rice in 2008-09 has been estimated at about 99.4 MMT which is higher than 2007-08 production of 96.7 MMT (93 MMT in 2006-07).
- Wheat production estimated at 77.6 MMT in 2008-09 has been lower than the 78.6 MMT in 2007-08 (76 MMT in 2006-07).
- Domestic production of pulses estimated at 14.2 MMT in 2008-09 (as in 2006-07) was slightly lower than the 14. 8 MMT in 2007-08, but was markedly lower in moong and urad.

4.31 The data in respect of global production of important commodities is given in Table 4.14. Global production of rice in 2008-09 has been estimated at 441-456 MMT by USDA-FAO, compared to 432-440 MMT in 2007-08. In wheat, the projected figure (lower bound) for 2008-09 was 680 MMT, in comparison to 596 MMT in 2007-08.

4.32 Regarding sugar and edible oils, the position is as below:

- With domestic sugarcane production in 2008-09 estimated at 289 MMT, compared to about 350 MMT in the past two years, the pressure on sugar prices may persist in the near term, with little or no imports to ease the situation. The international scenario has estimated production in 2008-09 at 161.5 MMT as compared to an estimated global demand of 165.8 MMT.
- As for edible oils from primary sources, domestic availability estimated at 53 lakh tonnes in 2008-09 was lower as compared to 70 lakh tonnes in the previous year, but with imports estimated at 71 lakh tonnes, the position on availability was not a problem. On the global front, production was assessed at 133 MMT in 2008-09, compared to 128 MMT in 2007-08.

Trends in world commodity price index (WCPI) versus WPI

4.33 A one-to-one comparison of global and domestic inflation trends shows that the 60-80 per cent inflation recorded in the first four months of 2008-09 in the WCPI energy group merely corresponded to a 7-17 per cent increase in that group in the WPI index. The fall to rates of (-) 30 to (-) 50 per cent in the WCPI in the second half of 2008-09 was a contrast to only a marginal decline to (-) 2 to (-) 6 per cent in the last quarter of 2008-09 in the WPI. The monthly WPI rates showed the high prices of crude oil reflected in the high global inflation rates prevalent in 2008-09 up to August. From October, inflation rates turned negative in this group globally, whereas domestically, the negative rates manifested from December 2008, after ruling in double digits from June to October (Table 4.15).

4.34 In agriculture, which includes food and non-food articles, the lack of congruence between the two indices – WCPI and WPI – was pronounced. Month-wise, global inflation rates in foodgrains began with a peak rate of 101 per cent and remained over 60 per cent till August 2008. In the next three months, it moderated from 40 per cent to 2 per cent and in the last four months of the year, posted negative rates. In contrast, the WPI inflation in foodgrains was 6-7 per cent in the first half and increased in the second half to 9-12 per cent.

- Global inflation in rice began in three digits in 2008-09 with a rate of 206 per cent which declined progressively to 123 per cent by September 2008, falling into two digits in the second half from 94 per cent to 27 per cent from October 2008 to February 2009 and into single digit in March 2009 at about 5 per cent. The WPI inflation trend in rice was in contrast to the WCPI. In the first half of the year, inflation fell from about 9 to 5 per cent and in the second half, it rose to double digits from 11 to 15 per cent from October 2008 to February 2009, before falling marginally to 14 per cent in March 2009.
- In wheat, global inflation declined from 83 per cent to 27 per cent from April to August 2008, and posted increasingly negative rates during the second half of the year. In March 2009, it stood at (-) 47 per cent. The WPI inflation was

Table 4.14 : Global production estimates in 2007-09 (MMT)

Crop	2007-08		2008-09	
	Production	Consumption	Production	Consumption
Rice	432 – 440	428 - 437	441- 456	434- 448
Wheat	596 – 611	615 - 618	680-688	643-649
Sugar			161.5	165.8
Edible oils	128.19		133.04	

Source: Reports of D/o Consumer Affairs

Table 4.15 : Inflation in WCPI and WPI (%)

Item	Agriculture		Food		Fats & oils		Grains		Rice	
	WCPI	WPI	WCPI	WPI	WCPI	WPI	WCPI	WPI	WCPI	WPI
Weight		**21.54**		**26.94**		**3.14**		**5.01**		**2.45**
Apr 08	51.0	7.1	70.1	7.0	75.5	13.0	101.4	6.1	206.4	8.7
May 08	49.3	7.9	65.4	7.9	70.0	11.2	92.0	5.6	204.9	8.0
Jun 08	50.3	9.0	62.2	9.2	69.3	15.7	82.9	6.0	151.9	7.6
Jul 08	45.6	9.0	55.1	9.1	59.2	15.6	77.5	6.6	138.5	7.7
Aug 08	32.5	9.6	36.5	9.8	31.6	13.1	60.6	6.5	126.3	6.6
Sep 08	21.3	10.2	21.6	10.1	12.1	11.3	40.0	6.7	123.3	5.4
Oct 08	-2.5	11.0	-3.4	9.4	-19.5	8.6	12.6	8.8	94.4	11.2
Nov 08	-11.9	10.8	-13.9	8.4	-31.6	4.6	1.9	9.5	68.4	12.6
Dec 08	-18.1	9.8	-20.4	7.7	-36.7	4.3	-9.4	10.8	53.1	15.1
Jan 09	-16.6	9.8	-19.1	9.4	-33.3	0.5	-7.6	11.3	59.2	15.2
Feb 09	-23.6	7.3	-26.4	9.3	-38.6	-2.4	-20.6	13.2	27.1	17.1
Mar 09	-28.6	5.1	-31.7	8.1	-43.5	-7.3	-26.5	11.6	4.7	16.7
Item	**Wheat**		**Energy**		**Fertilizers**		**Metal & minerals**		**Iron ore**	
	WCPI	WPI	WCPI	WPI	WCPI	WPI	WCPI	WPI	WCPI	WPI
Weight		**1.38**		**14.23**		**3.69**		**8.83**		**0.21**
Apr 08	82.7	6.9	67.4	7.0	171.3	4.7	11.7	24.2	66.0	58.1
May 08	68.0	7.2	87.1	7.7	187.6	10.5	7.9	22.6	66.0	47.6
Jun 08	56.3	7.7	93.7	16.3	174.5	10.5	10.7	23.5	66.0	47.4
Jul 08	37.7	8.2	84.4	17.2	213.4	10.1	9.6	25.3	66.0	52.6
Aug 08	26.8	6.9	66.2	17.2	224.8	10.0	8.6	25.9	66.0	55.2
Sep 08	-9.5	7.8	35.7	16.6	189.2	9.9	1.8	23.0	66.0	42.1
Oct 08	-29.2	5.0	-4.7	14.1	125.8	9.1	-20.6	21.6	66.0	42.1
Nov 08	-29.5	4.0	-33.2	6.4	74.2	8.7	-25.1	17.1	66.0	42.1
Dec 08	-40.3	4.8	-46.0	-0.2	30.8	8.5	-28.5	15.4	66.0	44.3
Jan 09	-35.5	5.2	-45.5	-1.7	14.4	8.4	-37.8	9.5	66.0	29.9
Feb 09	-47.1	6.1	-51.6	-3.4	-4.7	8.5	-42.5	1.9	0.0	-2.7
Mar 09	-47.5	4.6	-51.9	-6.0	-26.8	5.9	-43.0	-7.5	0.0	5.9

Source of WCPI : World Bank Pink Sheet and for WPI D/o Indl Policy & Promotion

Note : Composition of groups in WCPI vs. WPI: Energy=Fuel group; Agriculture=Food plus Non-food Articles; Food=Food Articles and Food Products; Fats and Oils=Edible Oils, Butter and Ghee; Grains=Cereals and Pulses; Fertilizers (as is); Metals and Minerals=Basic Metals, Alloys & Metal Products and Minerals.

7-8 per cent in the first half of the year and in the vicinity of 5-6 per cent in the second half.

4.35 The discord between movements in WCPI and WPI was also marked in the case of non-energy commodities, fats and oils, fertilizers and metals & minerals.

- With administered control of fertilizer prices, inflation rates in the WPI remained in the 8-10 per cent range for 10 months of the year and fell to 6 per cent in March 2009, unlike in the WCPI, where the rate ranged from a high of 225 per cent to a low of (-) 27 per cent, averaging 93 per cent in the year.
- The global monthly inflation rates in fats and oils, which include edible oils, butter and ghee, were 60-75 per cent up to July moderating in the next two months and turning negative from October 2008. The WPI inflation in edible oils ruled from 11 to 16 per cent in the first half of 2008-09, declined in the third quarter of 2008-09 and turned negative in the fourth quarter.
- Metals & minerals ruled at negative rates in the second half of 2008-09 in the world economy. In contrast, WPI rates had ranged between 15 and 25 per cent in the first three quarters, declining thereafter in the last quarter of 2008-09. Iron ore recorded inflation rates of above 60 per cent globally and over 40-60 per cent locally (Table 4.15).

4.36 Thus, despite the growing connectivity to the world economy, inflation rates in India appear to have been primarily affected by domestic constraints and administered prices as would be observed by the disconnect brought out in Box 4.1. While increase

Box 4.1 : Impact of global and domestic inflation

The impact of global prices on domestic prices can be minimized through administrative and fiscal policies, so that the pass-through is limited. Domestic inflation rates have been lower than global rates, as indicated below:

1. Global inflation in food was 66 to (-) 26 per cent; in the WPI, it was 8-10 per cent.
2. In rice, WCPI inflation fell from 206 to 5 per cent; in the WPI, it ranged from 5 to 15 per cent.
3. In wheat, global inflation swung from 83 to (-) 47 per cent; domestic inflation was between 4 and 8 per cent.
4. In fats & oils, global inflation swung from 75 to (-) 43 per cent; WPI inflation fell from 16 to (-) 8 per cent.
5. Global inflation in energy was 60 to 80 per cent. WPI inflation in energy was 10-17 per cent.
6. In petroleum products, global inflation fell from 94 to (-) 52 per cent; WPI inflation ranged from 17 per cent on the higher side to (-) 6 per cent on the lower side.
7. In fertilizers, global inflation oscillated between 225 and (-) 27 per cent; in WPI it was 5 to 11 per cent.
8. In iron ore, global inflation fell from 66 to 0 per cent; domestic inflation ranged from 82 to 62 per cent.

in trade of these commodities in the medium term may enhance the correspondence in the movement of global and domestic inflation, within a short period, it would still be possible for the impact being felt with a timelag in the near term in 2009-10.

Global and domestic price linkages

Foodgrains

4.37 The global price of rice was US$ 672 per tonne during January-October 2008, more than twice the price which prevailed in the previous year and exceeded US$ 900 in April-May, 2008. The factors responsible for the price spike and high inflation were the high cost of inputs, low stocks and increase in utilization versus production resulting in lower levels of exportable surplus and consequent export restrictions in major producing countries, combined with strong demand caused by higher wheat prices. In wheat, prices averaged almost US$ 347 per tonne during January-October 2008, the highest level since the mid-1970s. However, there was a sharp plunge to US$ 238 per tonne in mid-2008, due to 11 per cent increase in global production relative to 2007 and the impact of the financial crisis.

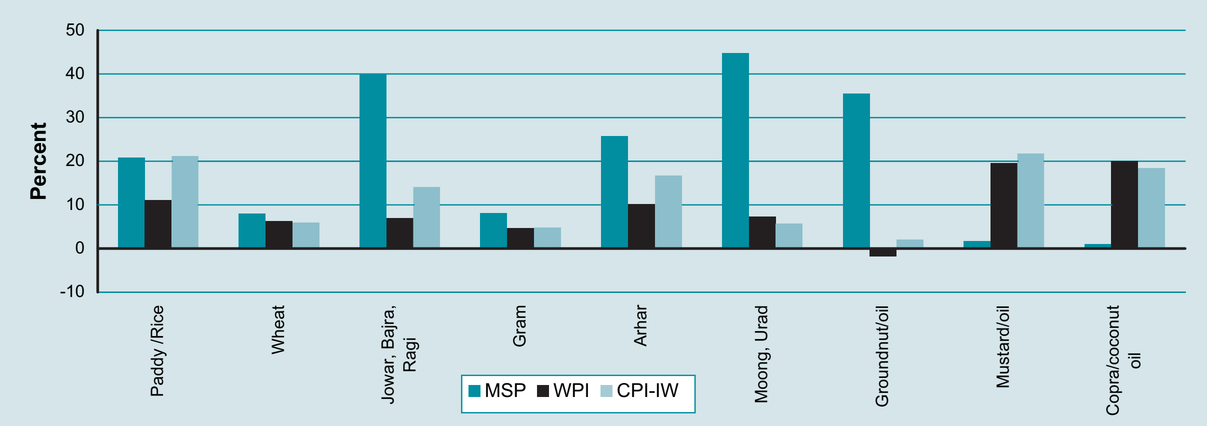
4.38 On the domestic front, apart from the global demand-supply aspects, the minimum support price (MSP) system also has a critical role on the ruling prices. From 2007-08, the jump in the MSP of various crops could have contributed to the increase in inflation rates for agricultural commodities. While during 2000-01 to 2006-07, the rise in the basic MSP (excluding bonus) had been gradual, in 2008-09, the MSP in almost every crop had witnessed increases of about 30 per cent or more. This was particularly pronounced in pulses, cereals and edible oils (Table 4.16) .

Table 4.16 : Minimum support price (Rs. per quintal)

Crop	Price range, 2000-01 to 2006-07	2007-08*	2008-09*	% change '08-09/'07-08
(i) Paddy , common	510 - 580	645	850	31.8
(ii) Paddy, grade A	540 - 610	675	880	30.4
Wheat	610-650 till '05-06, 750 in '06-07	1000	1080	33.3
Coarse cereals	445-540	600	840	40.0
Gram	1100-1445	1600	1730	8.1
Arhar	1200-1410	1550	2000	29.0
Moong, Urad	1200-1520	1700	2520	48.2
Sugarcane	59.50-80.25	81.18	81.18	0.0
Groundnut	1220-1520	1550	2100	35.5
Rapeseed/Mustard	1200-1715	1800	1830	1.7
Sunflower	1170-1500	1510	2215	46.7
Soyabean, black	775-900	910	1350	48.4
Soyabean, yellow	865-1020	1050	1390	32.4
Copra	3500-3840	3870	3910	1.0
Sesamum	1300-1560	1580	2750	74.1

Source : D/o Agriculture & Cooperation. * : Excluding Bonus.

Figure 4.3 : Annual price rise in 2008-09 in MSP, WPI, CPI-IW(%)



4.39 Lower domestic production and the hike in MSP, except in gram, appears to have contributed to high inflation in pulses. Annual per cent price variation in MSP, vis-à-vis, WPI and CPI is presented in Figure 4.3.

Sugar and edible oils

4.40 Globally, sugar prices averaged 28.6 cents per kg during January-October 2008, which was 30 per cent higher than in 2007. A 5 per cent decline in production had been estimated in 2008-09, as grain production has displaced sugarcane in several countries, including India. The decline in sugarcane production in India is ascribed to a cyclical dip in production and lower producer prices. The MSP had also remained invariant in 2007-08 and 2008-09.

4.41 Global palm oil prices exceeded US$ 1,175 per tonne in the first half of 2008 but declined sharply to US$ 560 per tonne in October 2008, fuelled by strong import demand and increased biofuel use. With over three quarters of global output being traded, import demand would keep pace with growth in production. On the domestic front, the increase in MSPs ranged from a low of 32 per cent in the case of soyabean yellow to a high of 74 per cent in sesamum seeds, barring copra and rapeseed and mustard.

4.42 In sum, factors contributing to increased global prices in the first half of 2008-09 were (i) increased crude oil prices (Box 4.2); (ii) increased demand for food due to the rapid income growth in emerging economies, strong demand from the oil exporting countries and increased biofuel use, together with decreased supply of grains in 2006-07 due to low stocks and droughts; (iii) higher cultivation costs caused by higher input prices and shipping cost of landed products; (iv) increased prices of metals, following rise in demand from the emerging economies and slower growth in supplies due to lower investment and delays in bringing new capacities.

4.43 In the second half of 2008, world prices of major agricultural commodities fell much faster and farther (in excess of 50 per cent from their recent peaks), due to factors such as emergent global financial crisis, halving of world crude oil prices, the dollar appreciation and uncertainty in world agricultural markets. The trends in the WCPI and the WPI are contrasted in Figures 4.4 and 4.5.

GDP CONSUMPTION DEFLATOR

4.44 Personal consumption expenditure (PCE) is the measure of consumption in GDP. It consists of the actual and imputed expenditures of households on durable and non-durable goods and services. The PCE price index is a country-wide indicator of the average increase in the level of prices for all domestic personal consumption, derived from PCE and assumes that the consumer makes allowances for changes in relative prices by substitution, so that it rises by about 33 basis points less than the CPI. Analysis of divergent trends in WPI inflation and the consumption deflator from 2000-01 show marked deviation in 2000-01, 2003-05 and on a lesser scale, in 2002-03 and 2007-08 (Table 4.17).

HOUSING PRICE INDEX

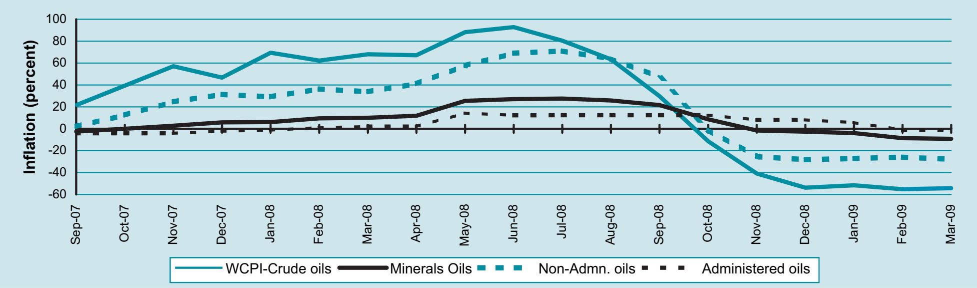
4.45 Urbanization, economic growth, land acquisition for special development hubs and growing liquidity have resulted in real estate assets becoming a significant part of private sector wealth; and housing loans constitute an important component of credit portfolio of the financial sector. Recognizing the need to develop a reliable database on the actual price trends in the real estate sector, the National Housing Bank (NHB) constituted a technical advisory group

Box 4.2 : International and domestic movements in oil prices

The movements in crude oil prices acted as the proximate trigger for the inflation uptrend in 2008. Crude prices peaked above US$ 145 per barrel in mid-2008 due to OPEC output restraints, sluggish non-OPEC supply growth, falling dollar, robust growth in demand in developing countries and investor interest in commodities and then plunged below US$ 60 per barrel in November 2008, on falling demand in industrial countries and dollar appreciation. The uptrend began in September 2007 and the downtrend in July 2008.

Y-o-Y inflation in price indices (%)

World crude oil, domestic admn. and non-admn. oils inflation



***Indices at 1993-94 base.**

Looking at the one-to-one correspondence between global and domestic inflation rates, it is seen that while WCPI inflation in crude oil was over 90 per cent in June 2008, WPI inflation was less than 30 per cent, largely due to administered pricing. The peak inflation rate in administered oils, with a weight of 5.44 per cent in the commodity basket was 14 per cent, while in non-administered oils, it was 69 per cent, with its weight being 1.55 per cent. Therefore, the movements in the WCPI are approximated by the non-administered component in the WPI. Increase in crude oil prices affect other commodities through higher input prices for fertilizers and fuel, long distance transportation cost, increase in energy prices for commodities with energy-intensive production process (metals), higher prices of substitute crude and synthetic products. A 1 per cent pass-through of crude price changes is estimated to impact commodity prices by 16 basis points (John Baffes, August 2007).

Figure 4.4 : World commodity price index (1993-94 = 100)

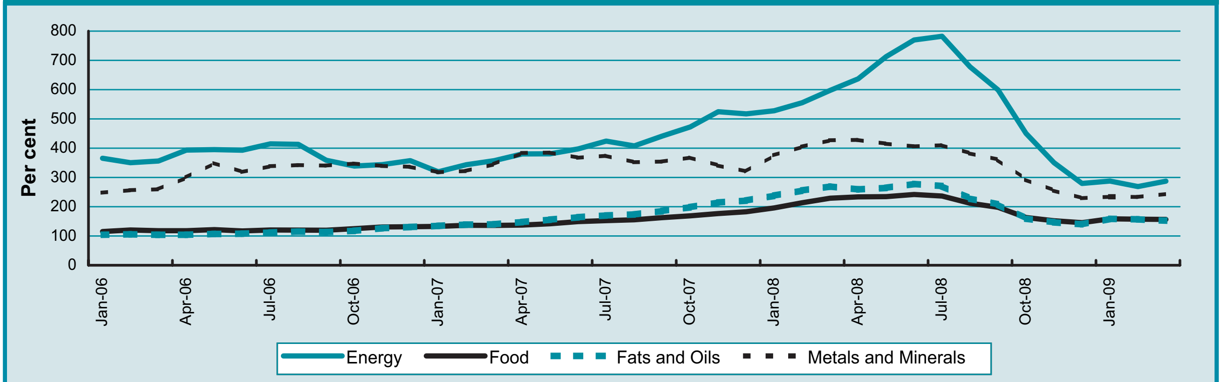


Figure 4.5 : Wholesale Price Index (1993-94 = 100)

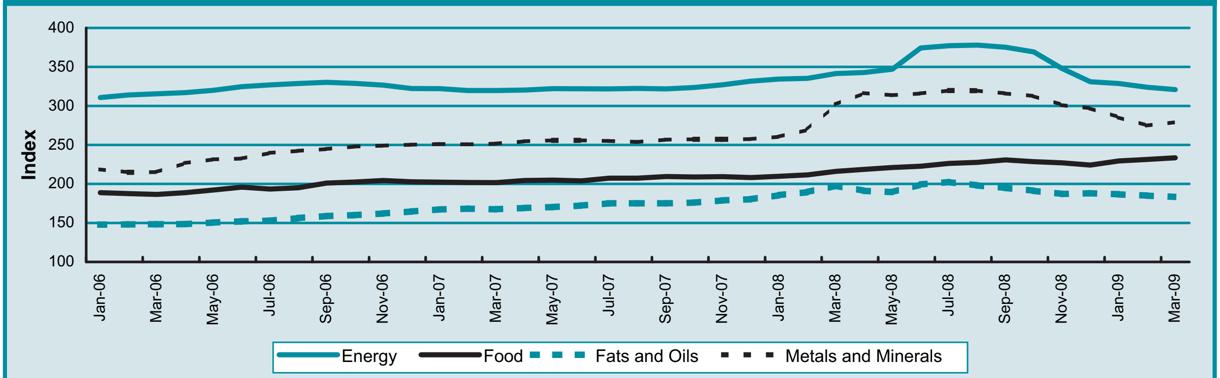


Table 4.17 : Annual trends in WPI inflation and GDP deflator (%)

Year	WPI Inflation Base 1999-2000	GDP consumption 1999-2000
2000-01	7.1	3.2
2001-02	3.6	3.4
2002-03	3.4	2.7
2003-04	5.5	3.5
2004-05	6.5	2.8
2005-06	4.4	4.6
2006-07	5.4	5.5
2007-08 (QE)	4.7	3.7
2008-09 (AE)	8.4	7.8

Source : D/o Indl Policy & Promotion and CSO.

to deliberate on all aspects of constructing a representative housing price index (HPI). Initially, a pilot study of Bangalore, Bhopal, Delhi, Kolkata and Mumbai was undertaken, taking into account the actual transaction prices of residential properties for 2001-05, with 2001 as the base year. This complex exercise, which factored in such challenges as localities, covered area, community facilities, individual layouts, data distortions caused by transactions costs, etc., led to the launch of NHB RESIDEX in July 2007.

4.46 The HPI aims to track price movements in residential properties in selected cities over time and develop an all-India composite index to capture inter-temporal price variations, with the scope to be expanded to commercial properties subsequently. Three categories of housing products were considered based on built-up area of less than 500 sq. ft., built-up area greater than 1,000 sq. ft and area in-between these limits. The cities/towns have been classified according to tax or administration zones, municipal wards or any other criteria, with data collected from 20-30 colonies in each city or town, with the sample size being 500–600 observations every year.

4.47 The index and the annual increase in the housing prices of the five major cities updated to 2007 had been released, details of which are indicated below (Table 4.18). Figure 4.6 plots the rise and fall in the HPI.

Figure 4.6 : Rise and fall in prices of houses across 5 major cities

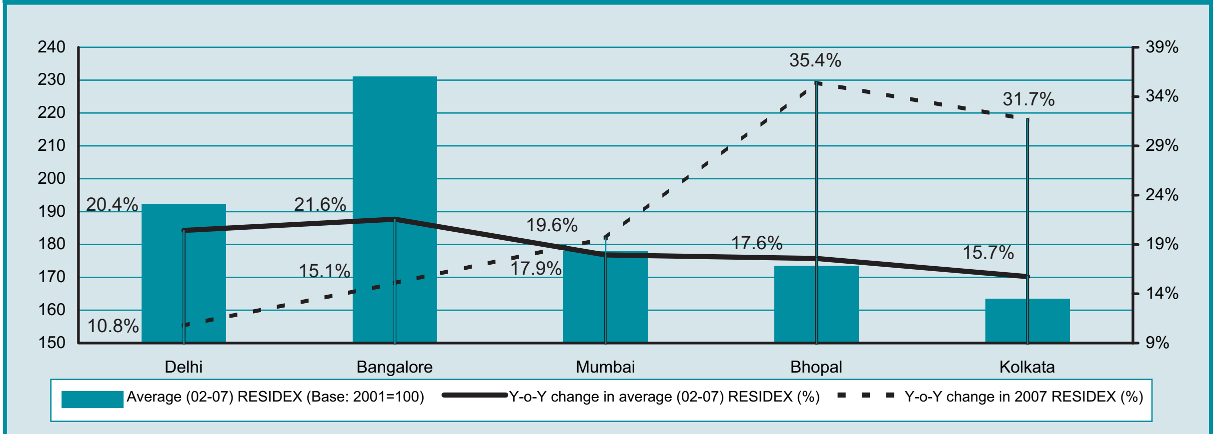


Table 4.18 : Trends in the housing price index (Base 2001=100)

City	2001	2002	2003	2004	2005	2006	2007	02-07
				City-wise index				Average
Delhi	100	106	129	150	201	269	298	192.2
Bangalore	100	133	170	224	275	272	313	231.2
Mumbai	100	116	132	149	178	224	268	177.8
Bhopal	100	120	136	154	179	192	260	173.5
Kolkata	100	115	129	148	172	180	237	163.5
				City-wise year-on-year growth rate (%)				Average
Delhi		6.0	21.7	16.3	34.0	33.8	10.8	20.4
Bangalore		33.0	27.8	31.8	22.8	-1.1	15.1	21.6
Mumbai		16.0	13.8	12.9	19.5	25.8	19.6	17.9
Bhopal		20.0	13.3	13.2	16.2	7.3	35.4	17.6
Kolkata		15.0	12.2	14.7	16.2	4.7	31.7	15.7

Source : National Housing Bank

4.48 Considerable volatility in the HPI, with inter-year and inter-city variations were observed which were also significant. The NHB has set up an institutional mechanism to facilitate release of NHB RESIDEX on a regular basis. The 63 cities of the Jawaharlal Nehru National Urban Renewal Mission are expected to be covered under the HPI in phases, the first phase covering 10 cities — Ahmedabad, Chandigarh, Chennai, Kochi, Hyderabad, Jaipur, Bhubaneswar, Lucknow, Pune and Surat.

Monetary developments

Emerging trends in 2008-09

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

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

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

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

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

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

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

B: Mid-term review of annual policy statement

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

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

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

Source : RBI

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

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

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

Monetary aggregates

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

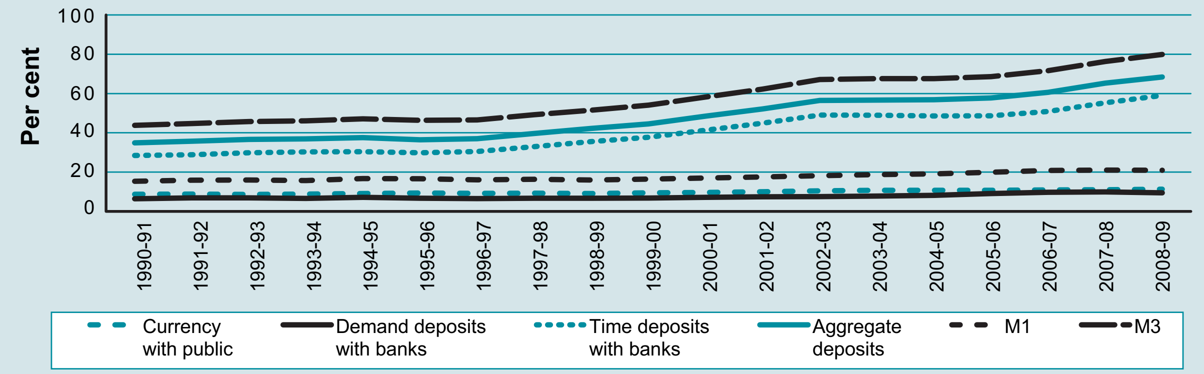
4.55 The following data traces the trend in the relationship between monetary aggregates and

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

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

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

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



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

Reserve money (M_0)

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

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

Sources of change in reserve money (M_0)

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

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

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

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

Narrow money (M_1)

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

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

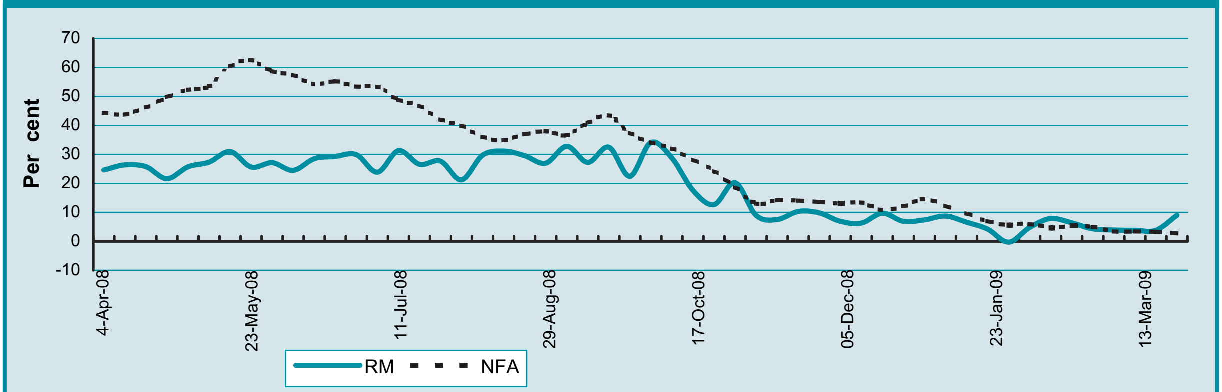
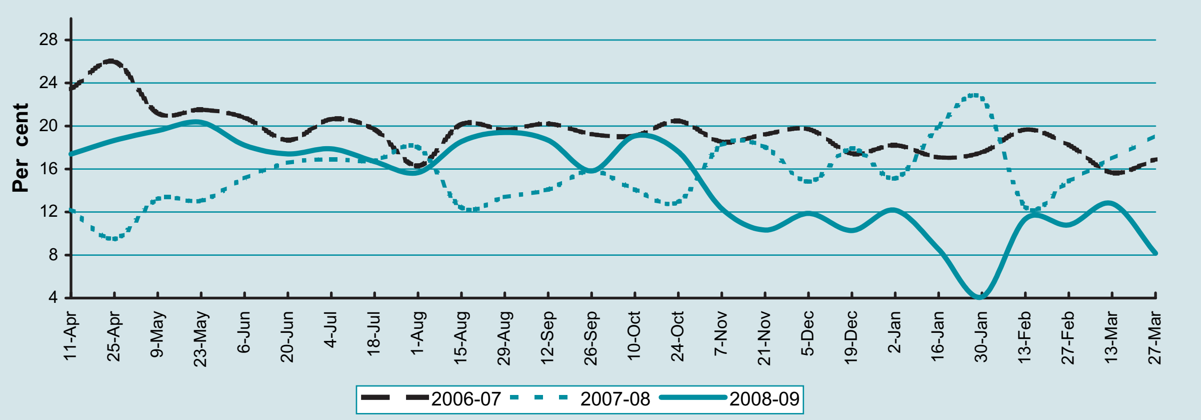


Figure 4.9 : Narrow money(M1) - annual growth rate (%)



Broad money (M_3)

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

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

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

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

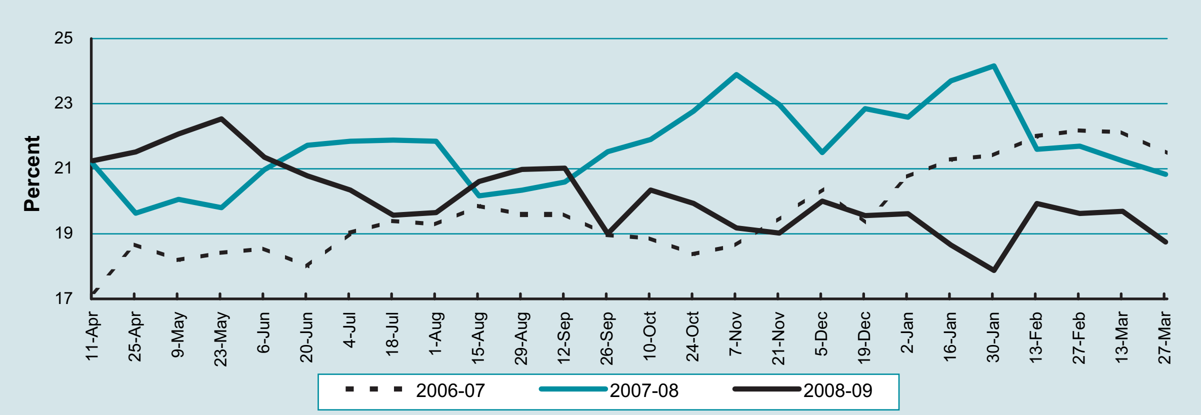


Table 4.21 : Summary table on monetary aggregates

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

Source : RBI

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

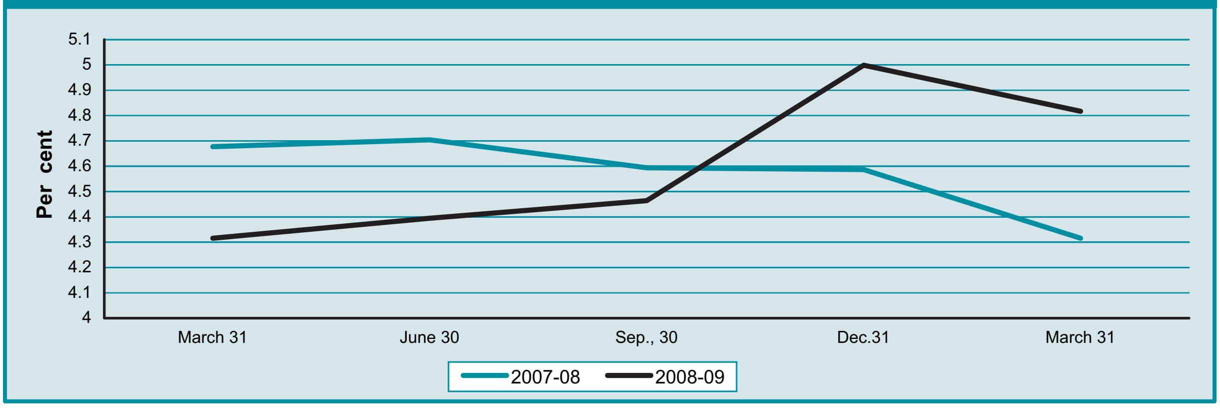
Money multiplier

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

Liquidity management

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

Figure 4.11 : Movements in money multiplier



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

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

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

Table 4.22 : Liquidity management

(Rs. crore)

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

Source : RBI

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

* Data pertains to March 31.

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

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

Figure 4.12 : Market Stabilisation Scheme

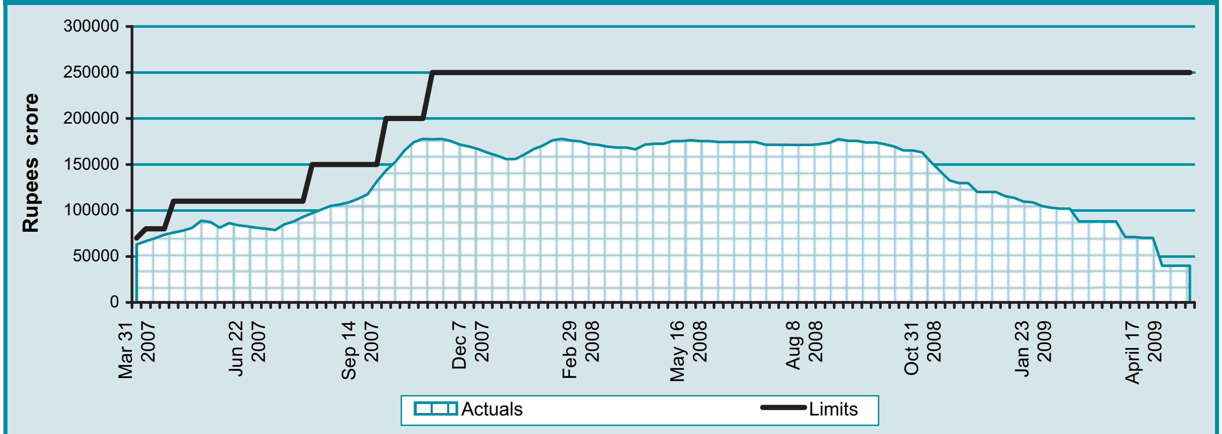
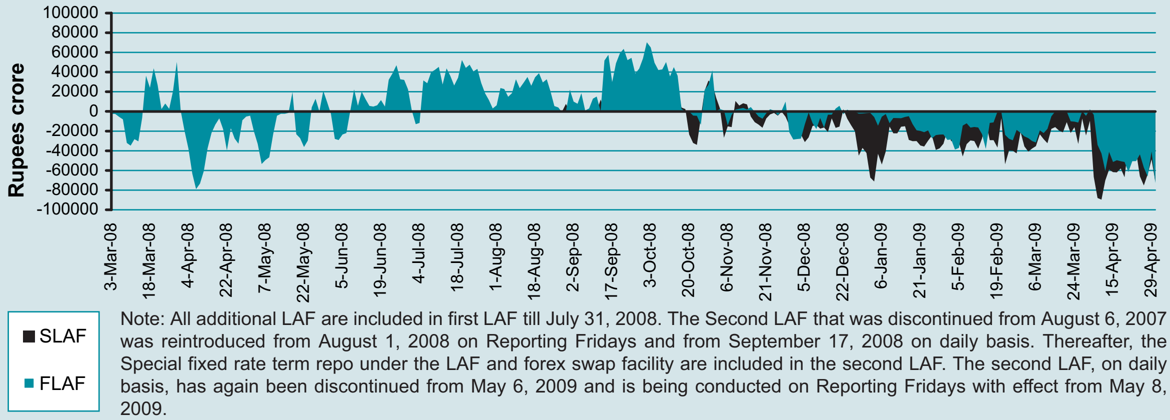


Figure 4.13 : LAF reverse-repo and repo volume



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

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

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

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

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

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

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

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

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

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

Movement of interest rates

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

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

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

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

Figure 4.14 : Movement of interest rates

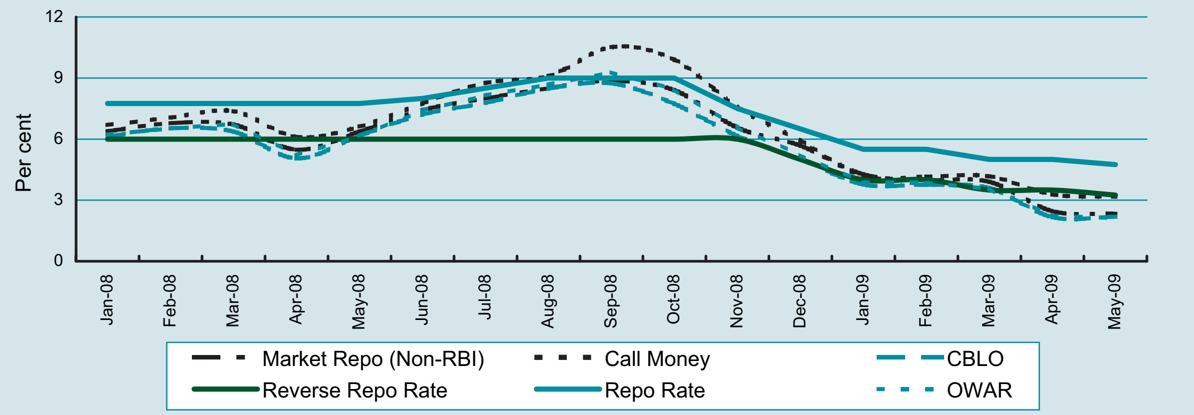


Table 4.23 : Call Money markets at a glance

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

Source : RBI

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

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

Treasury Bills

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

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

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

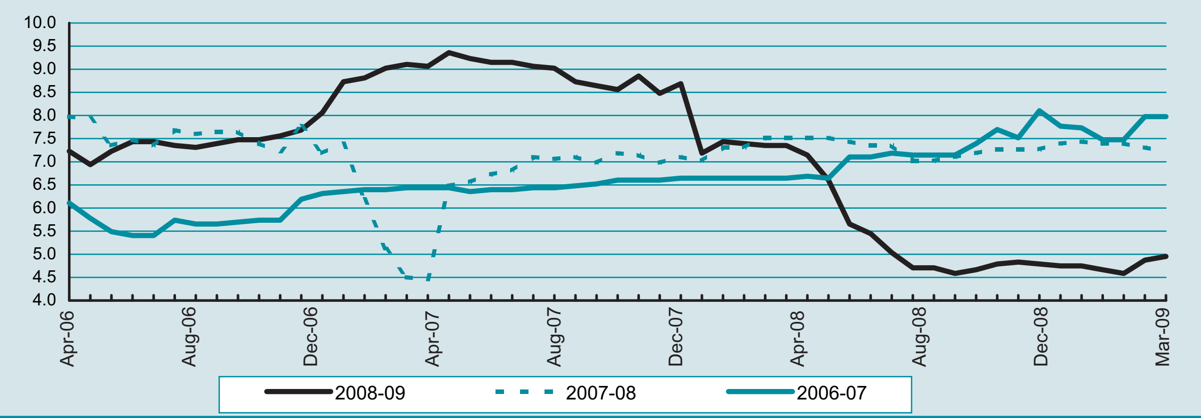


Figure 4.16 : 364-day treasury bill- yield to maturity at auction

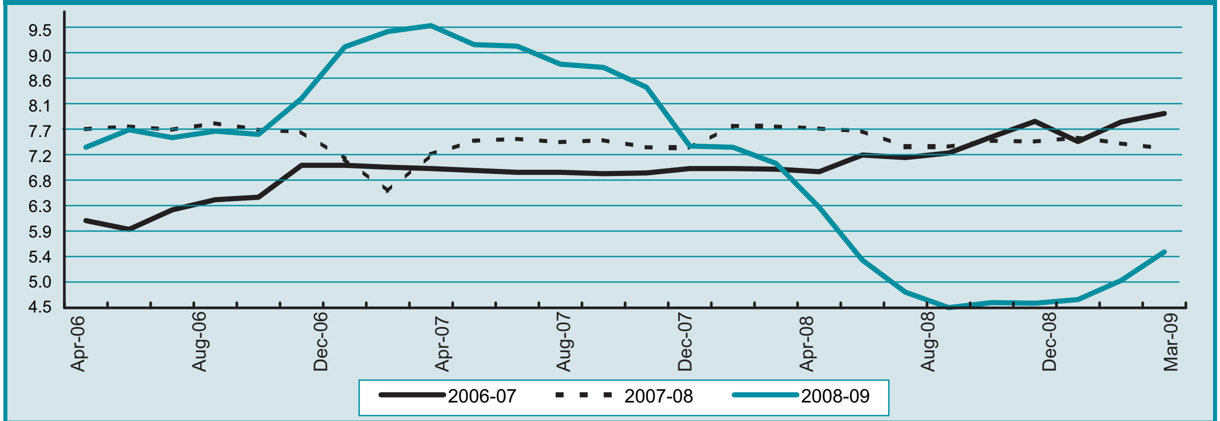
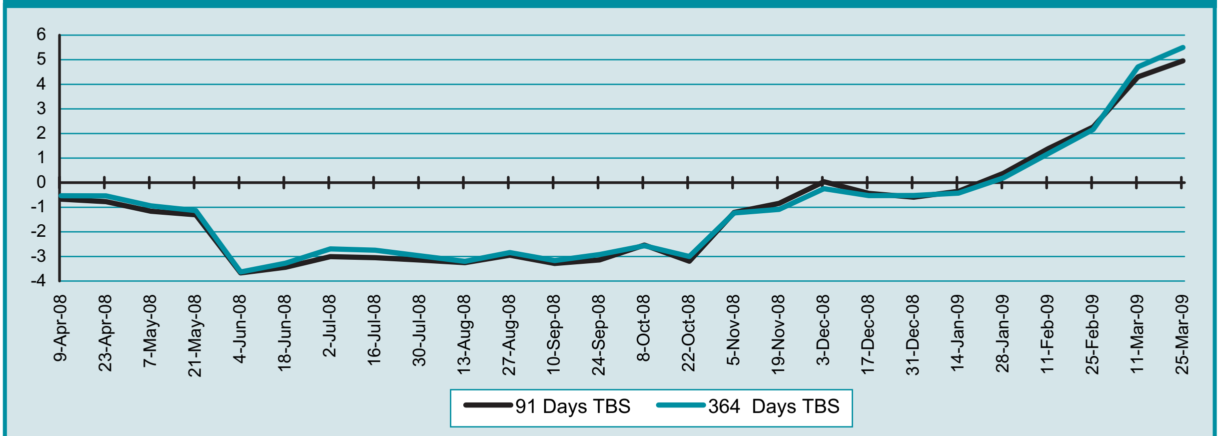


Figure 4.17 : Real yield to maturity on treasury Bills



Yields on government securities

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

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

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

Figure 4.18 : 10 year Govt. yield movement

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

Update on monetary policy stance during 2009-10

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

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

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

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

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

Anti-inflationary measures

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

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

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

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

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

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

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

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

Challenges and outlook

4.94 The domestic economy is currently witnessing the contagion effects of the global economic slowdown. It is necessary to ensure the continued health of the economy and the productive sectors through adequate liquidity and credit from the financial sector. The objective is to restore the economy to a high growth path consistent with price and financial stability.

4.95 In the first half of the fiscal year 2008-09, the inflationary pressure was on account of the momentum in the international commodity prices and the domestic prices of food items like cereals and pulses. The Government has been alert and responsive to situation as it unfolded and took the required administrative and fiscal measures in tandem with the monetary policy initiatives of the RBI, which bore fruit. Though agricultural imports by India are limited, the constraints in the global agricultural production might exacerbate the supply side concerns in India. There is need to address these concerns, particularly in the medium term through productivity gains and efficient supply management. The continued food inflation though moderating of late, could undermine inclusive growth, in particular, the efforts to combat poverty.

4.96 While risks from the uncertainties in the global financial markets continue to persist, there are some concerns on the domestic front as well. In respect of the monetary policy, the effort to maintain ample liquidity in the system, as some would argue, might be sowing the seeds of the next inflationary cycle. It would be important, therefore, to ensure that once economic growth picks up sufficient momentum, the excess liquidity is rolled back in an orderly manner. There is also the concern related to transmission channels, the lags and the impact of monetary policy changes on the financial and real sectors of the economy.

4.97 In India, monetary transmission has had a differential impact across various segments of financial market. In general, the transmission has been more efficient in the money and bond markets and somewhat sluggish in the credit market with its implications for the real side of the economy. The credit market suffers from structural rigidities which may have been reinforced in the recent years due to a high credit demand encouraging the banks to raise deposits at higher rates for maintaining long term liquidity. These high rates have now come in the way of cutting lending rates at a pace which is consistent with the current outlook on inflation and the need for stimulating investment demand.

4.98 The focus in the coming months will continue to be on having a calibrated approach to using monetary policy measures for an early return to the high growth path. At the same time, efforts to build and preserve financial stability in the economy have to be high on the agenda. It would require strengthening the resilience of the banking sector, ensuring well functioning financial markets, proactive liquidity management and institutional reforms to make regulatory oversight systems more effective.