

Prices and Monetary Management

It is well recognized that inflation in India is a structural as well as a monetary phenomenon. In the short term, localised demand – supply imbalances in wage goods, often due to seasonal variations in production – coupled with market rigidities and regulatory failures have supported inflationary expectations that have resulted in a more widespread impact on the consumers than the initial inflationary impulse. In the medium- to long-term, the movement and outcome of monetary aggregates such as the money supply and reference interest rates of the financial systems have influenced aggregate demand and consequently changes in price levels in the economy. The latter considerations and the influence of global commodity prices on the domestic prices have become more important with the opening and growing integration of the Indian economy with the rest of the world. Indeed, the fiscal 2007-08 has demonstrated this facet of the economy more than ever before. With huge surge in capital inflows, the liquidity management with its underlying implications for inflation has been a major challenge for the policymakers. This chapter brings together an analysis of developments on prices and monetary management in 2007-08.

PRICES

4.2 The Wholesale Price Index (WPI), which is available on a weekly basis, continues to be the most popular measure of headline inflation in India. There are, however, four Consumer Price Indices (CPIs) that are specific to different groups of consumers. The commodity basket for these indices is derived on the basis of group-specific consumer expenditure surveys and weights to each commodity is proportionate to its expenditure. WPI is an economy-wide index covering 435 commodities. Weights of the commodities are

derived based on the value of quantities traded in the domestic market. It is, therefore, the most comprehensive measure of economy-wide inflation available with high frequency. The four consumer price indices are: CPI-IW for industrial workers; CPI-UNME for urban non-manual employees; CPI-AL for agricultural labourers; and, CPI-RL for rural labourers. CPI-IW is the most well known of these indices as it is used for wage indexation in Government and in the organized sectors. CPIs are compiled in terms of general standards and guidelines set by the International Labour Organization (ILO) for its member countries.

4.3 Inflation in terms of the wholesale prices started firming up from June 2006. This owed substantially to an increase in the prices of wheat, pulses and edible oils in the "primary articles" group and mineral oils in the group "fuel and power". The increase in the international prices of crude (Brent) from an average of US\$ 38/bbl in 2004 to US\$ 54/bbl in 2005 and further to US\$ 70/bbl during April-June 2006 necessitated an upward revision in the prices of petrol and diesel in the domestic market. The price of petrol and diesel was raised by Rs. 4 per litre and Rs. 2 per litre, respectively, with effect from June 6, 2006. However, the pass through to the consumers was restricted to 12.5 per cent with the rest being absorbed by the Government, the upstream companies and the oil marketing companies. With softening of the international prices of crude oil in the later months of 2006 and early 2007, domestic prices of petrol and diesel were reduced on November 30, 2006, and February 16, 2007 to their pre-June 6, 2006, levels. The increase in the prices of wheat, pulses and edible oils was largely because of the shortfall in the domestic supply relative to demand and firm international prices. Wholesale prices reached a peak of 6.6 per cent in March 2007 and started decelerating thereafter.

Table 4.1 Annual inflation as per different price indices (per cent)

Month	WPI ^a		CPI-IW		CPI-UNME		CPI-AL		CPI-RL	
	06-07	07-08	06-07	07-08	06-07	07-08	06-07	07-08	06-07	07-08
Apr	3.86	6.28	5.03	6.67	4.97	7.74	5.57	9.44	5.23	9.12
May	4.73	5.46	6.31	6.61	5.84	6.79	6.41	8.22	6.38	7.90
Jun	5.12	4.53	7.65	5.69	6.47	6.08	7.25	7.84	7.20	7.53
Jul	4.83	4.71	6.71	6.45	5.71	6.86	6.29	8.60	5.95	8.02
Aug	5.12	4.14	6.32	7.26	6.14	6.40	6.53	8.80	6.21	8.51
Sep	5.38	3.51	6.78	6.40	6.55	5.74	7.34	7.89	7.02	7.61
Oct	5.51	3.11	7.30	5.51	7.17	5.48	8.43	6.99	8.10	6.72
Nov	5.50	3.25	6.33	5.51	6.70	5.06	8.33	6.15	8.01	5.88
Dec	5.68	3.60	6.91	5.51	6.94	5.07	8.94	5.90	8.31	5.63
Jan	6.37		6.72		7.36		9.52		8.91	
Feb	6.36		7.56		7.81		9.80		9.47	
Mar	6.61		6.72		7.56		9.50		9.17	

^a Monthly averages

The fiscal, administrative and monetary measures which were taken beginning June 2006 together with improved availability of wheat, pulses and edible oils started working through in terms of a decline in the inflation. Headline inflation declined gradually from April 2007 onwards to reach 3.6 per cent in December 2007. With decline in the prices of primary articles, deceleration was also observed in CPI. The decelerating trend in CPIs became apparent from September 2007 and in the next four months, the decline ranged from 1.3 percentage points (CPI-UNME) to 2.9 percentage points (CPI-AL). The year-on-year inflation remained generally high for CPI-AL and CPI-RL, as food articles have relatively high weights in these indices. But with a deceleration in inflation of primary articles, the decline in inflation was manifest in all these indices (Table 4.1 and Figures 4.1, 4.3, 4.4 and 4.5).

Wholesale Price Index — general trends

4.4 WPI recorded an inflation of 3.9 per cent, on January 19, 2008, down sharply from the 6.3 per cent inflation rate a year ago. Build-up of inflation in the current fiscal year (from end-March, 2007 to January 2008) at 3.2 per cent was also significantly lower than the inflationary build-up of 5.9 per cent in the corresponding period of previous year (Table 4.2 and Figure 4.2). All the three major components of the WPI, viz. "primary articles", "fuel, power, light and lubricants" and "manufactured products" showed a deceleration in annual inflation during 2007-08. There was a sharp deceleration in inflation of primary articles to 3.8 per cent on January 19, 2008, compared to 10.2 per cent a year ago. These commodities contributed 22 per cent to overall inflation as against 35.4 per cent in the previous year. For primary articles, the

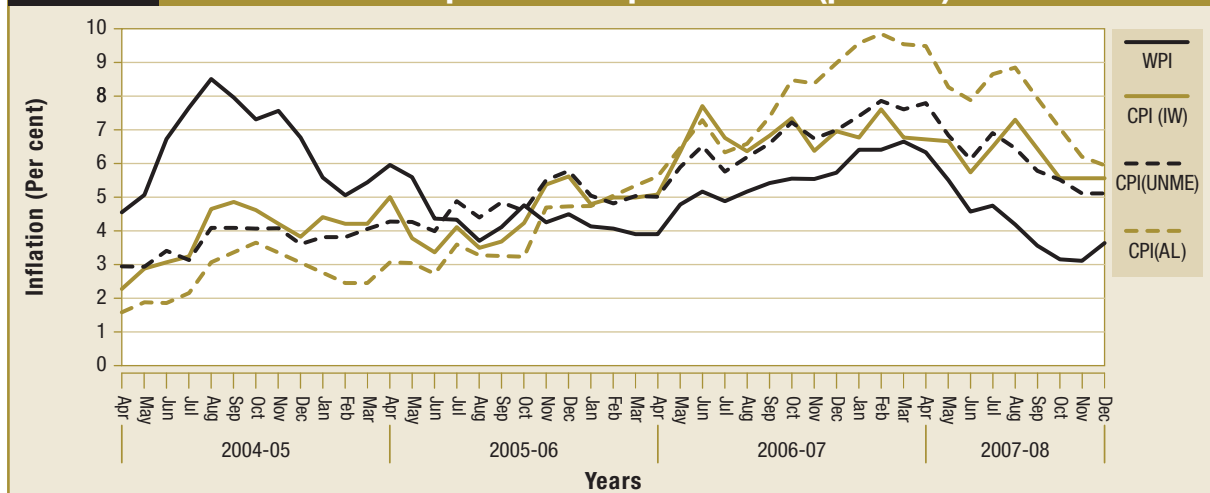
Figure 4.1 Annual Inflation as per different price indices (per cent)

Figure 4.2 Inflation in WPI (per cent)

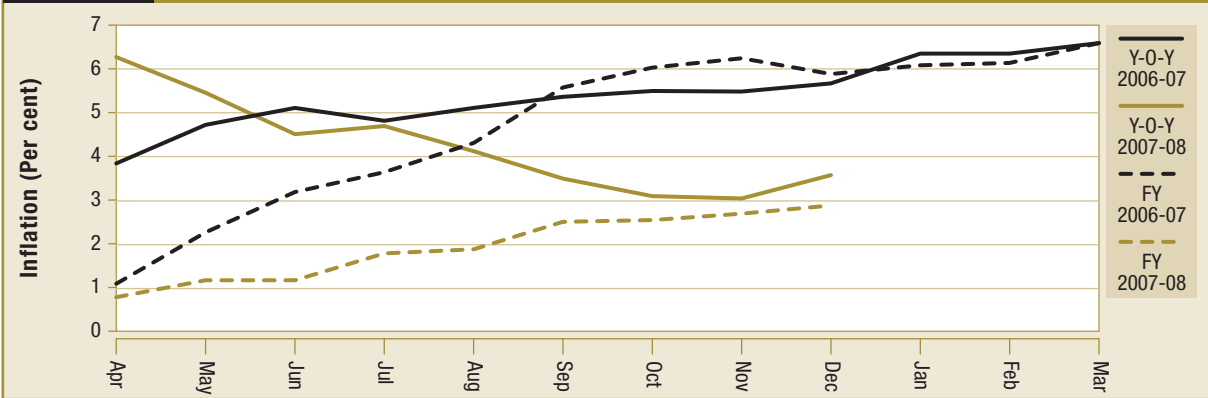


Figure 4.3 Inflation in CPI-IW (per cent)

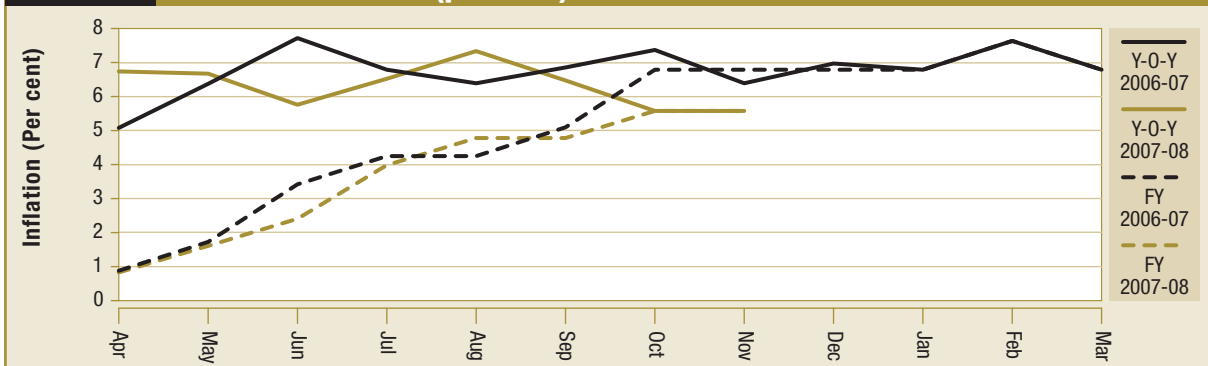


Figure 4.4 Inflation in CPI-UNME (per cent)

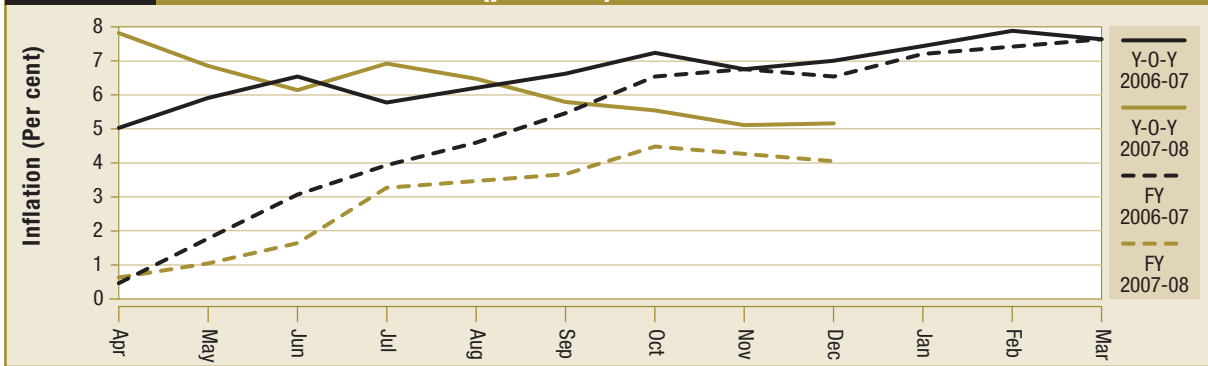
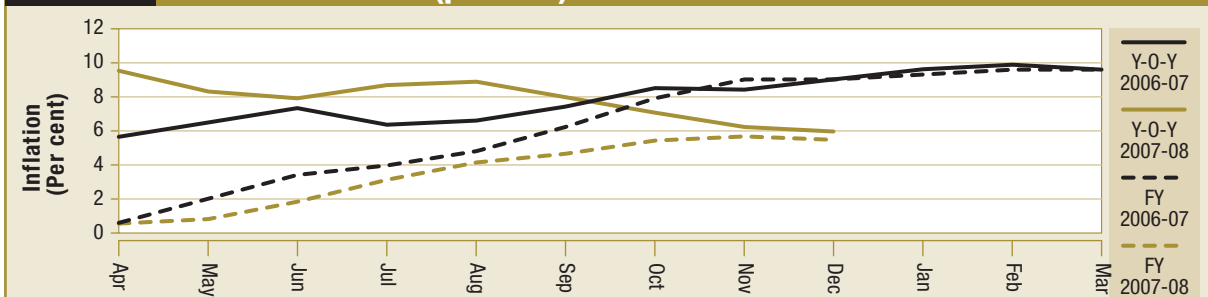


Figure 4.5 Inflation in CPI-AL (per cent)



year 2007-08 began with a year-on-year inflation of 12.2 per cent as on April 7, 2007, but this decelerated gradually to reach the current levels.

Further, the overall build-up of inflation in the first 10 months (42 weeks) of the current fiscal year was 3.2 per cent contributing 22.7 per cent to the

Table 4.2 Inflation as on January 19, 2008, in major groups (per cent)

Commodities	Weight (%)	Variations (April-January)				Variations (year-on-year)			
		Cumulative change		Contribution		Inflation		Contribution	
		07-08	06-07	07-08	06-07	07-08	06-07	07-08	06-07
All Commodities	100.00	3.18	5.93	100.00	100.00	3.93	6.31	100.00	100.00
Primary articles	22.03	3.20	11.02	22.68	40.10	3.82	10.22	22.03	35.35
Fuel power light & lubricants	14.23	4.47	1.74	30.36	6.69	3.92	3.57	21.86	12.73
Manufactured products	63.75	2.66	5.76	46.62	53.94	3.91	5.88	55.20	51.92

overall inflation. The corresponding inflation in 42 weeks of 2006-07 (up to January 20, 2007) was 11 per cent. Primary articles were major drivers of inflation in 2006-07 and were also the major contributors to decline in inflation in 2007-08.

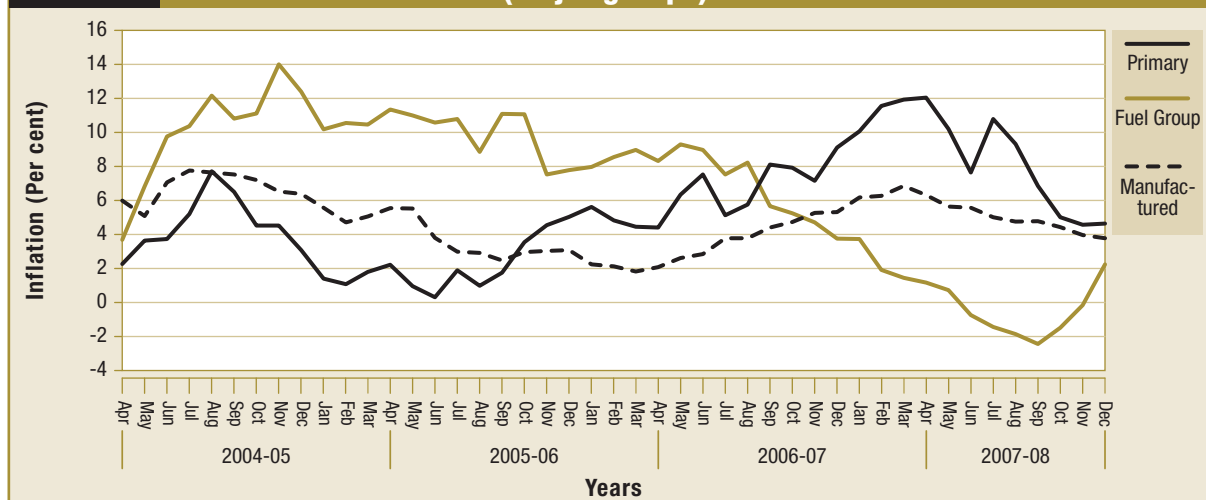
4.5 Fuel, power, light & lubricants seemed to be emerging a major contributor of inflation in 2007-08 with a FY inflation rate of 4.5 per cent and a contribution of 30.4 per cent, which is more than twice its weight of 14.2 per cent in the index (Table 4.2). In the case of fuel and power, with the prices of petrol and diesel being administratively kept constant at the February 16, 2007 level, this component of inflation remained low during 2007-08. Annual inflation remained negative from June 9, 2007, to November 10, 2007. Though the increase in the prices of other commodities in this group continued to push up the index from 320.1 at end-March 2007 to 326.5 as on November 10, 2007, the base effect kept the inflation negative. Inflation increased in later months to reach 3.9 per cent on January 19, 2008, higher than the inflation on the same date in the earlier year. The contribution of this group

to overall inflation also remained negative till November 2007 and started increasing thereafter. Annual inflation has been on a clear-up trend since October (Figure 4.6) because the sharply rising fuel prices have been passed through the items that are free of control.

4.6 In the case of “manufactured products” year-on-year inflation as on January 19, 2008, was 3.9 per cent compared to 5.9 per cent in the corresponding period of 2006-07. The manufactured products, with a weight of 63.8 per cent in WPI, contributed 55.2 per cent of the year-on-year inflation which is not significantly higher than their contribution in the previous year. In the financial year so far, the build-up of inflation was 2.7 per cent only, as annual manufactured goods inflation has been decelerating since it peaked in February 2007 (Figure 4.6).

Wholesale prices – primary articles

4.7 Primary articles are further subgrouped as food articles, non-food articles and minerals. In the case of food articles, year-on-year inflation decelerated to 2.1 per cent as on January 19,

Figure 4.6 Annual inflation in WPI (major groups)

2008. Food articles contributed 8.5 per cent to the overall inflation and their share in the inflation of primary articles was 38.4 per cent. The value of the index of the food articles, however, continued to show an upward trend till September 2007 and a decline thereafter. In the current fiscal so far, food articles with an inflation of 2.7 per cent contributed 13.1 per cent to the overall inflation. Within food articles, milk recorded inflation of more than 6 per cent. In case of “condiments and spices”, while the annual inflation as on January 19, 2008, was negative, build up of inflation in 42 weeks of the current fiscal was 5.1 per cent. The index of “condiments and spices” after a decline during February 2007 to May 2007, witnessed an increase, making what was earlier a negative point to point inflation into a positive build up in inflation in the current fiscal year. However, both on year-on-year basis and in terms of build-up inflation in the current fiscal remained lower than in the previous year. In non-food articles, inflation was significantly higher for fibres, particularly cotton. Oilseeds and other non-food crops (sugarcane) witnessed a deceleration in inflation. Deceleration in inflation in minerals was also significant. The level of prices for minerals, as reflected by the value of the index, after reaching a level of 453.5 (1993-94=100) on May 19, 2007 declined to 424.7 on September 1, 2007, and remained at that level until January 19, 2008. Build up of inflation, therefore, remained moderate (Table 4.3).

4.8 Year-on-year inflation in the primary articles was highest in April 2007. However, there was a significant deceleration since July 2007. Between July 28, 2007 (10.5 per cent) and January 19, 2008, inflation in primary articles declined by 665 basis points. Year-on-year inflation was negative for fruits and vegetables; eggs, meat and fish; condiments and spices; and other non-food articles. With a deceleration in inflation of primary articles, contribution of these articles to overall inflation declined from 51.8 per cent as on July 7, 2007, to 22.0 per cent. All three components of primary articles – food, non-food and minerals – contributed more than proportionately to acceleration in inflation during 2006-07 and all three contributing (more or less in equal proportion) to the decline in primary articles and overall inflation in 2006-07.

Wholesale prices – fuel and power

4.9 In the major group “fuel and power” the index of petrol, diesel, kerosene and LPG remained at the February 17, 2007, levels as there was no change in the administered prices of these products. Stable prices of petroleum products also exerted a significant neutralizing influence on overall inflation. The other products in the mineral oil group, particularly naphtha, bitumen, furnace oil and aviation turbine fuel (ATF), were not covered by the price freeze. However, since these products had a smaller weight in the overall basket of the WPI, increase in prices of these products only moderately affected the level of prices in the fuel

Table 4.3 Inflation as on January 19, 2008, in primary articles (per cent)

Commodities	Weight (%)	Variations (April-January)				Variations (year-on-year)			
		Cumulative change		Contribution		Inflation		Contribution	
		07-08	06-07	07-08	06-07	07-08	06-07	07-08	06-07
Primary articles	22.03	3.20	11.02	22.68	40.10	3.82	10.22	22.03	35.35
Food articles	15.40	2.66	10.01	13.10	25.80	2.09	9.56	8.45	23.35
Food grains	5.01	2.98	9.09	4.71	7.62	1.82	9.82	2.38	7.72
Fruits & vegetables	2.92	-0.72	16.43	-0.70	8.08	-4.18	11.62	-3.41	5.62
Milk	4.37	6.61	5.51	8.73	3.84	9.53	8.23	10.01	5.28
Eggs, meat & fish	2.21	-1.35	7.00	-1.05	2.89	-0.30	2.27	-0.19	0.93
Condiments & spices	0.66	5.05	26.32	1.15	2.91	-2.19	35.10	-0.44	3.42
Other food articles	0.24	3.76	15.38	0.20	0.42	1.51	14.08	0.07	0.36
Non-food articles	6.14	5.00	12.93	9.34	11.80	8.96	11.02	13.17	9.65
Fibres	1.52	7.00	4.64	2.73	0.89	19.71	-1.86	5.61	-0.36
Oilseeds	2.67	8.72	26.95	7.00	9.46	12.28	25.24	7.80	8.47
Other non-food articles	1.95	-0.60	3.99	-0.41	1.48	-0.39	4.42	-0.21	1.54
Minerals	0.48	1.05	17.00	0.32	2.52	1.51	17.17	0.37	2.40

Table 4.4 Inflation as on January 19, 2008, in fuel group (per cent)

Commodities	Weight (%)	Variations (April-January)				Variations (year-on-year)			
		Cumulative change		Contribution		Inflation		Contribution	
		07-08	06-07	07-08	06-07	07-08	06-07	07-08	06-07
Fuel, power light & lubricants	14.23	4.47	1.74	30.36	6.69	3.92	3.57	21.86	12.73
Coal mining	1.75	8.77	0.00	5.31	0.00	8.77	0.00	4.34	0.00
Minerals oils	6.99	6.24	1.19	24.72	2.69	5.80	3.36	18.84	6.99
Electricity	5.48	0.18	3.15	0.41	3.94	-0.66	4.93	-1.20	5.70

and power group. Further, there was no increase in the prices of coal until December 2007. The WPI of coal after remaining unchanged from February 2005 to December 2007 moved upwards in the first week of January 2008 after a revision in its prices. The index for electricity also remained stationary since May 2007 indicating a stable price regime. As a result of upward revision of coal prices and increase in the prices of mineral oils, products not covered by the administered prices, inflation of this group increased to 3.9 per cent as on January 19, 2008. Coal mining had an inflation of 8.8 per cent followed by mineral oils with an inflation of 5.8 per cent. The contribution of mineral oils to overall inflation was 18.8 per cent. The inflation of the subgroup "mineral oils" in the current fiscal year (over end-March 2007) was 6.2 per cent compared to 1.2 per cent in the previous year. Mineral oils contributed nearly a quarter to the total build-up of inflation in the current year (Table 4.4).

Wholesale prices—manufactured products

4.10 In the case of manufactured products the increase in the prices was generally moderate. Year-on-year inflation as on January 19, 2008, continued to show deceleration for many product groups within the manufacturing sector. An increase in the rate of inflation was observed for food products; beverages and tobacco; wood products; leather products; chemicals and chemical products; and transport equipments. In the case of textiles, the level of index declined and inflation turned negative in September 2007 and remained so in the next four months. In the case of basic metals, inflation substantially moderated from 13.9 per cent as on January 20, 2007, to 2.7 per cent. The build-up of inflation for metal products, over end-March 2007 at 2.4 per cent was significantly lower. International prices of metals also witnessed deceleration during this period and deceleration in the domestic inflation was keeping with the global trend (Table 4.5).

Table 4.5 Inflation as on January 19, 2008, in manufactured goods (per cent)

Commodities	Weight (%)	Variations (April-January)				Variations (year-on-year)			
		Cumulative change		Contribution		Inflation		Contribution	
		07-08	06-07	07-08	06-07	07-08	06-07	07-08	06-07
Manufactured Products	63.75	2.66	5.76	46.62	53.94	3.91	5.88	55.20	51.92
Food products	11.54	5.16	5.52	16.53	9.57	5.56	3.63	14.49	6.05
Beverages tobacco & tobacco products	1.34	6.83	6.60	3.50	1.77	9.35	7.79	3.82	1.95
Textiles	9.80	-3.75	1.91	-7.31	2.09	-3.53	2.38	-5.62	2.45
Wood & wood products	0.17	0.00	-2.02	0.00	-0.06	5.99	-2.02	0.26	-0.06
Paper & paper products	2.04	1.14	3.82	0.67	1.24	0.78	7.63	0.37	2.26
Leather & leather products	1.02	1.58	6.09	0.40	0.83	1.09	-1.55	0.22	-0.21
Rubber & plastic products	2.39	4.84	8.14	2.67	2.33	7.27	7.30	3.20	1.98
Chemicals & chemical products	11.93	3.27	0.99	11.58	1.94	5.93	2.70	16.73	4.91
Non-metallic mineral products	2.52	4.36	5.80	3.30	2.28	8.84	13.10	5.25	4.54
Basic metals alloys & metals products	8.34	2.35	16.23	7.10	24.03	2.73	13.87	6.71	19.78
Machinery & machine tools	8.36	3.08	6.96	6.24	7.43	4.63	8.04	7.55	8.03
Transport equipment & parts	4.29	2.08	1.56	2.18	0.92	2.33	1.31	1.99	0.73

Table 4.6 Cumulative movement in WPI (per cent)

	2005-06		2006-07		2007-08	
	First Half	Second Half	First Half	Second Half	First Half	Second Half ^a
All commodities (100.00)	4.0	-0.2	5.5	1.0	2.5	0.4
Primary articles (22.03)	6.4	-2.1	9.9	1.4	5.2	-1.5
Food articles (15.40)	6.7	-1.4	10.3	-0.3	5.3	-1.8
Non-food articles (6.14)	1.8	-3.9	7.4	6.5	5.7	-0.7
Minerals (0.48)	37.2	-1.5	20.5	-0.6	1.3	0.0
Fuel and power (14.23)	7.8	0.9	4.6	-3.2	0.7	2.3
Manufactured products (63.75)	1.5	0.2	4.2	2.4	2.2	0.4
Food products (11.54)	2.2	-1.1	3.8	1.2	1.6	2.4
Textiles (9.80)	-2.8	2.4	2.2	-0.2	-0.2	-2.3
Chemicals and products (11.93)	1.0	2.6	0.6	2.7	2.8	0.3
Non-Metallic mineral products (2.52)	0.0	7.1	5.0	6.4	4.1	0.0
Basic Metals, alloys & products (8.34)	4.3	-6.9	12.4	3.1	2.1	0.2
Machinery & machine tools (8.36)	3.1	0.9	3.1	4.9	3.5	-0.1

^a Up to December 2007.

4.11 It has generally been observed that for most of the products the inflation is usually high in the first and second quarter of the year. Cumulative increase in the prices in the first half of the year 2005-06, 2006-07 and 2007-08 was 4 per cent, 5.5 per cent and 2.5 per cent, respectively. In the second half of these years this increase was only -0.2 per cent, 1 per cent and 0.4 per cent, respectively. While it is still early to say whether this trend will also be observed in the last quarter of 2007-08, the current indications are that build-up of inflation in the second half except for the group "fuel and power" may remain moderate (Table 4.6).

4.12 Broadly seven commodity groups were the major contributors to inflation. The overall contribution of these seven commodity groups averaged 82 per cent during April 2006 to December 2007. Overall contribution increased from 75 per cent in 2006-07 to 92 per cent in nine months of the current year. Acceleration in the rate of inflation during January-April 2007 was associated with an increasing contribution of food articles, edible oils (including oilseeds and oilcake) and metals. A decline in the contribution of metals (from July 2007 onwards), mineral oils (negative contribution from May 2007 to October 2007) and food articles (October 2007 to December 2007) to the overall inflation resulted in deceleration in the inflation rate in the subsequent months (Table 4.8). Commodity composition of main drivers of inflation in recent months indicates that domestic inflation has been affected by global commodity price changes (metals, mineral oils,

edible oils and food items), domestic supply shortfalls (edible oils and food) and a buoyant demand (machinery, chemicals and cement). There are also spillover effects due to inter-linkages of commodities.

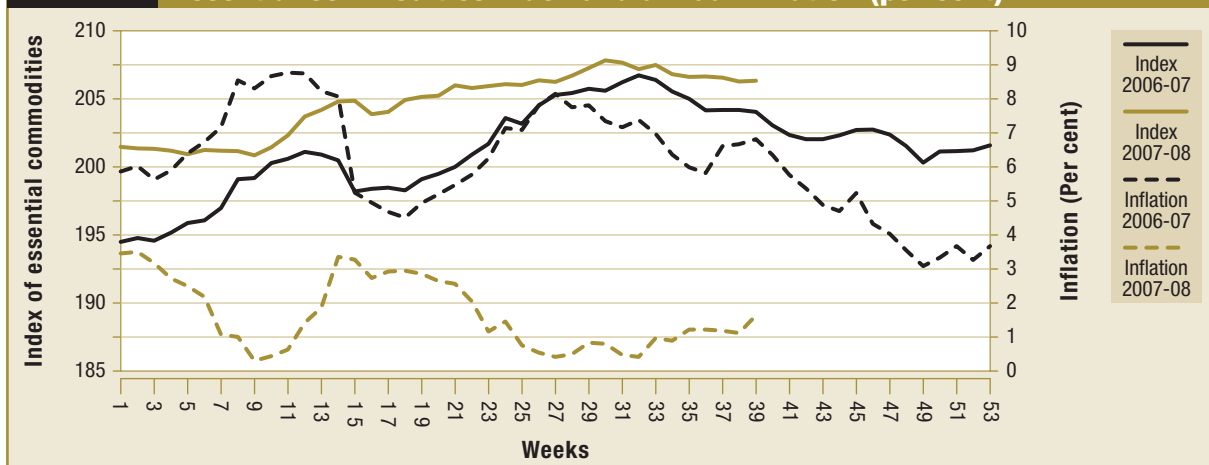
Wholesale price index – essential commodities

4.13 About 30 commodities within the Wholesale Price Index have been identified as essential commodities. These commodities are broadly grouped into seven categories: cereals and their products; pulses; edible oils; vegetables and spices; dairy, fisheries and animal products; tea, sugar and salt; and other essential commodities. Nearly 16 of these 30 commodities are primary articles, 12 manufactured products and 2 belong to fuel and power group. These commodities together have a weight of 17.6 per cent in the WPI and also figure in the consumption basket of CPI-IW (Table 4.7 and Figure 4.7).

4.14 The overall level of prices as reflected in the value of the composite index of the 30 commodities continued to show moderate increase from 201.4 as on April 7, 2007 (1st week of 2007-08) to 207 as on January 19, 2008. Year-on-year inflation, however, moderated from 3.4 per cent in the first week of 2007-08 to 2.5 per cent in the 42nd week, indicating a deceleration of 89 basis points. Inflation was also significantly lower compared to 4.8 per cent as on January 20, 2007. The rate of inflation, however, differed across the seven groups by a wide margin. In case of pulses,

Table 4.7 Inflation as on January 19, 2008, in essential commodities (per cent)

Commodities	Weight (%)	Variations (April-January)				Variations (year-on-year)			
		Cumulative change		Contribution		Inflation		Contribution	
		07-08	06-07	07-08	06-07	07-08	06-07	07-08	06-07
All commodities	100.00	3.2	5.9	100.0	100.0	3.9	6.3	100.0	100.0
Essential commodities	17.63	2.8	3.7	14.6	10.8	2.5	4.8	11.0	13.3
Cereals	4.37	4.1	10.4	1.4	1.1	3.5	9.8	0.9	1.1
Pulses	0.60	-3.8	14.6	-0.4	0.4	-4.1	18.9	-0.5	0.5
Edible oils and vanaspati	1.63	5.7	16.1	0.6	0.6	4.5	15.4	0.5	0.6
Vegetables and spices	0.54	3.3	47.9	0.4	0.7	2.7	33.2	0.1	0.8
Dairy, fisheries & animal pdts.	5.31	0.7	0.5	2.5	1.0	3.2	0.4	3.2	1.3
Tea, sugar, gur & salt	3.86	-0.1	-0.7	-0.7	-1.2	-2.8	-1.1	-1.2	-0.9
Other essential commodities	1.32	1.7	0.9	0.1	0.0	4.3	2.6	0.2	0.1

Figure 4.7 Essential commodities Index and annual inflation (per cent)

and “tea, sugar, gur and salt” the index witnessed a decline in the current financial year, with inflation measured either on year-on-year basis or as a build-up during the current fiscal year so far turning negative. The deceleration in inflation was also significant for cereals (including atta) and edible oils. The fiscal and administrative measures (reduction in customs duty on edible oils, import of wheat and pulses through PSUs to increase domestic availability and a strict vigil on prices of these products) contributed to this deceleration in inflation. The value of index for the other essential commodities, mainly the manufactured products and two products of the fuel group, remained stable throughout these 10 months. In case of “vegetables and spices”, increase in index up to October 2007 was primarily because of an increase in the prices of onions. With a deceleration in the prices of onions in later months, there was also a moderation in the index and inflation rates.

4.15 Deceleration in the year-on-year inflation for the 30 essential commodities was both on account of base effect and also because of a decline in the index for pulses and “tea, sugar, gur and salt”. Inflation of 30 essential commodities in the current year also remained lower than the overall WPI inflation. Essential commodities contributed 11 per cent of the overall inflation as on January 19, 2008, compared to a contribution of 13.3 per cent in the corresponding period of 2006-07.

Essential commodities – retail prices

4.16 The Department of Consumer Affairs monitors the prices of 16 essential commodities at selected centres throughout the country. These commodities witnessed wide fluctuations in year-on-year inflation in the last five years. In 2007-08 (measured as increase in prices as on January 16, 2008 over January 17, 2007), however, 9 of these commodities witnessed a deceleration in

Table 4.8 Contribution of selected commodity groups to inflation (per cent)

Month/ Year	Head line inflation ^a	Edible Oils ^b	Food Articles	Mineral Oils	Chemical- icals	Cement	Metals	Machinery	Total
2006-07									
Apr	3.9	-8.6	18.5	37.9	9.5	6.3	-3.4	5.4	65.7
May	4.7	-4.9	21.0	35.3	7.1	5.6	0.2	4.3	68.6
Jun	5.1	-3.7	24.9	39.0	8.6	5.3	0.7	4.6	79.3
Jul	4.8	-4.3	13.9	35.1	9.4	5.9	8.3	5.3	73.7
Aug	5.1	-2.1	15.9	36.1	6.8	5.7	8.7	5.3	76.3
Sep	5.4	0.1	25.7	18.3	6.8	5.0	9.1	4.8	69.8
Oct	5.5	1.3	24.6	13.1	4.9	4.9	11.2	6.3	66.3
Nov	5.5	6.2	21.3	11.0	4.8	5.3	12.8	7.7	69.1
Dec	5.7	13.4	23.8	7.3	5.2	5.3	14.1	8.4	77.5
Jan	6.4	15.2	23.0	7.0	4.8	4.2	20.9	7.8	83.0
Feb	6.4	17.3	24.8	3.5	4.8	3.7	22.6	7.9	84.6
Mar	6.6	18.7	23.6	2.1	5.8	3.8	22.0	8.0	83.9
2007-08									
Apr	6.3	21.1	24.9	1.2	7.7	2.8	17.5	8.5	83.7
May	5.5	21.6	25.1	-0.6	10.5	2.9	17.1	10.2	86.7
Jun	4.5	26.3	18.4	-8.1	11.0	3.7	20.0	11.9	83.3
Jul	4.7	28.1	31.8	-11.2	9.6	3.7	12.8	11.8	86.5
Aug	4.1	29.7	31.7	-15.0	13.5	4.2	11.6	12.8	88.5
Sep	3.5	33.9	22.8	-12.7	17.7	6.0	14.4	15.5	97.5
Oct	3.1	38.3	15.2	-7.2	20.6	6.2	12.8	14.7	100.5
Nov	3.3	34.5	12.7	4.6	19.5	5.3	10.9	13.5	101.0
Dec	3.6	27.6	13.1	15.7	17.3	4.9	7.8	10.3	96.8

a Inflation and contribution of commodities are based on monthly averages.

b Includes edible oils, oilseeds and oilcake.

inflation compared to a deceleration in prices of 4 commodities in the previous year. Highest inflation of 28.5 per cent was recorded for tur dal. An

increase in the rate of inflation was observed for rice, groundnut and mustard oil, milk and salt (both in packets and loose) (Table 4.9).

Table 4.9 Average retail prices of essential commodities

Commodities	Retail prices (Rs. /kg.)									
	14-1-2004	19-1-2005	18-1-2006	17-1-2007	16-1-2008	14-1-2004	19-1-2005	18-1-2006	17-1-2007	16-1-2008
	Prices (Rs/kg)					Year-on-year inflation (per cent)				
Rice	10.8	11.4	11.6	12.6	14.3	0.5	5.5	1.9	8.4	13.0
Wheat	10.0	9.8	11.3	13.9	13.3	12.2	-2.1	16.3	22.4	-4.4
Atta	10.9	10.7	12.2	15.2	14.8	NA	-2.0	13.5	24.7	-2.1
Gram	21.8	21.3	27.4	38.2	32.7	1.7	-2.3	28.5	39.4	-14.3
Tur	29.8	29.3	30.3	31.9	40.9	13.7	-1.7	3.4	5.3	28.5
Sugar	15.0	19.1	20.1	18.7	16.2	4.9	27.9	5.2	-7.3	-13.3
Gur	13.9	17.8	18.5	18.0	17.0	10.1	28.1	3.8	-2.4	-5.7
Groundnut oil ^a	66.9	63.6	62.9	72.4	84.9	11.9	-5.0	-1.0	15.1	17.3
Mustard oil ^a	60.2	56.5	53.8	58.8	65.3	14.7	-6.1	-4.8	9.2	11.0
Vanaspati ^a	49.7	49.5	46.6	54.0	57.4	9.2	-0.4	-6.0	15.9	6.4
Tea (loose)	113.8	112.8	114.4	123.1	128.0	-0.1	-0.9	1.4	7.6	4.0
Milk ^a	15.8	16.4	16.5	17.5	19.4	NA	3.8	0.2	6.2	10.9
Potato	5.8	6.5	9.5	10.5	10.5	3.6	12.1	46.2	11.0	0.4
Onion	11.9	7.9	8.7	12.2	11.2	111.6	-33.5	10.6	39.6	-8.2
Salt (pack) ^b	6.7	6.6	7.2	7.6	8.3	3.3	-0.9	8.6	6.0	9.2
Salt (loose)	2.5	2.7	2.8	3.1	3.4	-5.3	6.8	6.0	9.9	9.6

^a (Rs./lt.). ^b Iodized. NA: Not Available.

Consumer price index and other price indicators

4.17 The commodity composition of the Consumer Price Indices significantly differ from the Wholesale Price Index and also across the other group specific CPIs. Because of a different commodity composition and weights assigned to various commodities and services in the CPIs, inflation measured in terms of Consumer Price Indices and Wholesale Price Index differ significantly over the months.

4.18 From a long-term perspective, however, inflation as measured in terms of WPI and CPIs seems to be converging. Reconstructing the WPI and CPIs, including the GDP consumption deflator with a common 1999-2000 base, reveals that the cumulative increase in inflation during the year 1999-2000 to 2006-07 was the highest for the Wholesale Price Index. There, however, were inter

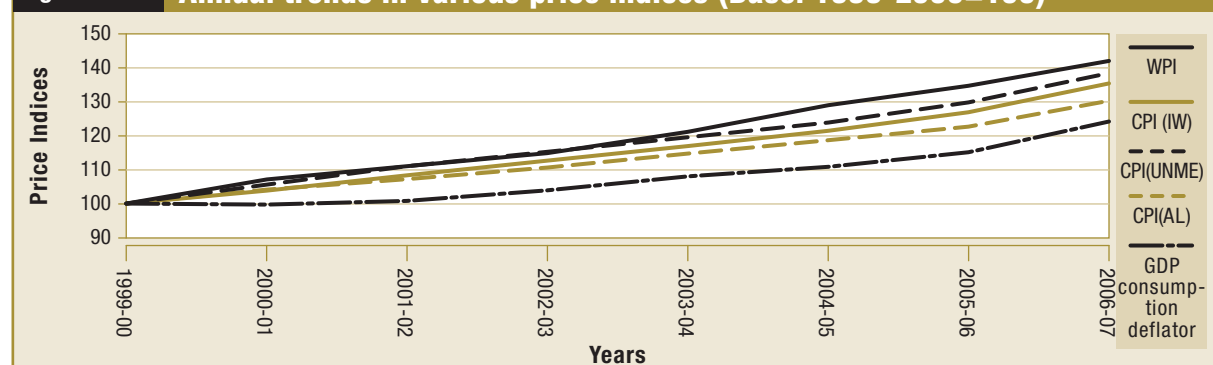
year variations in the rate of inflation based on these indices. But, over the years, the difference seemed to be narrowing considerably. The average difference between monthly rate of inflation, measured in terms of WPI and CPI-IW, during 2001-02 to 2007-08 (up to December) was only 5 basis points and between WPI and CPI-UNME was 3 basis points. While the inflation measured in terms of WPI remained higher compared to the CPIs in 2003-04 and 2004-05, it was lower than these indices during 2006-07. General converging of overall indices, measuring changes in prices notwithstanding their year-on-year variations, indicates a strong association in inflation, both in its acceleration and deceleration phase across all these indices (Table 4.10 and Figure 4.8).

4.19 There is, however, no aggregate, broad-based CPI in India. While considering shifting the present base of CPI-UNME, the Technical Advisory

Table 4.10 Annual trends in various price indicators

Year / Indices	WPI	CPI-IW	CPI-UNME	CPI-AL	CPI-RL	GDP consumption deflator
Price indices based on 1999-2000=100						
1999-00	100.0	100.0	100.0	100.0	100.0	100.0
2000-01	107.1	103.8	105.6	99.7	100.0	103.5
2001-02	111.0	108.3	111.0	100.8	101.4	106.8
2002-03	114.8	112.6	115.2	103.9	104.5	109.8
2003-04	121.1	116.9	119.5	108.0	108.5	113.8
2004-05	128.9	121.4	123.8	110.8	111.3	117.0
2005-06	134.6	126.8	129.7	115.1	115.6	120.5
2006-07	141.9	135.3	138.3	124.1	124.3	126.7
Year-on-year Inflation (in per cent)						
2000-01	7.1	3.8	5.6	-0.3	0.0	3.5
2001-02	3.6	4.3	5.1	1.1	1.3	3.2
2002-03	3.4	4.0	3.8	3.2	3.1	2.9
2003-04	5.5	3.9	3.7	3.9	3.8	3.6
2004-05	6.5	3.8	3.6	2.6	2.6	2.8
2005-06	4.4	4.4	4.7	3.9	3.9	3.0
2006-07	5.4	6.7	6.6	7.8	7.5	5.1

Figure 4.8 Annual trends in various price indices (Base: 1999-2000=100)



Committee on Statistics of Prices and Cost of Living in its 44th Meeting decided that (i) the resources proposed to be utilized for revision of CPI-UNME may be used for compilation of CPI numbers separately for rural and urban, and (ii) existing series of CPI-UNME may be continued without revision till CPI (Urban) series gets stabilized. The Central Statistical Organisation has already initiated steps to bring out CPI (Urban).

Real estate/housing price index

4.20 Rapid urbanization and high economic growth experienced by the urban centres in the last few years has resulted in an upsurge in property values. The importance of facilitating supply of affordable housing to the people and the necessity of designing a right mix of policy initiatives to encourage house acquisition highlight the necessity of tracking the movement of residential house prices. Moreover, the real estate assets are a significant component of the wealth of the private sector and financial freedom allowed for acquiring this wealth is one of the important financial obligations of this sector. For the financial

intermediaries also, lending for residential houses has been a significant component of their credit portfolio. The authentic data on the real estate sector in the country, development of a credible database on market driven price trends and price index of market-segments have, therefore, emerged as crucial elements of market development and for enhancing the efficiency of market processes. The National Housing Bank (NHB) had earlier set up a Technical Advisory Group (TAG) to explore the possibility of constructing a real estate price index. TAG has since submitted its report and have provided index of housing prices in five cities for 2000-05 on a pilot basis.

4.21 The housing prices in the five selected cities have increased between 12.1 per cent (KMA) and 28.8 per cent (Bangalore) [per year on an average basis], over the last five years and inter-year and inter-city variations have been quite significant. These results are only indicative as they are based on a pilot study. NHB, however, is setting up an institutional mechanism for releasing an economy-wide housing price index on a regular basis.

Table 4.11 Housing price index for selected cities

City	2001	2002	2003	2004	2005
Delhi City	100	106	129	150	201
Mumbai Metropolitan Region	100	116	132	149	178
GMCC	100	119	136	159	198
OM	100	114	130	141	163
Kolkata Metropolitan Region	100	115	129	148	172
Kolkata MC	100	120	136	159	192
KMA	100	111	125	139	158
Bangalore City	100	133	170	224	275
Bhopal City	100	120	136	154	179

GMCC: Greater Mumbai City Corporation; OM: Other Municipalities (Mumbai); KMC: Kolkata Municipal Corporation; KMA: Kolkata Municipality Area; Based on the housing price index of five cities, the annual increase in the housing prices has been as indicated in Table 4.12.

Table 4.12 Housing price inflation in selected cities (year-on-year, per cent)

City	2002	2003	2004	2005	Annual average
Delhi City	6.0	21.7	16.3	34.0	19.1
Mumbai Metropolitan Region	16.0	13.8	12.9	19.5	15.5
GMCC	19.0	14.3	16.9	24.5	18.6
OM	14.0	14.0	8.5	15.6	13.0
Kolkata Metropolitan Region	15.0	12.2	14.7	16.2	14.5
Kolkata MC	20.0	13.3	16.9	20.8	17.7
KMA	11.0	12.6	11.2	13.7	12.1
Bangalore City	33.0	27.8	31.8	22.8	28.8
Bhopal City	20.0	13.3	13.2	16.2	15.7

MONETARY POLICY

4.22 The changes in the domestic and global economy, impacting the price level and financial stability, pose serious challenges in the conduct of monetary policy. The major thrust of the monetary policy has been to facilitate the growth of the economy in a non-inflationary environment. The Annual Policy Statement (APS) and its quarterly reviews by the Reserve Bank of India (RBI) are the principal modes of communicating policy signals to the system.

4.23 The APS for 2006-07 (April 2006) was formulated in the wake of higher real GDP growth and with a relatively lower rate of inflation than the preceding year. The APS 2006-07 had placed real GDP growth in the range of 7.5 to 8 per cent, rate of inflation in the range of 5 to 5.5 per cent. Broad money (M_3) was expected to expand by around 15 per cent and non-food credit growth was assumed at 20 per cent. Actual performance of these parameters during 2006-07 was in fact much higher. Real GDP growth was 9.6 per cent, annual rate of inflation was 5.9 per cent, M_3 grew by 21.3 per cent and non-food credit by 28.4 per cent.

4.24 The year 2006-07 was marked by a surge in headline inflation during January 2007, volatility in financial markets in the fourth quarter of 2006-07 and sizeable swings in liquidity. In spite of hardening of interest rates, the industrial sector was buoyant, leading to rapid expansion in non-food credit. The high level of capital inflows, which led to surge in the net foreign exchange assets (NFA) of the RBI, had implications for rupee liquidity in the system. In response, changes were made in the repo and reverse-repo rates. By March 31, 2007, the fixed repo rate was raised to 7.75 per cent. Cash Reserve Ratio (CRR) was also raised by 25 basis points on four occasions during the year, thereby bringing it to 6 per cent on March 3, 2007 (Table 4.19).

4.25 Against this background, RBI articulated its monetary policy stance for 2007-08 in APS (April 2007). The policy recognized the need to manage the transition to a higher growth path while at the same time containing inflationary pressures. For policy purposes, the RBI assumed that real GDP for the year to grow at 8.5 per cent, inflation close to 5 per cent, and monetary

expansion in the range of 17-17.5 per cent. The Annual Policy Statement placed primacy on price and financial stability. It also focused on greater credit penetration and financial inclusion.

4.26 The RBI in its mid-term review of the APS 2007-08 reiterated the policy stance announced in April 2007 with an additional resolve "to be in readiness to take recourse to all possible options for maintaining stability and the growth momentum in the economy in view of the unusual heightened global uncertainties, and the unconventional policy responses to the developments in financial markets". During the year the RBI changed its policy rates from time to time excepting the bank rate (Box 4.1).

MONETARY DEVELOPMENTS – TRENDS

4.27 A brief overview of select monetary parameters indicates that, during the year 2007-08, the growth in Reserve Money (M_0) as also of Broad Money (M_3) have been higher compared to the last year; the growth in Narrow Money (M_1) has, however, been lower during the current year (Table 4.13).

Reserve money (M_0)

4.28 Reserve money growth accelerated sharply in 2006-07 and in the first nine months of 2007-08. In both the years, the NFA of RBI was the main driver of this growth. Reserve Money (M_0) grew by 23.7 per cent in 2006-07 compared to 17.2 per cent during 2005-06. A dramatic spurt in capital inflows led to 28.7 per cent growth of RBI's NFA in 2006-07. As regards the other source of M_0 , namely, Net Domestic Assets (NDA), it declined during the year. The RBI credit to the Government was in the nature of liquidity management rather than proactive financing of fiscal deficit of the Government. The RBI net credit to Central Government declined by Rs. 3,023 crore in 2006-07 as compared to an increase of Rs. 28,417 crore during 2005-06. This owed mainly to an increase in deposits of the Centre [higher balances under Market Stabilization Scheme (MSS)].

4.29 The acceleration in reserve money growth continued in 2007-08. The expansion in M_0 (up to January 4, 2008) was 13.6 per cent compared to

Box 4.1 Annual Policy Statement for the Year 2007-08**Annual Policy Statement at a glance**

- Reverse repo rate and repo rate kept unchanged at 6 per cent and 7.75 per cent, respectively.
- Cash Reserve Ratio (CRR) hiked to 6.50 per cent earlier with effect from the fortnight beginning April 28, 2007, prevailing from 6.25 per cent.
- Ceiling interest rate on NR(E)RA deposits reduced by 50 basis points to LIBOR/SWAP rates.
- Ceiling interest rate on FCNR(B) deposits reduced by 50 basis points to LIBOR minus 75 basis points.
- Average cut-off yield on 182-day Treasury Bills to be used as a benchmark rate for floating rate bonds.
- Overseas investment limit (total financial commitments) for Indian companies enhanced to 300 per cent of their net worth.
- Listed Indian companies limit for portfolio investment abroad in listed overseas companies enhanced to 35 per cent of net worth.
- Aggregate ceiling on overseas investment by mutual funds enhanced to US\$ 4 billion from US\$ 3 billion.
- Prepayment of external commercial borrowings (ECBs) without prior RBI approval increased to US\$ 400 million.
- Limit for individuals for any permitted current or capital account transaction increased from US\$ 50,000 to US\$ 1,00,000 per financial year in the liberalized remittance scheme.
- Risk weight on residential housing loans to individuals for loans up to Rs. 20 lakh reduced to 50 per cent as a temporary measure.
- Ceiling rate of interest payable by NBFCs (other than RNBCs) on deposits raised by 150 basis points.

Mid-term review

- CRR increased by 50 basis points to 7.5 per cent effective fortnight beginning November 10, 2007.
- Covering of "Short-sale" and "When issued" transactions to be permitted outside the Negotiated Dealing System-Order Matching (NDS-OM) system.
- Reinstatement of the eligible limits under the past performance route for hedging facility to be permitted.
- Oil companies to be permitted to hedge foreign exchange exposure by using overseas over-the-counter (OTC)/exchange traded derivatives up to a maximum of one year forward.
- Importers and exporters having foreign currency exposures to be allowed to write covered call and put options in both foreign currency/rupee and cross currency and receive premia.

Table 4.13 Summary data on select monetary and banking parameters

Items	Growth rates				
	2006-07	as on January 4, 2008			
		Financial year basis		Year-on-year basis	
		2007-08	2006-07	2007-08	2006-07
M ₀	23.7	13.6	9.1	28.7	19.3
M ₁	16.8	4.9	6.4	15.2	18.2
M ₃	21.3	13.3	12.2	22.4	20.8
NFA of RBI	28.7	25.2	15.9	39.1	26.1
SCBs credit					
(a) Food	14.3	-11.3	5.9	-4.2	0.0
(b) Non-food	28.4	11.8	17.5	22.2	31.9
(c) Total	28	11.3	17.2	21.5	30.8
Memo items			Variation (Rs. crore)		
NDA of RBI	-57211	-122296	-54406	-125102	-60277
Net RBI credit to Central Government	-3023	-152414	-6079	-149358	-19845

Table 4.14 Sources of change in reserve money

1	Growth rate				
	2	Financial year		Year-on-year	
		January 5, 2007	January 4, 2008	January 5, 2007	January 4, 2008
		over March 31, 2006	over March 31, 2007	over January 6, 2006	over January 5, 2007
3	4	5	6		
Reserve Money	23.7	9.1	13.6	19.3	28.7
A Components					
(a) Currency in circulation	17.1	11.7	10.3	17.0	15.5
(b) Bankers' deposits with RBI	45.6	2.6	23.8	28.2	75.8
(c) "Other" deposits with RBI	9.1	-22.4	-33.7	15.1	-6.7
B Select sources of Reserve Money					
1. Net foreign exchange assets of RBI	28.7	15.9	25.2	26.1	39.1
2. Government's currency liabilities to the public	-5.3	-6.8	6.8	-5.6	8.5
3. Net non-monetary liabilities of RBI	45.4	36.5	-22.3	33.0	-17.2

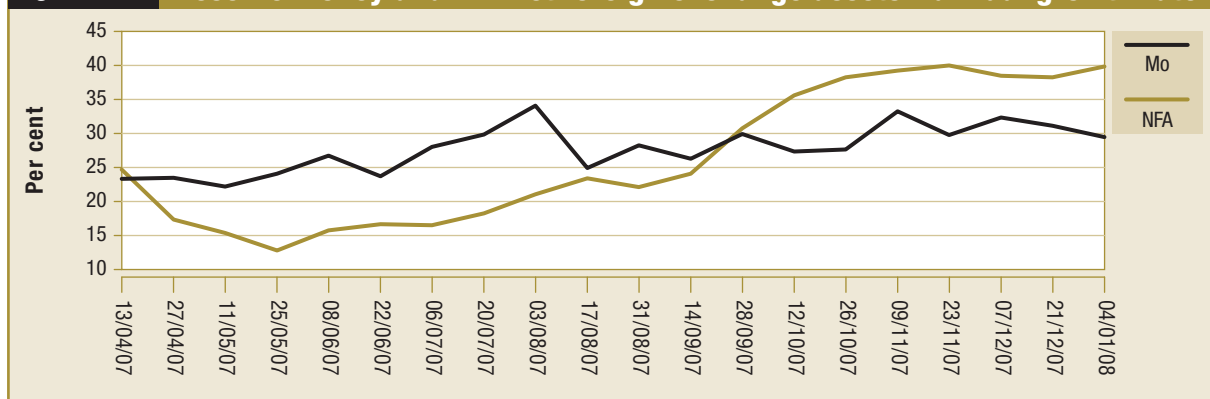
9.1 per cent during the corresponding period of the previous year. The main driver of growth of M_0 continued to be NFA of the RBI, which expanded by 25.2 per cent during this period compared to an expansion of 15.9 per cent during the same period of the previous year. The NFA of the RBI, on year-on-year basis as on January 4, 2008, expanded by 39.1 per cent as against 26.1 per cent on the corresponding date of the previous year (Figure 4.9). The net RBI credit to the Central Government declined by Rs. 1,52,414 crore (up to January 4, 2008), continuing the trend observed towards the end of 2006-07. On the year-on-year basis, decline in the net RBI credit to the Central Government, as on January 4, 2008, was Rs. 1,49,358 crore as compared to the decline of Rs.

19,845 crore on the corresponding date of the previous year.

4.30 The share of NFA of RBI in the aggregate reserve money as on March 31, 2007 was 122.2 per cent which further increased to 134.7 per cent on January 4, 2008. The ratio of NFA to currency in circulation which was 171.8 per cent at end March 2007 also increased as on January 4, 2008 to 195.1 per cent.

Liquidity management

4.31 During 2006-07, the RBI continued its policy of proactive short-term liquidity management through the use of the available policy instruments. RBI resorted to both repo and reverse repo operations depending upon the liquidity conditions in the market. On a net basis, the Liquidity

Figure 4.9 Reserve Money and RBI net foreign exchange assets - annual growth rate

Adjustment Facility (LAF) (consisting of repo and reverse repo) operations resulted in the net injection of Rs. 36,435 crore during 2006-07.

4.32 Figure 4.10 depicts the mean, standard deviation and coefficient of variation (CV) in the interbank call money rates during each month of 2007. It shows that 2006-07 ended with low liquidity in both January and February, with call money rates averaging around 7.5 per cent and a further tightening of liquidity in March 2007 with call money rates averaging over 13.5 per cent moving well outside the informal corridor set by the repo and reverse repo rates. The latter was partly because RBI tightened liquidity through the LAF facility and partly because of advance tax payments that take place every March.

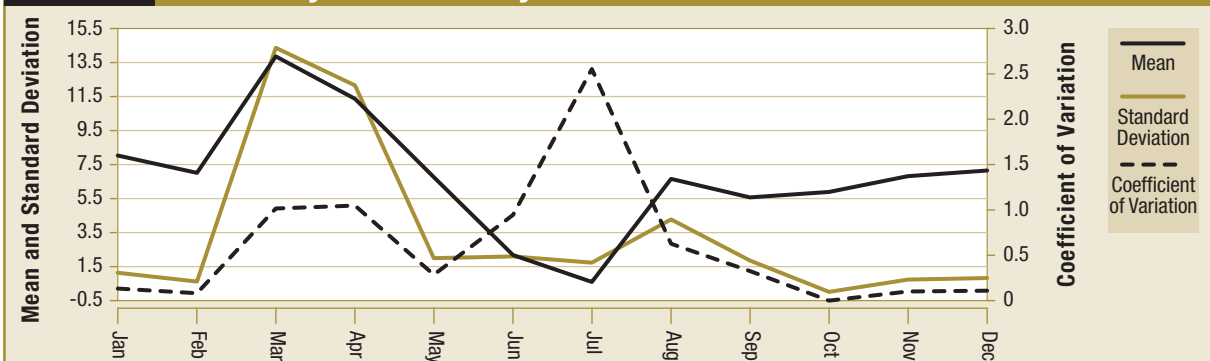
4.33 The liquidity situation eased during early 2007-08 and then became excessively easy. Liquidity was fairly tight in April 2007, with call money rates averaging a little less than 11.5 per cent. Indications of sharp liquidity easing were offset by a two-step (25 basis points each) hike in the CRR to 6.25 and 6.5 per cent, effective from April 14, 2007 and April 28, 2007, respectively. It improved considerably in May with call money rates falling sharply to an average of about 5.5 per cent. Liquidity was excessively easy in June and July 2007 with call money rates falling to an average of around 2 per cent and 1 per cent, respectively. The LAF therefore switched to an absorption mode in July 2007 with a net increase in balances by Rs. 2,992 crore (Table 4.16). There was also a sharp increase in volatility in call money markets in July, with the CV more than doubling (Figure 4.10) perhaps because of uncertainty about RBI's future policy stance. This became clear as net absorption through LAF increased sharply to Rs 16,855 crore in August and call money rates rose to an average of over 6.5 per cent.

Table 4.15**MSS ceiling and threshold limit profile**

(Rs. Crore)		
Date	Ceiling	Threshold
01-04-2004 (introduced)	60,000	50,000
26-08-2004	80,000	70,000
24-03-2006	70,000	60,000
30-03-2007	80,000	70,000
27-04-2007	1,10,000	95,000
08-08-2007	1,50,000	1,35,000
04-10-2007	2,00,000	1,85,000
07-11-2007	2,50,000	2,35,000

Consequently, volatility declined even more sharply than it had risen. During the last five months of 2007 call money rates have been relatively stable at a monthly average of 5.5 to 7.5 per cent, and volatility has declined to negligible levels. During this period the LAF facility has been used flexibly to manage short-term liquidity, on average being in injection mode in September, November and December and in absorption mode in October.

4.34 The RBI, on review of macroeconomic and overall monetary and liquidity situation, announced the withdrawal of the ceiling of Rs. 3,000 crore on daily reverse-repo under LAF and abolition of second LAF with effect from August 6, 2007. Consequently, the balances under LAF rose from Rs. 2,997 crore on August 3, 2007, to Rs. 19,625 crore on August 10, 2007, and further to Rs. 57,480 crore on October 4, 2007. From November 16, 2007, again, there was liquidity tightening with the net injection of Rs. 30,655 crore through repo window of LAF. As on January 30, 2008, amount absorbed under LAF stood at Rs. 24,675 crore indicating a comfortable liquidity situation in the system.

Figure 4.10 Call money rates: monthly mean and intra month variation

4.35 With the continuing surge in capital flows during 2007-08 and the need to regulate the domestic liquidity, the MSS limits were periodically revised by RBI in consultation with the Central Government (Table 4.15).

4.36 At end-April 2007, the amount absorbed under MSS was 9.4 per cent of the foreign currency assets of the RBI, which rose to 13.8 per cent at end-September 2007 and by end-December 2007 it further increased to 15.2 per cent (Table 4.16,

Figure 4.11). Thus, during April-December 28, 2007, liquidity absorbed under MSS was Rs. 96,742 crore with outstanding balances rising to Rs. 1,59,717 crore at end December 2007.

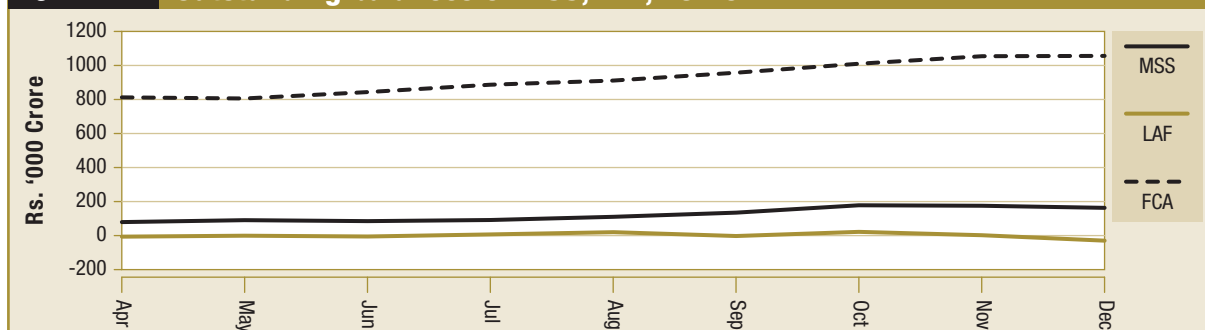
4.37 The sterilization also entails substantial cost to the exchequer in the form of interest payment. Accordingly, the Central Government has raised the budgetary provision on this head from Rs. 3,700 crore in BE 2007-08 to Rs. 8,200 crore through supplementary demands for grants for the year 2007-08.

Table 4.16 Outstanding balances of MSS and LAF (as on last Friday of the month)

(Rs. crore)

Months	MSS	LAF	FCA of RBI	As per cent of FCA of RBI	
				MSS	LAF
Mar 06	29062	7250	647327	4.5	1.1
2006-07					
April	25223	62075	690730	3.7	9.0
May	27817	57245	713007	3.9	8.0
June	33295	42565	718701	4.6	5.9
July	38995	48155	731320	5.3	6.6
August	42364	23985	736438	5.8	3.3
September	42064	1915	727733	5.8	0.3
October	40091	8110	724586	5.5	1.1
November	37917	15995	745118	5.1	2.1
December	37314	-2515	752738	5.0	-0.3
2007-08					
January	39375	-11445	760855	5.2	-1.5
February	41807	6940	824174	5.1	0.8
March	62975	-11900	836597	7.5	-1.4
2007-08					
April	75924	-9996	808573	9.4	-1.2
May	87319	-4690	801600	10.9	-0.6
June	81137	-8895	839913	9.7	-1.1
July	88010	2992	882854	10.0	0.3
August	106434	16855	907301	11.7	1.9
September	131473	-6070	953581	13.8	-0.6
October	174277	18135	1006040	17.3	1.8
November	171468	-1320	1050165	16.3	-0.1
December	159717	-33865	1052129	15.2	-3.2

Figure 4.11 Outstanding balances of MSS, LAF, FCA of RBI



Narrow money (M_1)

4.38 M_1 growth has been decelerating in both 2006-07 and 2007-08, in contrast to both base money and M_3 . It expanded by 16.8 per cent in 2006-07 compared to an expansion of 21.1 per cent during 2005-06. Among the major components of M_1 , currency with the public increased by 17 per cent in 2006-07, in conformity with higher economic activities during 2006-07 as against the expansion of 16.4 per cent during 2005-06. But demand deposits with banks grew at a much slower rate of 16.7 per cent in 2006-07 compared to 26.5 per cent in the previous year. This lower growth in demand deposits was largely due to the aggressive strategy adopted by banks to augment their time deposits segment to match robust credit expansion during 2006-07.

4.39 M_1 grew at a significantly lower rate of 4.9 per cent on financial year basis (up to January 4, 2008) compared to 6.4 per cent during the corresponding period of the previous year. On year-on-year basis also, on January 4, 2008, M_1 grew at a slower rate of 15.2 per cent compared to 18.2 per cent on January 5, 2007 (Figure 4.12). During the current financial year (up to January 4, 2008) currency with the public expanded by 10.7 per cent over end-March 2007 (Rs. 51,720 crore) compared to the expansion of 12.5 per cent (Rs. 51,827 crore) during the corresponding period of the previous year. On year-on-year basis, on January 4, 2008, the growth of this component was lower at 15.1 per cent compared to 16.8 per cent on the corresponding date of the previous year. The other important component of M_1 , viz., demand deposits with banks, witnessed a decline

during the period up to January 4, 2008; it posted a decline of 0.4 per cent compared to an increase of 0.5 per cent during the corresponding period of the previous year.

Broad money (M_3)

4.40 The increase in inflationary pressures in the middle of 2006-07 has been attributed in part to the acceleration in M_3 growth during 2006-07. Broad money (M_3) supply increased by 21.3 per cent during 2006-07 which was higher than both the targeted growth of 15 per cent envisaged in the APS for 2006-07 as well as 17 per cent observed for 2005-06. The growth in M_3 was associated with continued robust growth in the net domestic credit (NDC) of the banking sector at 20.4 per cent in 2006-07 on top of 18.3 per cent growth during 2005-06; the growth in NDC was still predominantly accounted for by credit to commercial sector which grew by 25.4 per cent, in spite of hardening of interest rates during the year. The growth in credit to commercial sector was much higher than 20 per cent envisaged in the APS for 2006-07 but was lower than 27.2 per cent achieved in 2005-06. The NFA of the banking sector also registered a substantial growth of 25.7 per cent in 2006-07 compared to 12.1 per cent during 2005-06.

4.41 M_3 growth during 2007-08 has been running ahead of the target as well as the growth of the previous year. During the current financial year 2007-08, up to January 4, 2008, the growth in M_3 was 13.3 per cent as compared to 12.2 per cent during the corresponding period of the previous

Figure 4.12 Narrow Money (M_1) – annual growth rate (per cent)

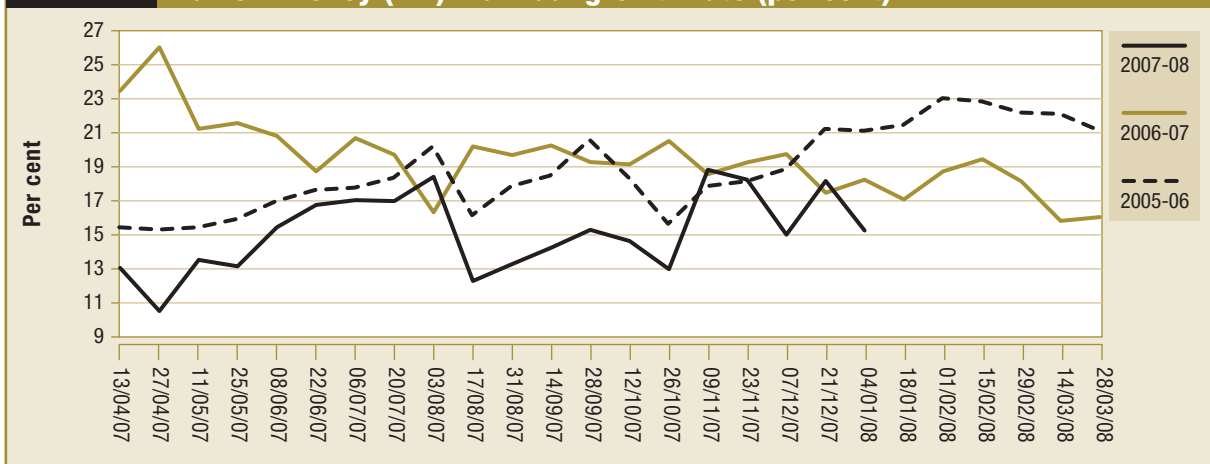


Table 4.17 Sources of change in money stock (M_3)

	Growth rate				
	March 31, 2006 to March 31, 2007	March 31, 2006 to January 5, 2007	March 31, 2007 to January 4, 2008	January 6, 2006 to January 5, 2007	January 5, 2007 to January 4, 2008
1	2	3	4	5	6
	Per cent				
I. M_1 (Narrow Money)	16.8	6.4	4.9	18.2	15.2
II. M_3 (Broad Money) (1+2+3+4)	21.3	12.2	13.3	20.8	22.4
1. Currency with the public	17.0	12.5	10.7	16.8	15.1
2. Demand deposits with banks	16.7	0.5	-0.4	19.9	15.6
3. Time deposits with banks	23.2	14.8	16.7	21.8	25.3
4. "Other" deposits with RBI	9.1	-22.4	-33.7	15.1	-6.7
III. Sources of change in money stock (M_3)	21.3	12.2	13.3	20.8	22.4
1. Net bank credit to Government of which:	9.3	5.3	0.9	3.3	4.8
Other banks credit to Government	9.8	6.4	19.6	5.9	23.3
2. Bank credit to commercial sector	25.4	15.8	10.9	28.0	20.2
A. RBI's credit to commercial sector	10.8	7.1	-10.0	7.1	-6.9
B. Other banks' credit to commercial sector	25.4	15.8	10.9	28.0	20.2
3. Net foreign exchange assets of the banking sector	25.7	16.2	22.1	28.0	32.1
4. Government's currency liabilities to the public	-5.3	-6.9	6.8	-5.6	8.5
5. Banking sector's net non-monetary liabilities other than time deposits	23.2	19.5	0.4	25.2	3.5
Memo Items					
1. Money multiplier (M_3/M_0)	4.67	-	-	4.90	4.66
2. Velocity of money	1.39	-	-	-	-
3. Net domestic assets	19.7	10.8	9.9	18.2	18.7
4. Net domestic credit	20.4	12.5	8.1	19.6	15.7

Note: Velocity of money pertains to 2006-07.

year. A shift in the drivers of M_3 has, however, been observed, with the increase in the contribution of NFA of the banking system. The NFA and NDA (NDC plus Government's currency liabilities to the public and non-monetary liabilities of the banking sector) contributed 6.1 percentage points and 7.2 percentage points, respectively, to the overall growth of 13.3 per cent of M_3 ; this contrasts with the 4.3 percentage points and 7.9 percentage points contribution of the same parameters, respectively, to the growth of M_3 at 12.2 per cent in 2006-07.

4.42 On a year-on-year basis, M_3 grew by 22.4 per cent on January 4, 2008, compared to 20.8 per cent on the corresponding date of the previous

year (Table 4.17). Among the sources of M_3 , bank credit to commercial sector decelerated (Figures 4.13 and 4.14). The RBI had visualized expansion in the non-food credit during 2007-08 by around 24-25 per cent compared to 28.4 per cent achieved at end-March 2007. The non-food credit by SCBs in fact grew only by 22.2 per cent as on January 4, 2008. On the other hand, the NFA of the banking sector had on this date increased by 32.1 per cent compared to 28 per cent on the corresponding date of the previous year due to robust capital inflows and the purchases in the forex market by the RBI.

4.43 Time deposits with banks during 2007-08 grew at a higher rate of 16.7 per cent (up to January 4, 2008) compared to 14.8 per cent during

Figure 4.13 Bank credit to commercial sector – annual growth rate (per cent)

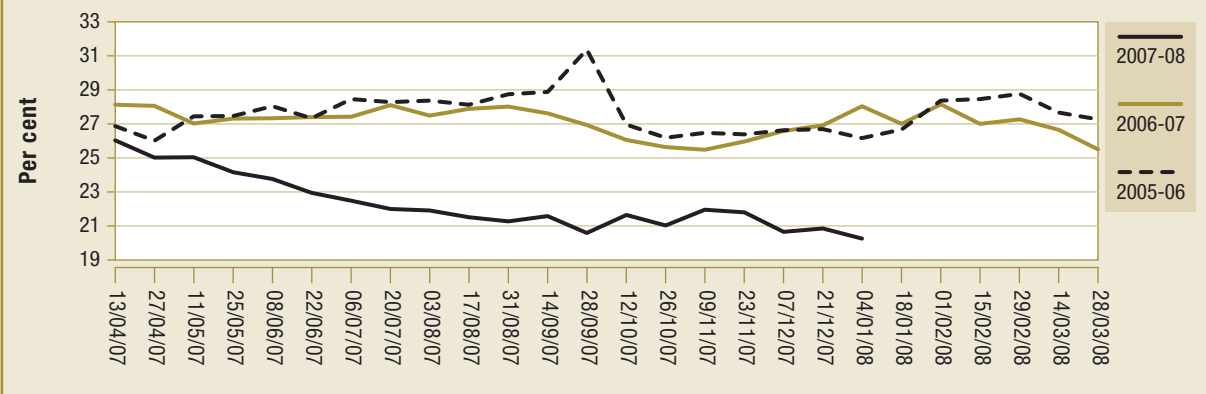
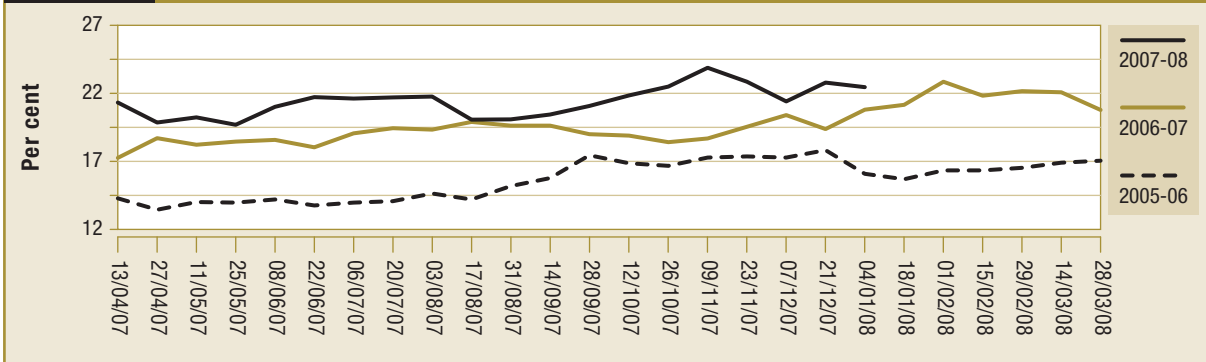


Figure 4.14 Broad Money (M3) – annual growth rate (per cent)

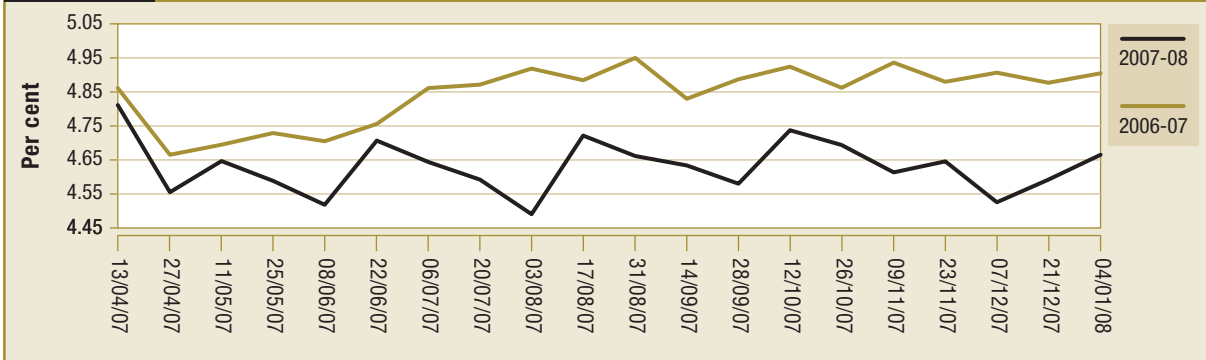


the corresponding period of the previous year. On year-on-year basis the performance was even more impressive, as growth on January 4, 2008 was substantially higher at 25.3 per cent compared to 21.8 per cent on the corresponding date of 2007. Higher accumulation in time deposits with banks can be attributed, among other things, to a hike in interest rates on term deposits of different maturities, extension of tax benefits under section 80C of the Income-tax Act, 1961, and expected higher economic activity. Thus, time deposits have been the major component of the growth of M_3 (Table 4.17).

Money multiplier

4.44 During 2006-07, the expansion in M_0 was faster than that of M_3 . Accordingly the ratio of M_3 to M_0 (money multiplier) showed a decline. At end-March 2007, this ratio was substantially lower at 4.67 compared to 4.76 at end-March 2006. During the current financial year 2007-08, the declining trend in the money multiplier has continued as reserve money is maintaining higher growth than that of the broad money supply. As on January 4, 2008, this ratio was 4.66 compared to 4.90 on the corresponding date of the previous year (Figure 4.15).

Figure 4.15 Movements in money multiplier



Monetization of economy

4.45 The monetary deepening, as measured by the ratio of average M_3 to GDP, increased steadily over the years from 44 per cent in 1990-91 to 68 per cent in 2004-05 and further to 71 per cent in 2006-07. This could be attributed to the spread of banking services in the country as well as fiscal incentives provided by the Government from time to time for savings, which resulted in the rise of time deposits. The monetization of the economy as measured by the ratio of average M_1 to GDP has also shown an upward trend, albeit at slower rate, during this period. In 1990-91, this ratio was 15 per cent, which increased to 17 per cent in 1995-96. But during the period 1996-2000

there was some deceleration in the ratio when it had moved in the range of 16-16.4 per cent but thereafter it once again showed a rising trend and reached the level of about 21 per cent in 2006-07 due to faster expansion of currency with the public (Table 4.18 and Figure 4.16).

Interest rate movements (market) and policy interest rates

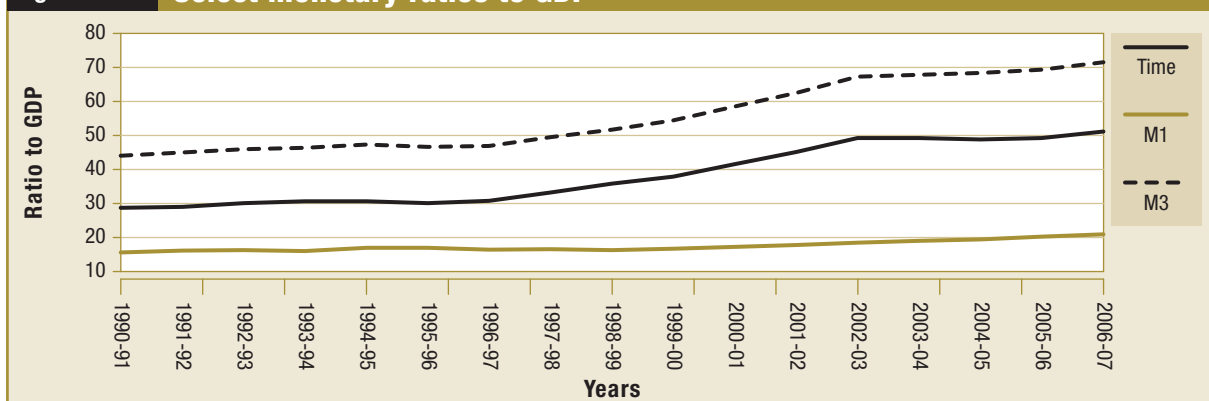
4.46 The continued rapid expansion in bank credit has exerted upward pressure on lending rates as well as on deposit rates of banks. The pressure was more pronounced for longer maturity deposits during 2006-07. Foreign banks had announced the highest increase in rates for term deposits by 300-

Table 4.18 Select monetary aggregates (ratio to GDP)

Year	As per cent of GDPMP					
	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
1999-2000	9.5	6.8	37.7	44.5	16.4	54.1
2000-01	9.6	7.2	41.3	48.5	17.0	58.2
2001-02	10.0	7.4	44.9	52.2	17.5	62.3
2002-03	10.5	7.5	48.9	56.5	18.2	67.0
2003-04	10.7	7.8	48.9	56.7	18.7	67.6
2004-05	10.7	8.2	48.6	56.8	19.2	68.1
2005-06	10.8	9.1	49.0	58.2	20.0	69.1
2006-07	10.9	9.7	50.9	60.6	20.7	71.3

Note: GDPMP-GDP at market prices.

Figure 4.16 Select monetary ratios to GDP



335 basis points, followed by public sector banks (PSBs) by 225-275 basis points and private sector banks by 175-200 basis points.

4.47 During 2007-08 (up to January 2008), PSBs reduced their deposit rates, particularly for short-term maturity (up to one year) by 25 basis points. They, however, increased deposit rates by 50-75 basis points over the level observed in March 2007 at the lower end of maturities of one year and above. The interest rates for such deposits were in the range of 8-9.25 per cent in January 2008. Private sector banks' deposit rates for up to one-year maturity declined from the range of 3-9 per cent to 2.5- 8.5 per cent during the period. Foreign banks too reduced such rates from 3-9.5 per cent to 2-9.25 per cent in this period.

4.48 During 2006-07, Benchmark Prime Lending Rate (BPLR) of SCBs hardened by 100-250 basis points. But in view of competition among banks, a substantial share of lending was at sub-BPLR rates. During the year the share of sub-BPLR lending increased from 69 per cent at end-March 2006 to 79 per cent at end-March 2007. This, however, raises questions about the definitions and meaning of BPLR.

4.49 The BPLR of PSBs and private sector banks increased from the range of 12.25-12.75 per cent and 12-16.5 per cent, respectively, at end March 2007 to the range of 12.5-13.5 per cent and 13-16.5 per cent, respectively, at end January 2008. The BPLR of foreign banks remained unchanged in the range of 10-15 per cent during the same period.

4.50 The yields on primary issues of Treasury Bills (TBs) witnessed a rising trend during 2006-07, in conformity with the medium-term trend in

money market rates. The primary yield on 91-day TBs hardened by 187 basis points while those on 364-day TBs hardened by 156 basis points. Consequently, both ended the year at identical primary yield of 7.98 per cent. Much of the rise occurred in the first three months and the last four months of 2006-07.

4.51 Treasury Bills yields in the primary market remained high during the first quarter of 2007-08. The year started with yields for 91-day TBs, 182-day TBs and 364-day TBs in the first auction of the financial year being quoted at 7.94 per cent, 7.99 per cent and 7.70 per cent, respectively. Thereafter the movements in the yields generally followed the trend set in the money market. The yields declined in July, reflecting easy liquidity in the system due to the prevalence of ceiling of Rs. 3,000 crore for absorption under LAF for reverse-repo transactions. The yields firmed up subsequently on the removal of this limit of absorption through reverse-repo and monetary measures. As on January 2, 2008, the yield on 91-day TBs and 364-day TBs were quoted at 7.02 per cent and 7.39 per cent, respectively (Figures 4.17 and 4.18).

4.52 Real yields on TBs have been on a rising trend throughout 2007-08 except for a short dip in July 2007. The real yield to maturity, derived by adjusting for the rate of inflation based on the nearest WPI index, was 1.35 per cent as on March 28, 2007, both for 91-day and 364-day TBs. The decline in the rate of inflation during the latter half of 2007-08 and the hardening of the nominal yields on these TBs led to higher real yield. Real yield movements for 364-day TBs broadly followed the trend observed for 91-day TBs. As on January 4, 2008, the real yield on 91-day and 364-day TBs

Figure 4.17 91 day Treasury bills – yield to maturity at auction

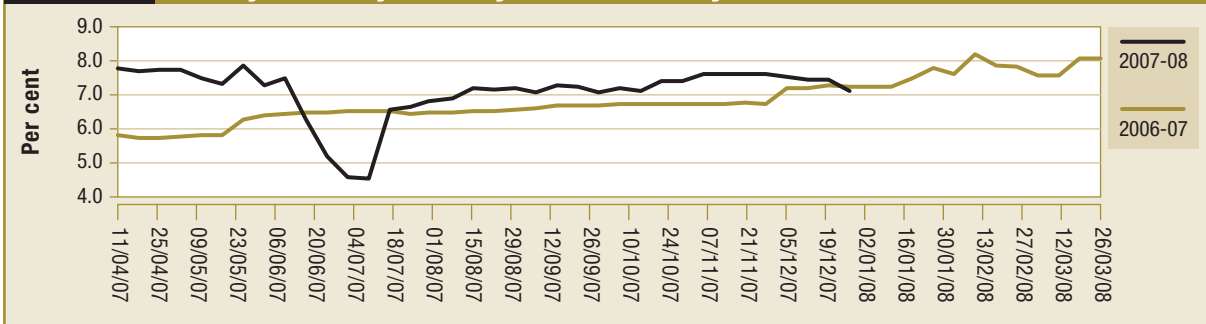
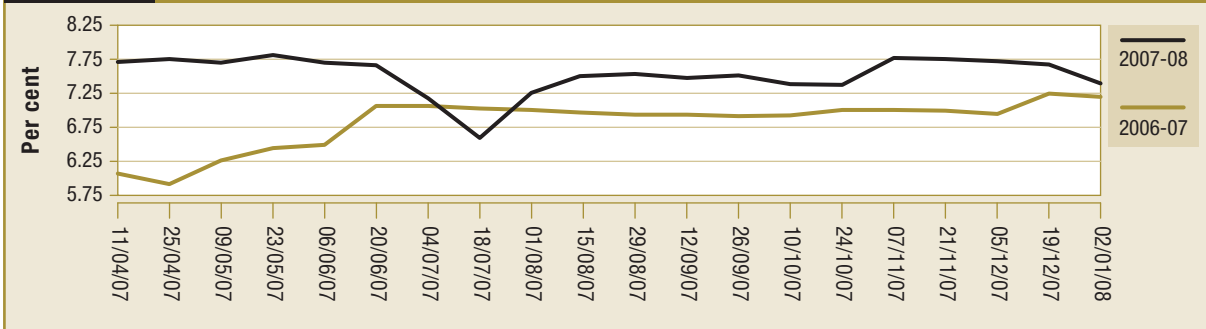
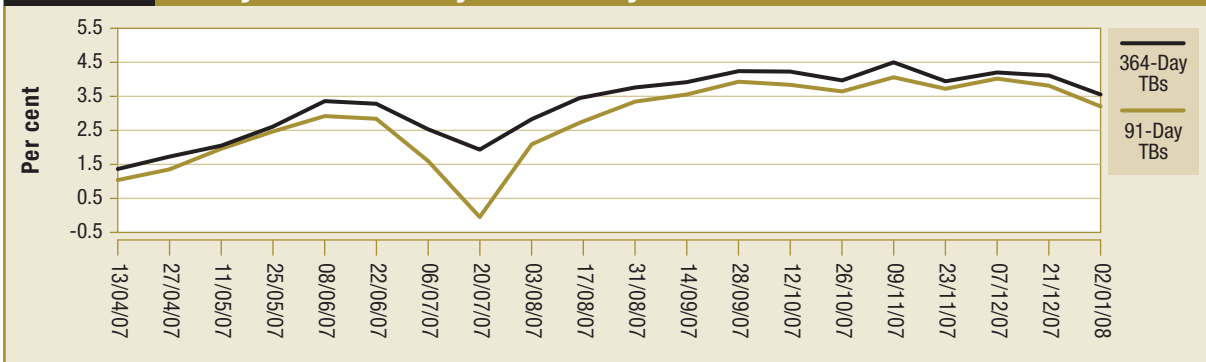


Figure 4.18 364 day Treasury Bills – yield to maturity at auction**Figure 4.19** Real yield to maturity on Treasury Bills

was 3.11 per cent and 3.46 per cent, respectively (Figure 4.19).

4.53 The nominal yield on benchmark 10-year G-sec hardened by 45 basis points over the year to 7.97 per cent on March 31, 2007. During 2007-08, they were range bound between 7.97 per cent and 8.19 per cent from April to May 2007. They, however reached a high of 8.32 per cent at end-June 2007. This was due to announcements of unscheduled auctions and hardening of interest rates in the international markets. Thereafter, yields softened and were range bound between 7.8 per cent and 8.2 per cent up to end-October 2007. There was further softening of yields by 20 basis points over the end-March 2007 level to reach 7.77 per cent as on January 4, 2008.

4.54 In contrast to the upward movements in the yields of 10-year G-sec during 2006-07, the yields on Treasury securities of comparable maturity for the United States softened by 21 basis points during the period to 4.65 per cent at end-March 2007. Thus, the spread between yields of the two securities as at end-March 2007 was 332 basis points. Notwithstanding the yields on Indian 10-year G-sec reaching the highest level at end-

June 2007, the spread was marginally lower at 327 basis points. On January 4, 2008, there was again a spurt in the spread to 389 basis points, with a sharper decline in the U.S. yields to 3.88 per cent. Thus, the divergence in the benchmark yields has widened.

4.55 During the current financial year 2007-08, the RBI after reviewing the macroeconomic and monetary situation adopted a pre-emptive policy stance to moderate inflationary expectations by raising policy interest rates. During 2007-08, the RBI used cash reserve ratio as a major policy instrument and so far CRR has been hiked four times during the year with cumulative increase of 150 basis points thereby bringing the level to 7.5 per cent on November 10, 2007 (Table 4.19). The first round impact of CRR change during 2007-08 so far is expected to absorb an additional amount of Rs. 48,000 crore from the banking system.

ANTI-INFLATIONARY MEASURES

4.56 High inflation hurts the poor. Putting pressure on interest rates adversely affects both savings and investment. Thus, containment of inflation is high on the Government's agenda. The anti-inflationary policies of the Government include, inter alia, strict fiscal and monetary discipline;

Table 4.19 Movement in key policy rates

Effective since	Reverse repo rate	Repo rate	Effective since	Bank rate	Effective since	Cash Reserve Ratio
1	2	3	4	5	6	7
March 5, 2002	6.00	8.50	February 17, 2001	7.50	December 29, 2001	5.50
March 28, 2002	6.00	8.00	March 2, 2001	7.00	June 1, 2002	5.00
June 27, 2002	5.75	8.00	October 23, 2001	6.50	November 16, 2002	4.75
October 30, 2002	5.50	8.00	October 30, 2002	6.25	June 14, 2003	4.50
November 12, 2002	5.50	7.50	April 30, 2003	6.00	September 18, 2004	4.75
March 3, 2003	5.00	7.50			October 2, 2004	5.00
March 7, 2003	5.00	7.00			December 23, 2006	5.25
March 19, 2003	5.00	7.00			January 6, 2007	5.50
August 22, 2003	4.50	7.00			February 17, 2007	5.75
March 31, 2004	4.50	6.00			March 3, 2007	6.00
October 27, 2004	4.75	6.00			April 14, 2007	6.25
April 29, 2005	5.00	6.00			April 28, 2007	6.50
October 26, 2005	5.25	6.25			August 4, 2007	7.00
January 24, 2006	5.50	6.50			November 10, 2007	7.50
June 9, 2006	5.75	6.75				
July 25, 2006	6.00	7.00				
October 31, 2006	6.00	7.25				
January 31, 2007	6.00	7.50				
March 31, 2007	6.00	7.75				

rationalization of excise and import duties of essential commodities to lighten the burden on the poor; effective supply-demand management of sensitive items through liberal tariff and trade policies; and strengthening the public distribution system.

4.57 To augment availability of wheat, the public sector agencies such as STC, MMTC and PEC are importing wheat during 2007-08. About 18 lakh tonnes of wheat has been contracted up to January 9, 2008. To maximize procurement of wheat and paddy, the Government approved an incentive bonus of Rs. 100 per quintal during the *khariif* marketing season 2007-08 for paddy. This raised the procurement price of Grade A paddy to Rs. 745 per quintal. The support price for wheat inclusive of bonus was raised to Rs. 850 per quintal in 2006-07 and further raised to Rs. 1,000 per quintal in 2007-08. There has been a ban on export of wheat and pulses. A minimum export price of US\$ 500 is applicable for export of non-basmati rice, which is a staple diet for a large number of consumers. Import of wheat and pulses by private trade is permitted at zero duty.

4.58 To maintain price stability, the Central Issue Price for rice and wheat has not been revised since July 2002. There has been a continuous reduction

in the import duty on edible oils. The customs duties on crude palm oil and soybean oil effective from July 23, 2007, have been reduced to 45 per cent and 40 per cent, respectively. With the tariff values for the calculation of tariff being kept unchanged at July 2006 levels (September 2006 levels for soybean oil), the effective duty on these oils is close to half of the applicable rates.

4.59 Keeping in view the prevailing price situation, the Central Government had issued a Central Order dated August 29, 2006, 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. By virtue of this Order, the State Governments/UT Administrations have been empowered to take effective action to bring out the hoarded stock of these items to ensure their availability at reasonable prices. The validity of the Central Order has been extended up to March 1, 2008.

4.60 The rupee appreciated from Rs. 44.48 to a US\$ in March 2006 to Rs. 42.15 in April 2007, and further to Rs. 39.4 in November and December 2007. This has resulted in the reduction of import prices which would also have a salutary impact on the general price level.

INTERNATIONAL PRICES OF SELECT COMMODITIES

4.61 In an open economy, movement in domestic prices of commodities depends on the behaviour of their world prices. The pass through, however, is often incomplete and may be influenced by administrative and fiscal interventions. International and domestic trends of inflation in respect of 12 commodity groups indicate that domestic inflation for comparable groups has been significantly lower than the increase in global commodity group indices (Table 4.20 and Figures 4.20 and 4.21).

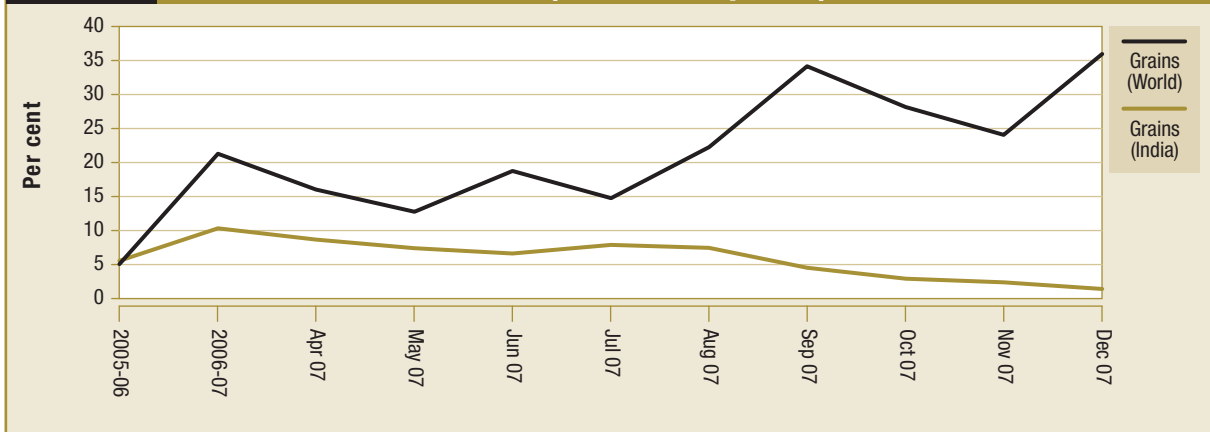
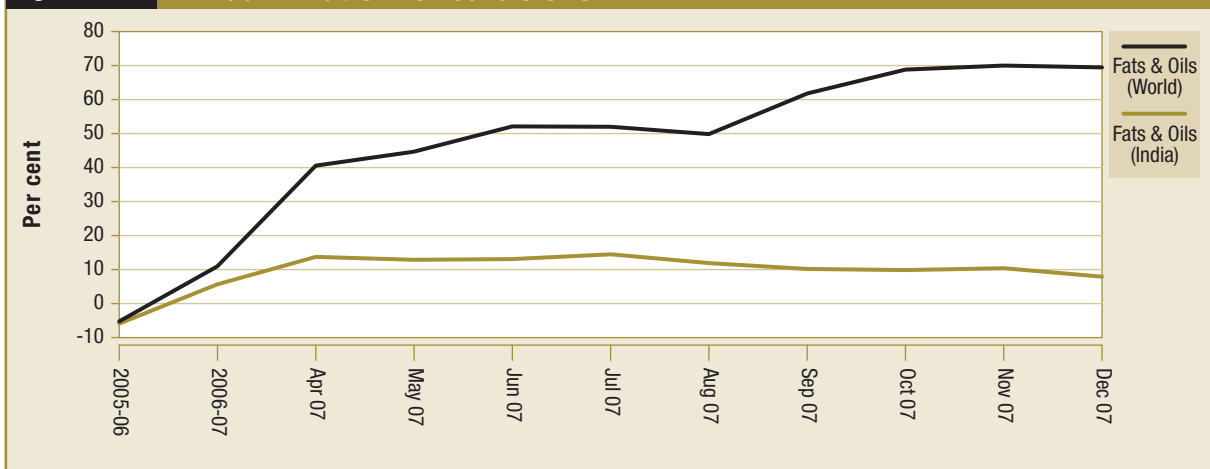
4.62 Four factors contributed to a global increase in the prices of commodities. First, demand for food crops and edible oils increased

because of rapid rise in income in developing countries. Strong demand from the oil exporting countries and increased use of these crops/commodities in biofuels also pushed up their demand. The World Bank in its Global Economic Prospects 2008 has indicated that, in 2006, biofuels accounted for 5-10 per cent of the global production of primary biofuel feed stocks. The United States used 20 per cent of its maize production for biofuels; Brazil used 50 per cent of sugarcane for biofuels; and the European Union used 68 per cent of its vegetable oil production for biofuels. Such large uses, by reducing the availability of these products for food and feed, exerted pressure on prices. Second, food prices also increased because of low output stocks. Global output of grains declined from 2,016 million tonnes in 2005-

Table 4.20 International and domestic trend of inflation (per cent)

Commodities	Average inflation			Year-on-year inflation in 2007-08								
	2005-06	2006-07	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avr
International inflation based on WPC (in per cent)												
Petroleum	38.3	10.9	-4.3	-5.1	-0.1	1.6	-2.3	23.6	41.5	57.1	46.8	17.6
Non-energy commodities	14.8	24.3	18.5	11.6	16.0	14.5	11.9	16.4	18.2	16.9	15.1	15.5
Agriculture	9.7	11.3	10.2	7.7	11.8	13.3	14.3	21.9	24.7	25.0	24.3	17.0
Beverages	15.9	6.3	9.7	12.7	21.4	19.2	12.6	18.2	22.2	14.1	14.4	16.1
Total food	2.8	10.0	10.5	9.2	20.4	22.0	25.3	32.8	34.0	34.1	37.2	25.1
Fats and oils (world)	-5.0	11.1	40.8	44.9	52.3	52.2	50.0	62.0	69.0	70.2	69.7	56.8
Grains (world)	4.9	21.1	15.8	12.6	18.5	14.5	22.1	33.9	28.0	23.9	35.8	22.8
Other food	10.0	2.8	-15.8	-19.3	-5.8	-0.7	3.3	2.8	1.9	2.3	1.7	-3.3
Total raw materials	14.5	16.4	10.0	3.0	-2.1	0.7	3.7	12.1	15.4	21.5	15.9	8.9
Timber	11.6	14.2	12.8	6.2	7.8	10.4	7.0	7.5	7.2	4.5	-0.7	7.0
Other raw materials	16.8	18.2	8.2	0.8	-8.1	-5.4	1.3	15.7	21.8	35.8	29.8	11.1
Fertilizers	3.2	4.2	37.0	56.4	77.9	76.7	84.6	88.8	92.4	99.7	140.8	83.8
Metals and minerals	27.2	50.4	29.8	14.4	18.5	12.4	4.6	4.8	5.8	1.4	-4.8	9.7
Domestic inflation based on WPI (in per cent)												
Energy	9.5	5.6	1.1	0.6	-0.8	-1.5	-1.9	-2.5	-1.6	-0.2	2.1	-0.5
Non-energy commodities	3.0	5.4	7.8	6.9	6.1	6.5	5.9	5.3	4.5	4.0	4.0	5.7
Agriculture	2.2	7.1	11.8	10.0	7.4	10.9	9.6	7.0	5.2	4.8	4.7	7.9
Beverages	4.9	7.4	10.0	12.2	12.5	12.6	11.0	9.6	9.8	6.9	7.9	10.3
Food	3.3	5.9	8.2	6.5	4.1	7.2	6.3	4.2	3.2	2.6	3.2	5.1
Fats and oils (India)	-5.7	5.9	14.0	13.1	13.3	14.7	12.1	10.3	10.0	10.5	8.4	11.8
Grains (India)	5.3	10.2	8.5	7.2	6.5	7.7	7.3	4.4	2.7	2.2	1.2	5.3
Other food	4.8	19.0	0.3	-1.6	1.8	2.6	1.7	-0.5	-3.9	-6.1	-5.5	-1.2
Raw materials	-1.5	8.0	16.1	13.2	13.2	13.0	10.7	10.9	9.8	9.0	8.4	11.6
Timber	8.4	6.0	3.8	7.1	7.1	7.1	7.1	7.1	6.0	7.1	1.6	6.0
Other raw materials	8.9	7.8	11.0	9.2	9.0	4.9	3.1	4.5	5.0	5.7	6.1	6.5
Fertilizers	2.5	1.3	2.7	2.1	2.4	1.7	1.8	1.4	1.1	0.8	1.4	1.7
Metals and minerals	8.7	8.5	12.3	10.5	10.0	6.4	4.7	4.9	3.7	3.2	2.7	6.5

Note: Composition of WPI Items/groups as compared to World Price Commodities as used in Table 4.20: Energy (Fuel group); Non Energy Commodities (All commodities excluding energy); Agriculture (Food Articles and Non-Food Articles); Beverages (Beverages Tobacco & Tobacco Products); Food (Food Articles and Food Products); Fats and Oils (Edible Oils, Butter and Ghee); Grains (Cereals and Pulses); Other Food (Other Food Articles); Raw Materials (Non-Food Articles and Minerals); Timber (Wood & Wood Products); Other Raw Materials (Naphtha and Basic Metals Alloys & Metals Products); Fertilizers (Fertilizers); Metals and Minerals (Basic Metals Alloys & Metals Products and Minerals)

Figure 4.20 Annual inflation for Grains (cereals and pulses)**Figure 4.21 Annual inflation for edible oils**

06 to an estimated 1,993 million tonnes in 2006-07. Global stocks as of January 2008 were estimated at 309 million tonnes compared to 389 million tonnes at the end of 2005-06 (U.S. Department of Agriculture estimates). Third, higher cost of cultivation due to an increase in the prices of fertilizers and fuels also raised the price expectations. For the foodgrains importing countries, increase in the shipping costs also raised the landed cost of the imported grains and edible oils. The current increase has both a temporary component, low stock and drought and also a structural component, high energy prices and, therefore, is expected to persist longer. Fourth, the increase in the prices of metals was largely because of an increase in demand from the emerging economies, particularly China. Slower growth of the supplies due in part to lower investment and delays in bringing new capacities contributed to the sustained increase. Overall price increase in December 2007 as compared to the

prices during 2005 (January-December) was relatively higher for lead (165.9 per cent), tin (120.4 per cent), copper (79.1 per cent), zinc (70.4 per cent) and aluminium (25.5 per cent). Prices of steel, except steel rebar were either flat or declined.

Reasons for domestic price increase

4.63 The major reasons for an increase in domestic prices during the year, albeit moderate compared to the previous year, were build-up of inflationary pressure in the preceding months and mismatch in demand and supply conditions.

4.64 On demand side, large capital inflows exerted pressure on liquidity conditions. On supply side, shortfalls in the domestic availability of wheat, pulses and edible oils in 2006-07 aggravated mismatches. The production of wheat averaged 69 million tonnes during 2004-06. Lower production led to lower procurement and decline in the carry-

Box 4.2 Impact of crude oil prices increase on global commodity prices

Crude oil prices affect the prices of other commodities in the following ways:

- Affect the prices of inputs which primary commodities use, such as fertilizers and fuel.
- Affect the transport cost of commodities over long distances.
- Prices of commodities, which have energy-intensive production process, particularly metals, get affected because of an increase in energy prices.
- Affect the prices of the products which could become substitutes for crude or could be used as biofuels (like maize and sugar for ethanol production or rapeseed and other oils for biodiesel production).
- Affect the prices of primary commodities which compete with the synthetic products made from crude (like cotton with man-made fibres, natural rubber with synthetic rubber).
- Affect the prices of commodities which can be substituted for crude as sources of energy (like coal, electricity and gas).

Based on annual data from 1960 to 2005 and a simple econometric model, the Working Paper of the World Bank (Policy Research Working Paper No. 4333 – Oil Spills on Other Commodities by John Baffes – August 2007) estimated the degree of pass through of crude oil price changes to the prices of 35 other internationally-traded primary commodities. The elasticity for the non-energy commodity index was estimated at 0.16 indicating that 1 per cent pass through may impact the commodity prices by 16 basis points. No estimates are available for India.

Source: Working Paper No. 4333, World Bank, August 2007.

over stocks, which together resulted in a build-up of inflationary expectations. This got compounded by a global decline in output and stocks, which was reflected in wheat prices of US SRW wheat averaging US\$ 345 per tonne in December 2007 compared to an average of US\$ 136 per tonne during January-December 2005, US\$ 159 in January-December 2006, and US\$ 239 in January-December 2007. Similarly, in the case of pulses, production during 2004-06 averaged 13.2 million tonnes relative to a demand estimated at around 15 million tonnes. Production of oilseeds also witnessed a decline of about 3.8 million tonnes in 2006-07. A shortfall in domestic availability increased the vulnerability of the domestic prices to international price shocks.

CHALLENGES AND OUTLOOK

4.65 Overall Inflation is likely to remain moderate in the coming months, as the policy measures taken during the course of the year work their way through the system. The behaviour of agricultural prices, including essential consumption items, will be critical, given falling poverty and rapidly rising per capita income. Global prices are having a more pronounced impact on domestic prices as the ability to meet shortfalls at affordable prices is being eroded by global

shortages and rising prices. Thus we will continue to depend on enhancement of supplies through higher productivity and efficient supply management to eliminate wastage. Domestic supply management is therefore critical to stabilizing inflation expectations, moderating pressures for upward revision of wages and prices, and containing pressures for cost push inflation through monetary and fiscal accommodation.

4.66 The parts of the economy characterized by market competition, such as manufacturing, have responded to the increase in demand through higher investment and capacity creation. The supply side pressures are likely only in sectors like agriculture that suffer from structural problems, infrastructure sectors still characterized by a monopoly core, heavily dependent on Government investment and relatively slow decision making sectors such as urban land. Monetary policy needs to address the inflationary expectations triggered by sub-sectoral price flare-ups arising from mismatches in demand and supply. Monetary policy also has to manage the stress arising from continued increase in capital flows and the consequential changes in the exchange rate, exchange reserves and liquidity. This is particularly challenging in a period of stagnancy or decline in production of durable consumer goods and deceleration in global demand for our exports.

