Macroeconomic and Monetary Developments in 2002-03

I. Growth, Saving and Investment

Growth Rates

The Central Statistical Organisation (CSO) has estimated real GDP growth at 4.4 per cent in 2002-03, down from 5.6 per cent in 2001-02. According to these Advance Estimates, the impact of the adverse supply shock from drought conditions following the South-West monsoon turned out to be worse than initially anticipated. Real GDP originating from 'agriculture and allied activities' is estimated to have contracted by as much as 3.1 per cent in 2002-03, the loss of output being higher than that witnessed in the unprecedented drought of 1987. A modest, but broad-based recovery in industrial activity and the gathering of growth momentum in the services sector helped to mitigate the full effects of the drought. Despite some acceleration in relation to the preceding year, real GDP growth in both industrial and service sectors, if confirmed in the final CSO estimates, would be below trend, indicating the persistence of gaps in aggregate demand (Table 1).

Table 1 : Growth Rates of Real GDP

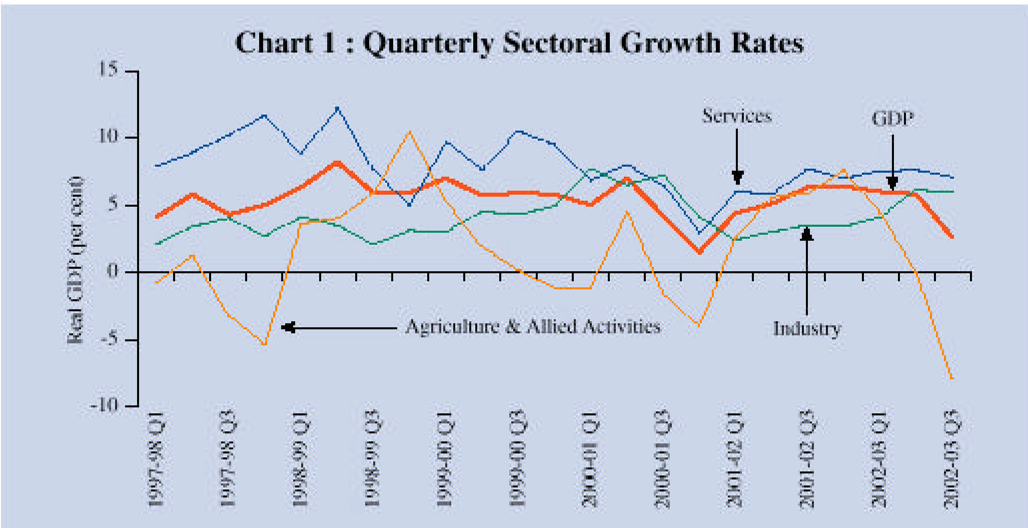
(Per cent)

Sector	Average from 1992-93 to 2000-01	2001-02*	2002-03#	2001-02 Q1	2001-02 Q2	2001-02 Q3	2001-02 Q4	2002-03 Q1	2002-03 Q2	2002-03 Q3
1	2	3	4	5	6	7	8	9	10	11
1. **Agriculture & Allied Activities**	**3.0**	**5.7**	**-3.1**	**2.6**	**5.6**	**5.9**	**7.6**	**4.4**	**0.0**	**-7.9**
	(27.9)	(23.9)	(22.2)							
1.1 Agriculture	3.1	5.7	–							
	(25.5)	(21.9)								
2. **Industry**	**6.6**	**3.2**	**5.8**	**2.4**	**3.0**	**3.5**	**3.4**	**4.1**	**6.1**	**6.0**
	(22.0)	(21.5)	(21.8)							
2.1 Manufacturing	7.2	3.4	6.1	2.9	3.1	3.4	3.1	3.8	6.4	6.3
2.2 Mining and Quarrying	4.1	1.0	4.8	-2.5	-0.2	3.6	3.5	5.3	5.1	4.6
2.3 Electricity, Gas and Water Supply	5.9	4.3	5.2	3.5	5.0	3.4	5.4	5.3	4.9	5.9
3. **Services**	**7.7**	**6.5**	**7.1**	**6.0**	**5.8**	**7.7**	**7.0**	**7.5**	**7.6**	**7.1**

	(50.1)	(54.6)	(56.0)							
3.1 Trade, Hotels, Restaurants, Transport and Communication	8.3	8.7	7.8	7.7	9.0	8.4	7.2	7.4	8.0	7.5
3.2 Financing, Insurance, Real Estate and Business Services	8.1	4.5	6.5	4.5	5.0	4.8	8.3	9.7	8.9	8.1
3.3 Community, Social and Personal Services	7.3	5.6	6.4	6.8	3.1	10.3	5.6	5.7	5.8	5.5
3.4 Construction	5.5	3.7	7.1	0.3	1.3	5.5	7.5	6.3	7.2	7.0
4. **GDP at factor cost**	**6.1**	**5.6**	**4.4**	**4.4**	**5.1**	**6.3**	**6.4**	**6.0**	**5.8**	**2.6**

* Quick Estimates; # Advance Estimates; – Not available.
Notes :
1. Figures in brackets denote shares in real GDP in per cent.
2. Q1: First Quarter (April-June); Q2-Second Quarter (July-September); Q3: Third Quarter (October-December) and Q4: Fourth Quarter (January-March).
Source: Central Statistical Organisation.

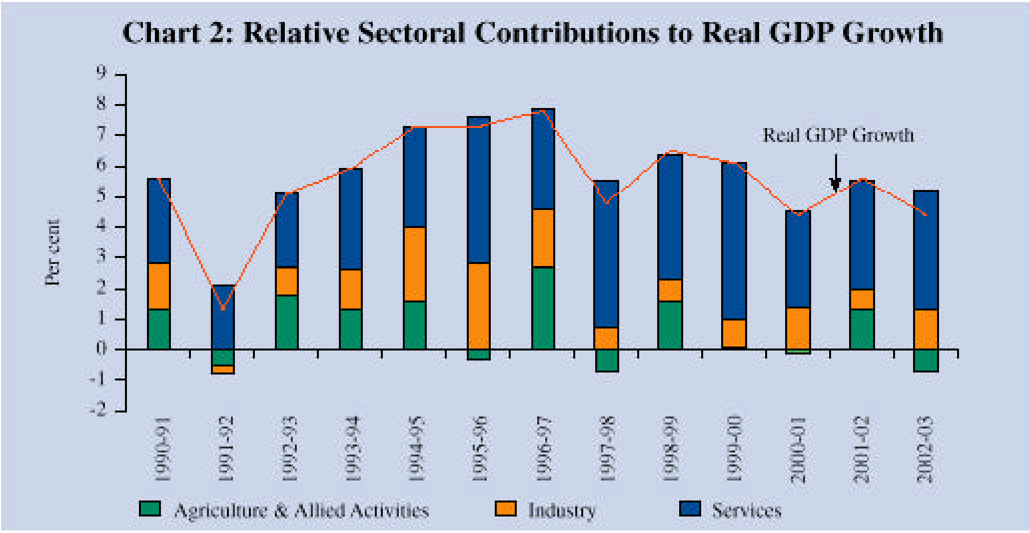
Real activity picked up in the first quarter of 2002-03 (in relation to the corresponding period of the preceding year), with all sectors sharing in this improvement. Agriculture led the resumption of growth. Industrial performance rose on the back of a revival in ‘manufacturing’ and ‘mining and quarrying’. Growth of the services sector was more evenly spread, but fuelled mainly by the construction sector. The impact of the drought became evident in the second and third quarters of 2002-03. Real GDP growth in agriculture plunged to touch zero in the second quarter and turned negative at (-)7.9 per cent in the third quarter. Even though the pace of growth of real GDP originating from industry and services was more or less maintained, the setback to agricultural output reduced overall real GDP growth in the third quarter (Chart 1).



The growth experience over the last decade is underpinned by structural changes in the economy reflected in sectoral shifts. The share of agriculture in GDP underwent significant fluctuations as it fell from about 32 per cent in 1990-91 to 22 per cent in 2002-03. Corresponding gains in share were recorded by the services sector (46 per cent to 56 per cent). On the other hand, the share of industry in GDP has remained broadly unchanged at under 22 per cent.

Relative contributions of sectors to real GDP growth have mirrored the structural shifts. Agriculture has made five years of negative contributions to growth since 1990. The robust growth of services has, however, insulated the overall growth process.

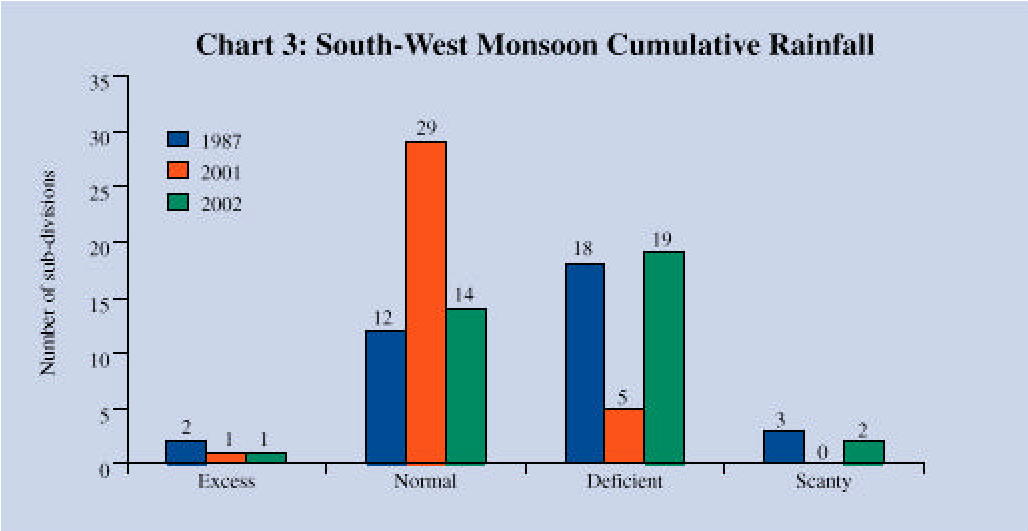
Services emerged as the dominant drivers in 2002-03, accounting for 88.3 per cent of real GDP growth, followed by industry (28.8 per cent). Agriculture and allied activities, on the other hand, recorded a negative contribution of 17.1 per cent (Chart 2).



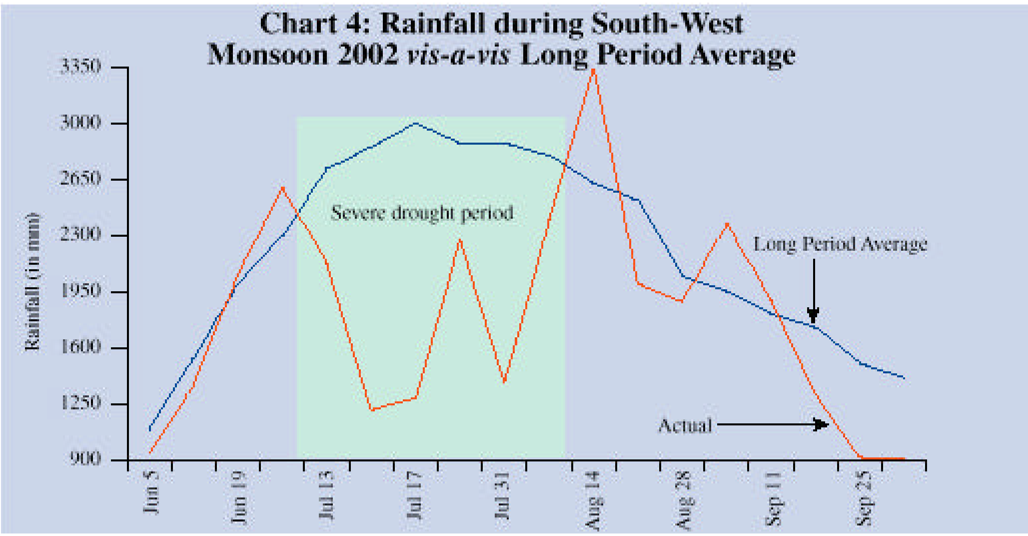
Agricultural Situation

According to the CSO's advance estimates, real GDP originating from 'agriculture and allied activities' fell by 3.1 per cent for the year 2002-03 as a whole. The index of agricultural production is estimated to have undergone a sharp decline of 11.9 per cent during 2002-03 as against an increase of 5.9 per cent in 2001-02. A decennial deceleration, superimposed upon by high variability, has characterised the behaviour of agricultural activity, indicative of continued rain-dependency.

The year 2002-03 was declared as a drought year since the deficiency in the all-India cumulative South-West monsoon rainfall (19 per cent) was greater than 10 per cent of the long period average (LPA) range, as per the criterion of the India Meteorological Department. The scale and intensity of the drought in 2002 is comparable with that in 1987 when 21 sub-divisions received deficient/scanty rainfall and only 14 sub-divisions received excess/normal rainfall (Chart 3).



Moisture stress was severe in July 2002, the sowing month of *kharif* 2002 (Chart 4). The States worst hit by the drought conditions were Haryana, Rajasthan, Punjab, Uttar Pradesh, Orissa, Madhya Pradesh, Gujarat, Tamil Nadu and parts of Karnataka and Kerala. Of the 36 meteorological sub-divisions of the country, 21 sub-divisions received deficient/scanty rainfall and only 15 sub-divisions received normal/excess rainfall.



The *kharif* foodgrains production touched a low of 89.5 million tonnes during 2002-03, down by 22.1 million tonnes from the level attained in *kharif* 2001-02. This reflected an across-the-board decline. *Rabi* foodgrain production at 94.6 million tonnes is likely to be lower than in the previous year mainly due to the poor performance of wheat and rice. *Rabi* production of pulses and oilseeds is also expected to be lower (Table 2). Poor rains during the South-West monsoon and the North-East monsoon in 2002-03 resulted in the total live water storage in the 70 major reservoirs across the country falling to 42.6 billion cubic metres (BCM) as on January 27, 2003. This storage level is 33 per cent of the designed utilisable storage, 72.6 per cent of the preceding year's level and only 58.4 per cent of the last ten years' average.

Table 2 : Season-Wise Agricultural Production

(Million Tonnes)

Crops	1998-99		1999-2000		2000-01		2001-02		2002-03 AE	
	Kharif	*Rabi*	*Kharif*	*Rabi*	*Kharif*	*Rabi*	*Kharif*	*Rabi*	*Kharif*	*Rabi*
1	2	3	4	5	6	7	8	9	10	11
Total Foodgrains	**102.9**	**100.7**	**105.5**	**104.3**	**104.7**	**94.6**	**111.6**	**100.5**	**89.5**	**94.6**
Rice	72.7	13.4	77.5	12.2	75.4	12.3	79.8	13.3	66.7	10.2
Wheat	-	71.3	-	76.4	-	69.7	-	71.8	-	70.3
Coarse Cereals	25.1	6.3	23.2	7.1	24.9	6.2	26.9	7.0	18.7	6.4
Pulses	5.1	9.8	4.8	8.6	4.5	6.4	4.9	8.3	4.1	7.8
Nine Oilseeds	15.8	9.0	12.5	8.2	11.9	6.5	12.9	7.6	8.4	7.2
Groundnut	6.9	2.1	3.8	1.5	4.9	1.5	5.4	1.5	3.1	1.6
Soyabean	7.1	–	7.1	–	5.3	–	5.9	–	4.3	–
Sugarcane $	288.7	299.3	296.0	300.1	279.3					
Cotton@$	12.3	11.5	9.5	10.1	8.6					
Jute and Mesta#$	9.8	10.6	10.6	11.6	11.0					

AE: Advance Estimates as on April 4, 2003. - Not available.
@ in million bales of 170 kg each; # in million bales of 180 kg each.
$ Production of Sugarcane, Cotton, Jute and Mesta pertain to the entire year.
Source : Ministry of Agriculture, Government of India.

The Ministry of Agriculture had set a target of 109.5 million tonnes for foodgrains production each for *kharif* as well as *rabi* 2002. The *kharif* targets for rice, coarse cereals and pulses were 78.5 million tonnes, 25.8 million tonnes and 6 million tonnes, respectively. The *rabi* targets comprised wheat at 78.0 million tonnes, rice at 14.4 million tonnes, coarse cereals at 7.2 million tonnes, and pulses at 10.0 million tonnes. The target for *kharif* and *rabi* oilseeds production had been set at 15.9 million tonnes and 11.1 million tonnes, respectively. The depressed performance in both *kharif* and *rabi* seasons of 2002-03 is expected to result in a significant shortfall in the output of all crops *vis-a-vis* their targets.

According to the third advance estimates of the Union Ministry of Agriculture, foodgrains production is estimated to have dropped sharply by 28.0 million tonnes to 184.1 million during 2002-03, the lowest since 1996-97. The worst affected were rice and coarse cereals. Non-foodgrains, especially oilseeds and sugarcane, also recorded considerable contraction in their production levels during 2002-03 (Table 3).

Table 3 : Crop-wise Targets/Achievements

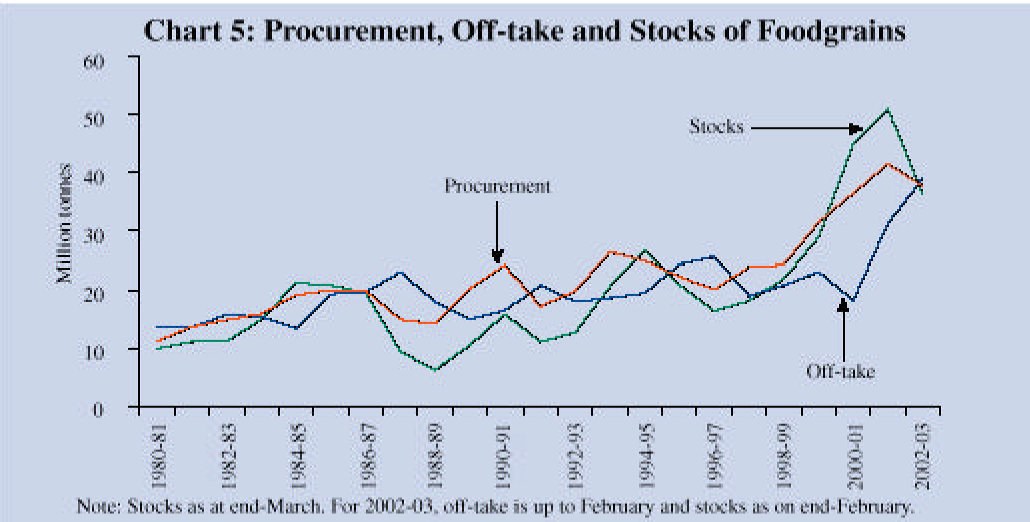
(Million Tonnes)

Crops	1998-99		1999-2000		2000-01		2001-02		2002-03	
	T	A	T	A	T	A	T	A	T	A#
1	2	3	4	5	6	7	8	9	10	11
Rice	84.2	86.1	86.0	89.7	90.0	87.7	92.0	93.1	93.0	77.0
Wheat	70.0	71.3	74.0	76.4	74.0	69.7	78.0	71.8	78.0	70.3
Coarse Cereals	34.3	31.3	34.5	30.3	33.0	31.1	33.0	33.9	33.0	25.1
Pulses	15.5	14.9	15.5	13.4	15.0	10.9	15.0	13.2	16.0	11.8

Total Foodgrains	**204.0**	**203.6**	**210.0**	**209.8**	**212.0**	**199.3**	**218.0**	**212.0**	**220.0**	**184.1**
Nine Oilseeds	27.0	24.8	28.0	20.7	28.0	18.4	28.0	20.5	27.0	15.6
Sugarcane	300.0	288.7	305.0	11.5	325.0	296.0	325.0	300.1	320.0	279.3
Cotton*	14.8	12.3	15.0	10.6	14.5	9.5	14.5	10.1	15.0	8.6
Jute & Mesta**	9.8	9.8	11.0	299.3	10.0	10.6	11.0	11.6	12.0	11.0

T: Target.
A: Achievement.
Third Advance Estimates as on April 4, 2003. * in million bales of 170 kg each.
** in million bales of 180 kg each.
Source: Ministry of Agriculture, Government of India

Foodgrain procurement declined to 37.8 million tonnes during 2002-03 from 41.5 million tonnes a year ago. Off-take of foodgrains, on the other hand, improved significantly (Chart 5). The pick up in off-take was mainly on account of increased off-take under Other Welfare Schemes (OWS) followed by Open Market Sales (OMS), exports and Targeted Public Distribution System (TPDS).



Foodgrains stock, which was at its peak at 64.8 million tonnes at end-May 2002, declined to 36.2 million tonnes as at end-February 2003 (Table 4). This was facilitated by special measures to liquidate the surplus stocks which included open market sales at prices much below economic cost, lowering of issue prices under Targeted Public Distribution System (TPDS) for Above Poverty Line (APL) families, increase in monthly allocation for APL, Below Poverty Line (BPL) and *Antodaya* families to 35 kg per month per family and utilisation of foodgrains for various welfare schemes. The reduced stock of foodgrains entailed a lower recourse to food credit which declined by more than Rs.11,000 crore between May 2002 and March 2003. For the rest of the year, the food stocks are expected to be in the range of 30-35 million tonnes.

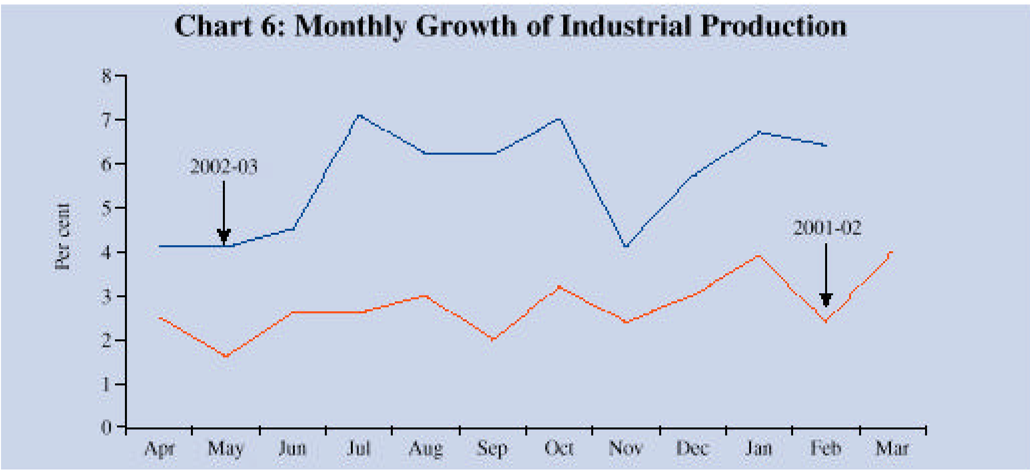
Table 4 : Management of Food Stocks during 2002-03

Month	Opening Stock of Foodgrains	Foodgrains Procure-ment	Foodgrains off-take				Closing Stock	Food Credit$
	(in million tonnes)		TPDS	OWS	OMS	Exports		
1	2	3	4	5	6	7	8	9
April 2002	51.0	13.3	1.2	0.4	0.2	1.0	62.6 (15.8)	52,484
May	62.6	7.0	1.5	0.8	0.2	1.2	64.8	60,669
June	64.8	1.8	1.6	1.3	0.2	0.9	63.1	61,008
July	63.1	0.9	1.5	0.6	0.4	1.1	59.9 (24.3)	59,077
August	59.9	0.2	1.8	0.5	1.1	1.5	55.4	56,400
September	55.4	0.6	1.5	0.5	0.7	1.4	51.4	53,362
October	51.4	7.1	1.8	1.2	0.7	0.9	53.6 (18.1)	52,705
November	53.6	1.3	1.5	0.8	0.5	0.8	51.5	54,346
December	51.5	1.3	1.7	1.2	0.4	0.9	48.2	51,947
January 2003	48.2	2.0	1.5	1.1	0.8	0.8	40.1 (16.8)	49,784
February	40.1	1.4	1.8	1.1	0.3	0.7	36.2	50,227
March	36.2	0.9	–	–	–	–	–	49,479

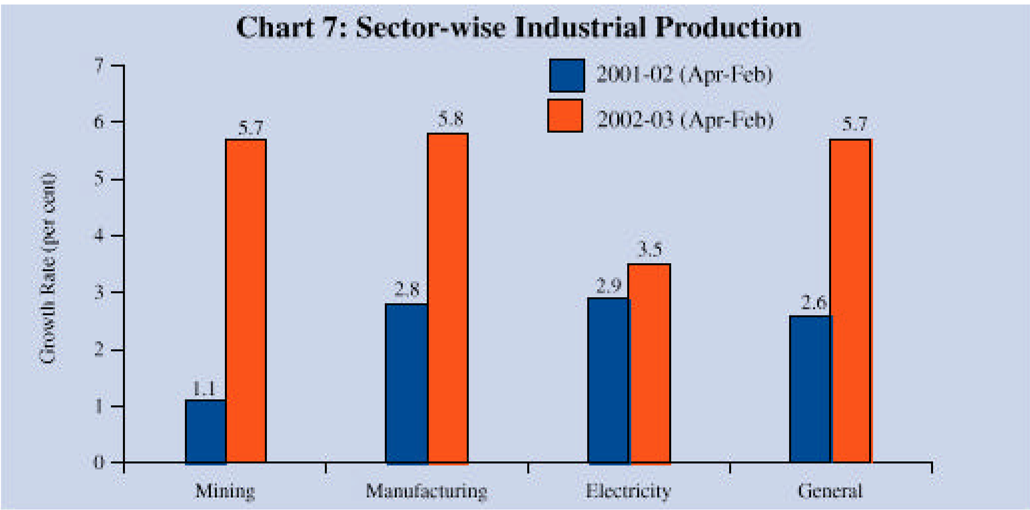
$ Outstanding in Rs. crore as on the last reporting Friday of the Month;
– Not available.
TPDS: Targeted Public Distribution System; OWS: Other Welfare Schemes; OMS: Open Market Sales.
Note: The figures in brackets represent total minimum stocks to be maintained by public agencies under new buffer stocking policy with effect from October 30, 1998.

Industrial Performance

The growth of real GDP originating from industry firmed up from the second quarter of 2001-02 and reached 6.1 per cent in the second quarter of 2002-03, before declining marginally to 6.0 per cent in the third quarter of 2002-03. For the year 2002-03, real growth of industrial GDP is estimated at 5.8 per cent, up from 3.2 per cent in the preceding year. The Index of Industrial Production (IIP) also recorded a higher growth of 5.7 per cent in April-February 2002-03 as compared with 2.6 per cent a year ago. Industrial production showed an upward trend throughout 2002-03 and the year-on-year growth remained higher in all the months of 2002-03 than in the preceding year (Chart 6).



All constituent sub-sectors – manufacturing, mining and quarrying, electricity generation - shared in the acceleration of growth (Chart 7).



In terms of the use-based classification, growth in the basic and consumer goods sectors accelerated during April-February 2002-03. Within the consumer goods sector, the improvement was mainly on account of consumer non-durables as the production of consumer durables declined by 5.7 per cent. Activity in the capital goods sector resumed with a growth of 10.7 per cent after a decline of 4.2 per cent in the preceding year. In the intermediate goods sector, growth firmed up moderately (Chart 8).

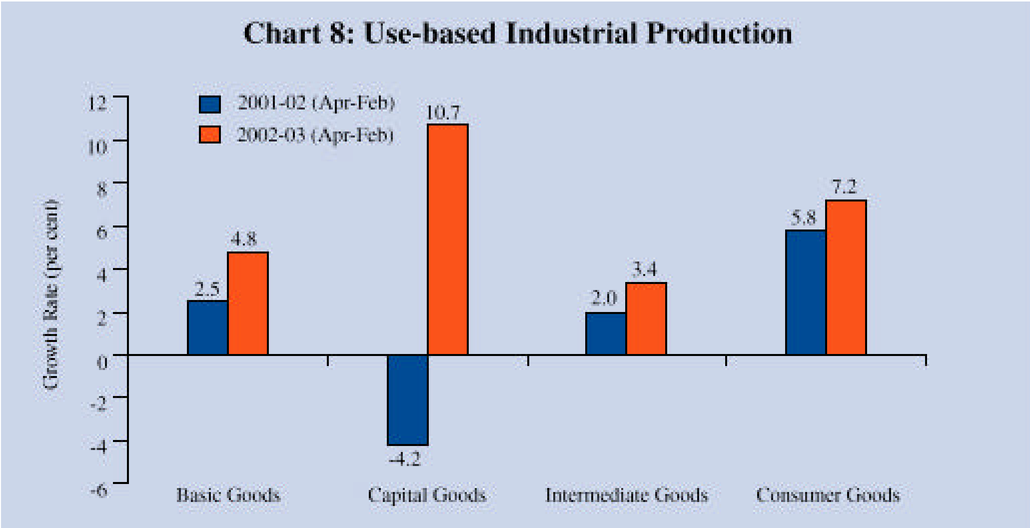


Chart 8: Use-based Industrial Production

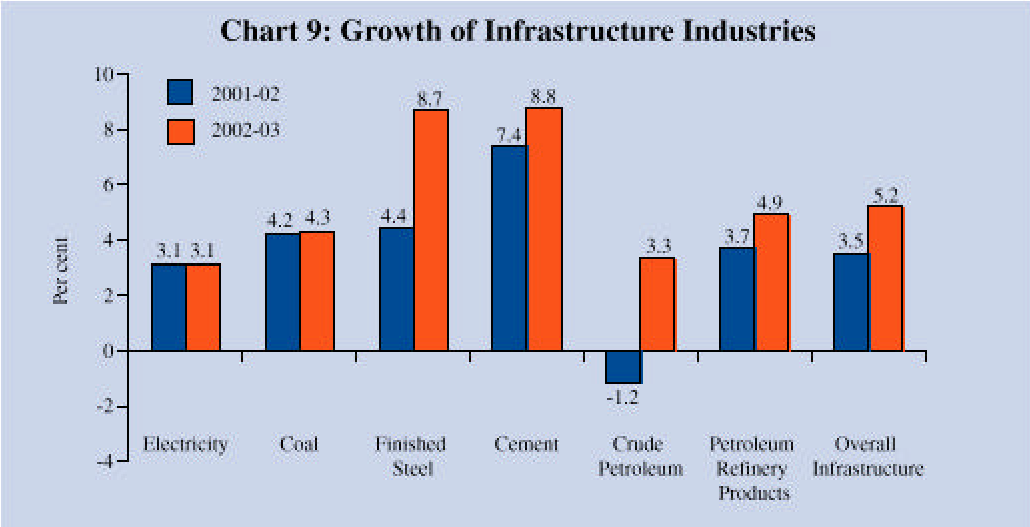
The improvement in manufacturing output was spread over various industry groups. Within the 17 major groups, 8 groups recorded growth above the manufacturing sector's average of 5.8 per cent. The major growth impulse emanated from five industry groups comprising 'beverages, tobacco and related products', 'basic chemicals and chemical products', 'food products', 'transport equipment and parts' and 'basic metal and alloy industries'. These industry groups together contributed 74.3 per cent of the growth in manufacturing sector. Declines in output were mainly in industries such as 'cotton textiles', 'leather and leather and fur products' and 'wood and wood products'. The industry group 'machinery and equipment', which has sizeable weight in the manufacturing output, continued to record subdued growth (Table 5).

Table 5 : Frequency Distribution of Industry Group Growth Rates (April-February, 2002-03)

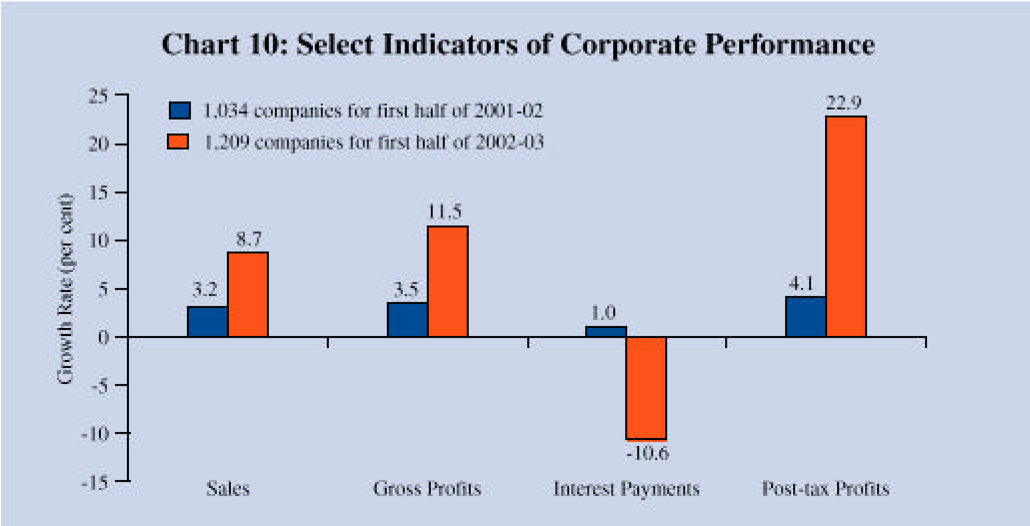
Negative	0-4 per cent	4-8 per cent	Above 8 per cent
1	2	3	4
1. Other manufacturing industries (0.9)	1. Machinery and equipment other than transport equipment (2.2)	1. Jute and other vegetable fibre textiles (except cotton) (7.2)	1. Beverages, tobacco and related products (26.4)
2. Cotton Textiles (3.0)		2. Metal products and parts (except machinery and equipment) (6.8)	2. Textile products (including wearing apparel) (15.5)
3. Leather and leather & fur products (4.4)		3. Wool, silk and man made fibre textiles (6.4)	3. Transport equipment and parts (14.5)
4. Wood and wood products furniture and fixtures (18.5)		4. Paper and paper products and printing, publishing & allied industries (5.3)	4. Food products (9.3)
		5. Rubber, plastic, petroleum and coal products (4.9)	5. Basic metal and alloy industries (8.4)
		6. Non-metallic mineral products (4.7)	
		7. Basic chemicals and chemical products (except products of petrol and coal) (4.4)	

Note : Figures in brackets indicate growth rates.

The performance of the infrastructure industries was encouraging. All the infrastructure industries except electricity recorded higher growth. Production of cement, finished steel, crude petroleum, petroleum refinery products and coal accelerated. The decline in the production of crude petroleum in 2001-02 was arrested and a modest increase of 3.3 per cent was recorded during 2002-03. The growth in electricity remained unchanged at 3.1 per cent during 2002-03 (Chart 9).



The industrial climate is turning favourable. The leading indicators of industrial production, *i.e.*, non-food credit off-take, production and imports of capital goods, have all recorded an increase. In the capital goods sector, diesel engines, protection system/switch boards, process control instruments and computer systems are recording high growth. The improvement in industrial activity is being reinforced by robust export performance. The financial performance of the Indian corporate sector reflected a distinct improvement during 2002-03 (up to September 2002) as compared with the previous year. Growth of sales accelerated on account of better performance in sectors such as, 'iron and steel', 'automobiles and ancillaries', 'electrical machinery', 'food processing', 'rubber and rubber products', and 'drugs and pharmaceuticals'. Furthermore, there was a substantial decline in interest payments attributable, *inter alia*, to softening of interest rates on corporate debt in the recent years. The post-tax profits of the corporate sector, thus, recorded a sharp improvement during the first half of 2002-03 (Chart 10).



The Business Confidence Index (BCI) survey conducted jointly by the Economic Times-National Council of Applied Economic Research (ET-NCAER) shows a 12.4 per cent improvement in the BCI in the third quarter of 2002-03 over the BCI level of the second quarter. The upswing in business confidence appears to be in all categories barring consumer non-durables. Industrial outlook surveys indicate improvement in the assessment of demand growth (order books and exports) and capacity utilisation. Similar optimism is reflected in other surveys of the business outlook as well as by the tracking of leading indicators.

Saving and Investment

The CSO's Quick Estimates provide information on saving and investment behaviour up to 2001-02. The rate of gross domestic saving is placed at 24.0 per cent in 2001-02, a marginal improvement from 23.4 per cent recorded a year ago. This was mainly on account of the increase in the rate of household saving (22.5 per cent from 21.6 per cent) reflecting increased holdings of both financial and physical assets (Chart 11). Among the constituents of the household sector's financial saving, currency holdings, bank deposits and claims on government rose in 2001-02, while non-bank deposits and holdings of contractual instruments declined. All other constituents experienced an erosion of saving. The rate of saving of the private corporate sector declined marginally (4.0 per cent in 2001-02 from 4.1 per cent in 2000-01), while the rate of public sector dis-saving continued to worsen (2.5 per cent in 2001-02 from 2.3 per cent in 2000-01) (Table 6).

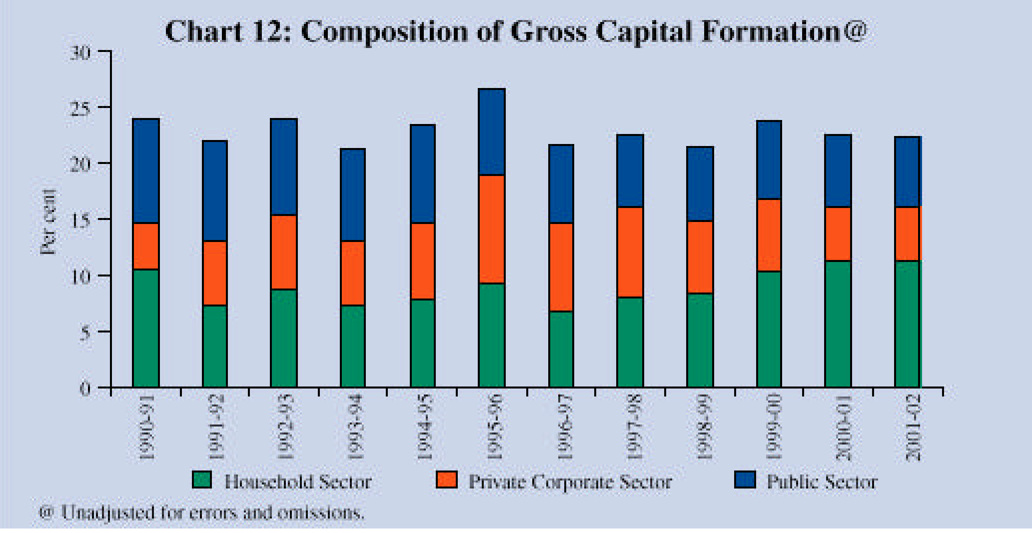
Chart 11: Sector-wise Saving Rates

Table 6 : Gross Domestic Saving and Investment

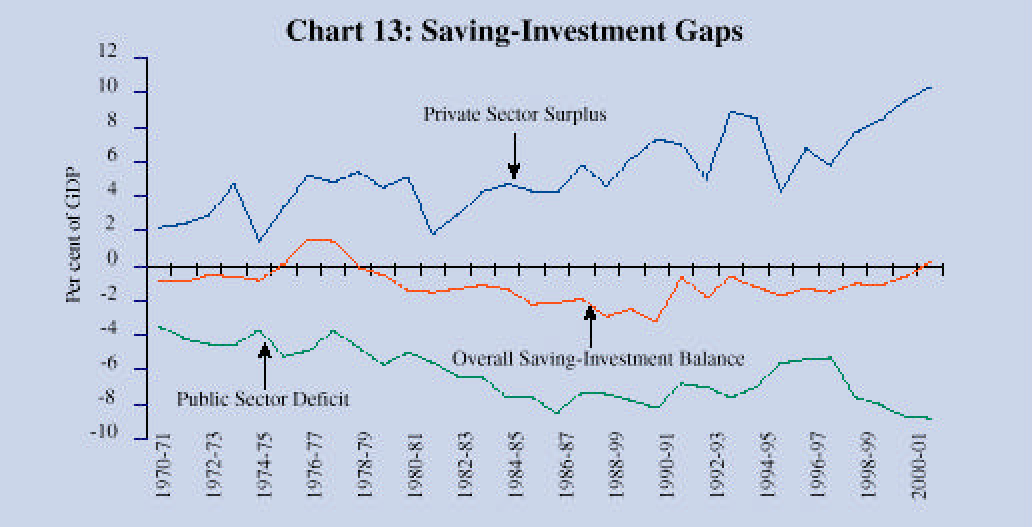
Item	Per cent of GDP (at current market prices)				Amount in Rupees crore			
	1998-99	1999-2000	2000-01@	2001-02*	1998-99	1999-2000	2000-01 @	2001-02*
1	2	3	4	5	6	7	8	9
1. Household Saving	18.8	20.8	21.6	22.5	3,27,074	4,02,360	4,53,641	5,15,565
1.1) Financial Assets	10.4	10.5	10.4	11.2	1,80,618	2,03,702	2,17,841	2,56,647
1.2) Physical Assets	8.4	10.3	11.2	11.3	1,46,456	1,98,658	2,35,800	2,58,918
2. Private Corporate Sector	3.7	4.4	4.1	4.0	65,026	84,329	86,142	92,060
3. Public Sector	-1.0	-1.0	-2.3	-2.5	-17,169	-20,049	-48,022	-57,662
4. Gross Domestic Saving (GDS)	21.5	24.1	23.4	24.0	3,74,931	4,66,640	4,91,761	5,49,963
5. Net Capital Inflow	1.0	1.1	0.6	-0.2	18,090	21,988	12,977	-4,872
6. Gross Domestic Capital Formation (GDCF)	22.6	25.2	24.0	23.7	3,93,021	4,88,628	5,04,738	5,45,091
7. Total Consumption Expenditure	77.7	78.6	77.2	77.9	13,53,444	15,22,665	16,23,921	17,87,865
7.1) Private Final Consumption Expenditure	65.4	65.6	64.6	65.0	11,39,411	12,71,556	13,59,358	14,92,894
7.2) Government Final Consumption Expenditure	12.3	13.0	12.6	12.8	2,14,033	2,51,109	2,64,563	2,94,971
Memo Items								
Saving-Investment gap (4-6)#	-1.0	-1.1	-0.6	0.2	-18,090	-21,988	-12,977	4,872
Public Sector $	-7.6	-8.0	-8.7	-8.8	-1,31,714	-1,54,533	-1,82,047	-2,02,744
Private Sector $	7.7	8.4	9.5	10.3	1,34,436	1,62,911	2,00,187	2,37,619
Private Corporate Sector	-2.7	-2.1	-0.8	-0.8	-46,182	-40,791	-17,654	-19,028
Household Sector	10.4	10.5	10.4	11.2	1,80,618	2,03,702	2,17,841	2,56,647

@ Provisional Estimates;
* Quick Estimates; # Adjusted for errors and omissions;
$ Not adjusted for errors and omissions.
Source : Central Statistical Organisation.

The investment rate has been declining after 1999-2000. In 2001-02, it fell further to 23.7 per cent from 24.0 per cent in 2000-01. The decline in the overall investment rate was primarily on account of the continuing slack in the private corporate sector as well as in the public sector during the period 2000-02 (Chart 12).



The overall saving-investment balance turned around into a surplus of 0.2 per cent of GDP in 2001-02 for the first time after the period 1975-78. While the public sector saving-investment gap widened to (-) 8.8 per cent of GDP in 2001-02 from (-) 8.7 per cent of GDP in the previous year, the private sector surplus increased to 10.3 per cent of GDP from 9.5 per cent (Chart 13).



Final consumption expenditure, which had declined to 77.2 per cent of GDP in 2000-01, increased to 77.9 per cent of GDP in 2001-02. This reflected an increase in both private and government final consumption expenditures after marginal declines in 2000-01.

II. Fiscal Situation

Combined Government Finances

The budgets for the year 2002-03 placed the combined gross fiscal deficit of the Centre and States at 9.5 per cent of GDP as against 10.3 per cent in the revised estimates for 2001-02. The combined gross primary and revenue deficits were placed at 3.1 per cent and 6.2 per cent of GDP, respectively, as compared with 4.0 per cent and 7.0 per cent in the revised estimates for 2001-02. The reduction in the deficits was sought to be achieved primarily through higher revenue mobilisation.

Centre's Fiscal Position

The Union budget for 2002-03 had envisaged ongoing fiscal consolidation through higher growth in revenue (15.3 per cent) and a relatively moderate growth (12.6 per cent) in aggregate expenditure. In the revised estimates for 2002-03, all the key deficit indicators were placed higher than their budgeted levels despite a decline in aggregate expenditure (Table 7). The deterioration was mainly due to shortfalls in revenue receipts and significantly lower disinvestment proceeds in relation to budgetary projections.

Table 7 : Deficit Indicators of the Centre

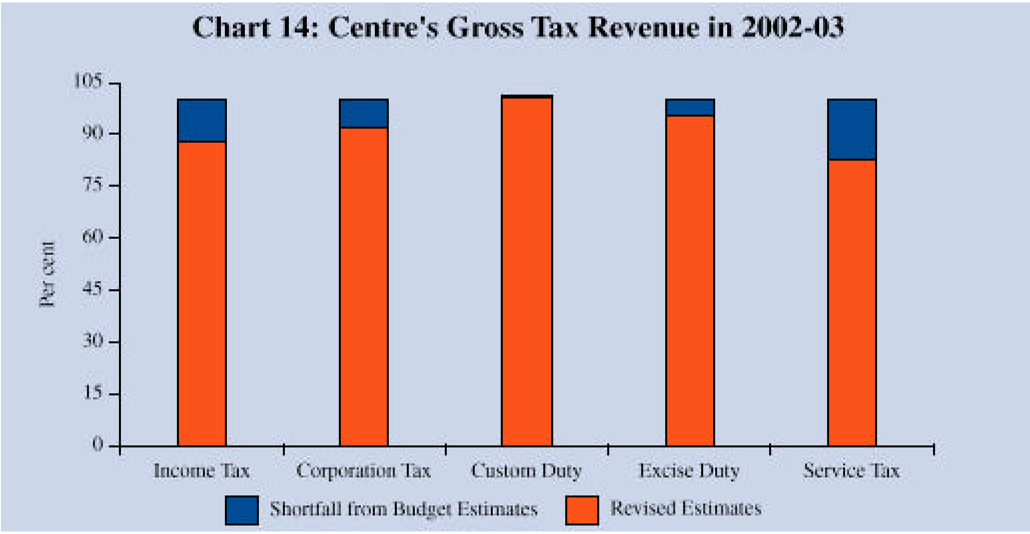
(Rupees crore)

	2001-02	2002-03 (BE)	2002-03 (RE)	Variation (4 over 3) Rupees crore	Per cent
1	2	3	4	5	6
Gross Fiscal Deficit	1,40,955 (6.1)	1,35,524 (5.3)	1,45,466 (5.9)	9,942	7.3
Revenue Deficit	1,00,162 (4.3)	95,377 (3.8)	1,04,712 (4.3)	9,335	9.8
Gross Primary Deficit	33,495 (1.5)	18,134 (0.7)	29,803 (1.2)	11,669	64.3

BE: Budget Estimates; RE: Revised Estimates.
Note: Figures in brackets are proportions to GDP in per cent.

Revenue receipts declined from their budgeted level due to a gap of 5.1 per cent in tax collection. Barring customs duties, all the major taxes fell short of the budget estimates (Chart

14).



Non-tax revenue registered a marginal increase over the budget estimates. Disinvestment proceeds at Rs.3,360 crore were substantially lower than the target of Rs.12,000 crore. Non-debt capital receipts (disinvestment and recoveries) accounted for 12.9 per cent of total capital receipts. The rest was contributed by debt receipts (Table 8).

Table 8 : Total Receipts of the Centre

(Rupees crore)

	2001-02	2002-03 (BE)	2002-03 (RE)	Variation (4 over 3) Rupees crore	Per cent
1	2	3	4	5	6
Total Receipts	3,62,453 (15.8)	4,10,309 (16.0)	4,04,013 (16.4)	-6,296	-1.5
Revenue Receipts	2,01,449 (8.8)	2,45,105 (9.6)	2,36,936 (9.6)	-8,169	-3.3
Tax Revenue	1,33,662 (5.8)	1,72,965 (6.8)	1,64,177 (6.7)	-8,788	-5.1
Non-Tax Revenue	67,787 (3.0)	72,140 (2.8)	72,759 (3.0)	619	0.9
Capital Receipts	1,61,004 (7.0)	1,65,204 (6.5)	1,67,077 (6.8)	1,873	1.1

BE: Budget Estimates; RE: Revised Estimates.
Note: Figures in brackets are proportions to GDP in per cent.

Aggregate expenditure in the revised estimates for 2002-03 was lower by 1.5 per cent than the budget estimates. Expenditure reduction was solely in non-Plan expenditure on account of reduced grants and loans to States and Union Territories (UTs) due to non-utilisation of the 'Fiscal Incentive Fund', lower defence capital expenditure, reduced interest payments due to decline in interest rates on Government securities and reduction in pension expenditure. Plan expenditure showed a marginal rise of Rs.589 crore (Table 9).

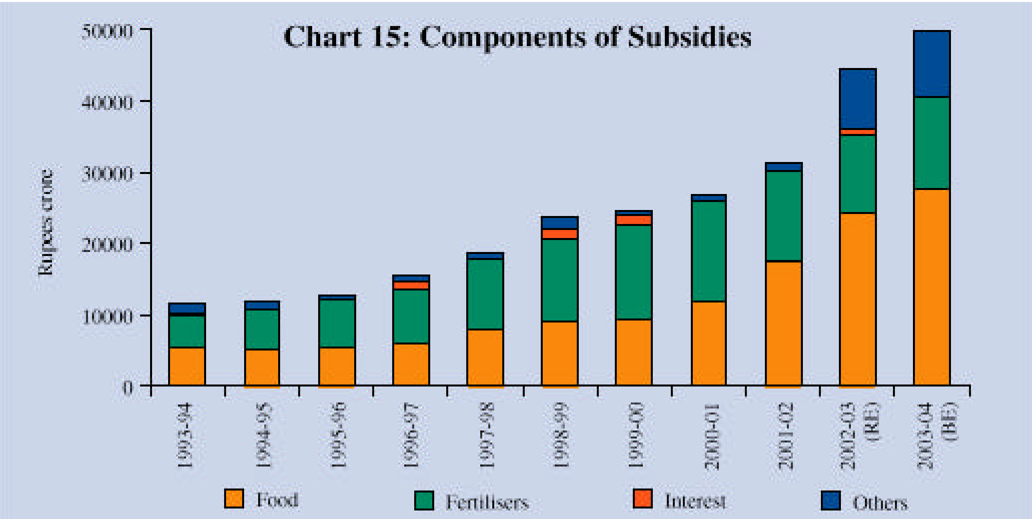
Table 9 : Aggregate Expenditure of the Centre

(Rupees crore)

		2001-02	2002-03 (BE)	2002-03 (RE)	Variation (4 over 3) Rupees crore	Per cent
1		2	3	4	5	6
Total Expenditure (1+2=3+4)		3,62,453 (15.8)	4,10,309 (16.0)	4,04,013 (16.4)	-6,296	-1.5
1.	Non-Plan Expenditure of which:	2,61,259 (11.4)	2,96,809 (11.6)	2,89,924 (11.8)	-6,885	-2.3
	Interest Payments	1,07,460 (4.7)	1,17,390 (4.6)	1,15,663 (4.7)	-1,727	-1.5
	Defence	54,266 (2.4)	65,000 (2.5)	56,000 (2.3)	-9,000	-13.8
	Subsidies	31,207 (1.4)	39,801 (1.6)	44,618 (1.8)	4,817	12.1
2.	Plan Expenditure	1,01,194 (4.4)	1,13,500 (4.4)	1,14,089 (4.6)	589	0.5
3.	Revenue Expenditure	3,01,611 (13.1)	3,40,482 (13.3)	3,41,648 (13.9)	1,166	0.3
4.	Capital Expenditure	60,842 (2.6)	69,827 (2.7)	62,365 (2.5)	-7,462	-10.7

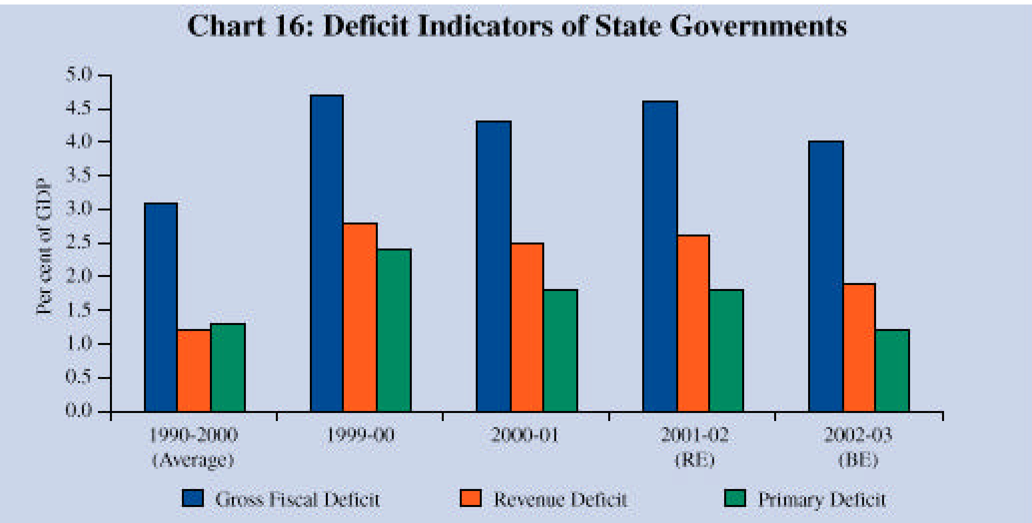
BE: Budget Estimates; RE: Revised Estimates.
Note: Figures in brackets are proportions to GDP in per cent.

Expenditure on subsidies increased over the budget estimates. Almost 83 per cent of the rise was accounted for by food and indigenous fertiliser subsidies. Total subsidies have shown a rising profile since the early 1990s mainly driven by food subsidy. Fertiliser subsidy has stabilised since 2000-01 (Chart 15). With the abolition of the Administered Price Mechanism in the petroleum sector and cessation of the oil pool account, petroleum subsidies now have to be provided for explicitly in the Union Budget, starting in 2002-03.

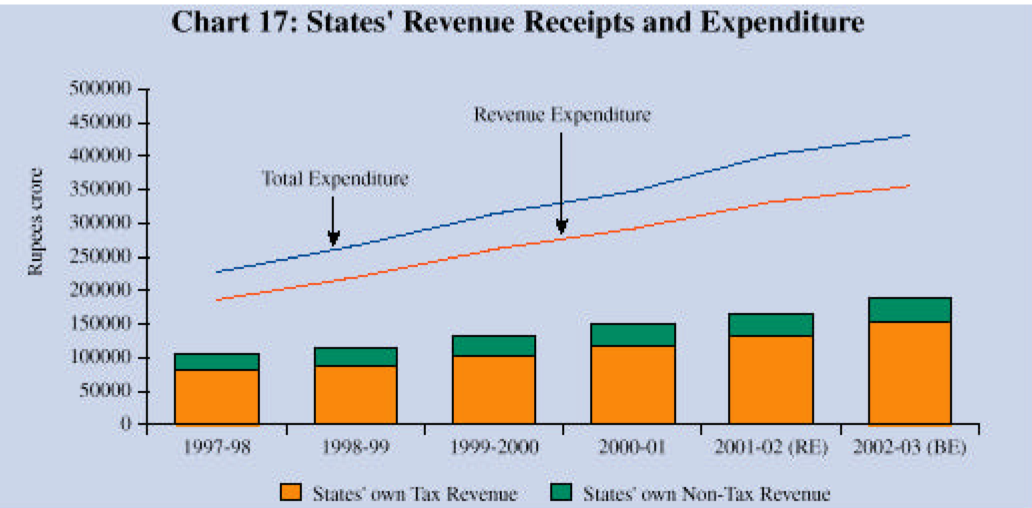


State Finances

The finances of State Governments during 2002-03 were budgeted to improve over the previous year with the revenue deficit placed at 1.9 per cent of GDP (2.6 per cent in the revised estimates (RE) for 2001-02), the gross fiscal deficit at 4.0 per cent (4.6 per cent in 2001-02 RE) and the primary deficit at 1.2 per cent (1.8 per cent in 2001-02 RE) (Chart 16).



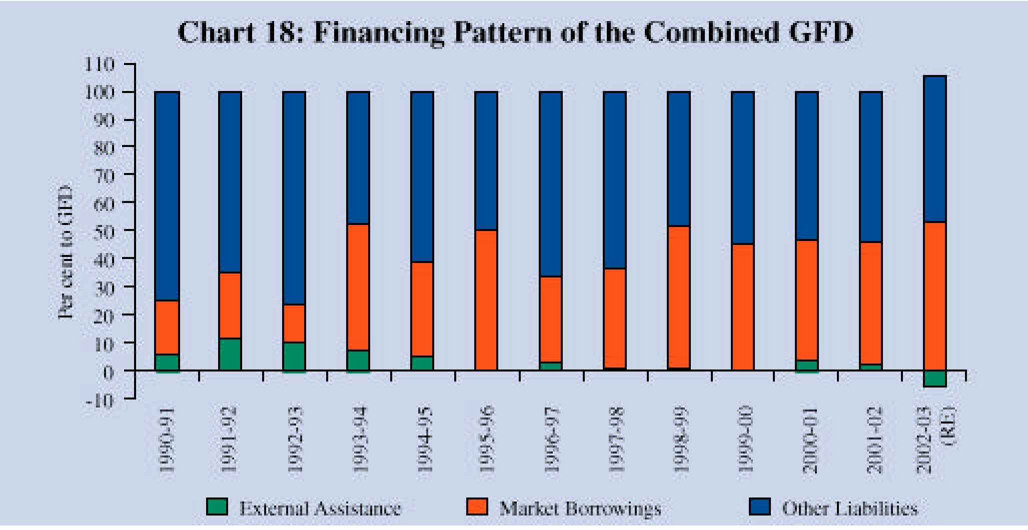
During 2002-03, revenue receipts were budgeted to rise by 13.3 per cent (Chart 17). States' own revenue receipts (revenue receipts minus sharable taxes and grants) were expected to finance 53.6 per cent of revenue expenditure and 44.2 per cent of the aggregate expenditure. The total expenditure of States was budgeted to grow by 7.3 per cent, significantly lower than 15.7 per cent in the previous year.



Details regarding the fiscal performance of States *vis-a-vis* budgetary projections for 2002-03 are not yet available. The budgets of States continue to emphasise fiscal consolidation through expenditure management, revenue augmentation and restructuring of public sector undertakings. Institutional reforms proposed in the State budgets aim at fiscal stability and sustainability. Several States have already finalised their Medium Term Fiscal Reforms Plans (MTFRP), while a few States have initiated measures to provide statutory backing to the fiscal reform process through enabling legislation. States have also focused on development of infrastructure, including encouragement to private investment in infrastructure projects and promotion of growth enhancing sectors like information technology and agro-based industries.

Financing Patterns

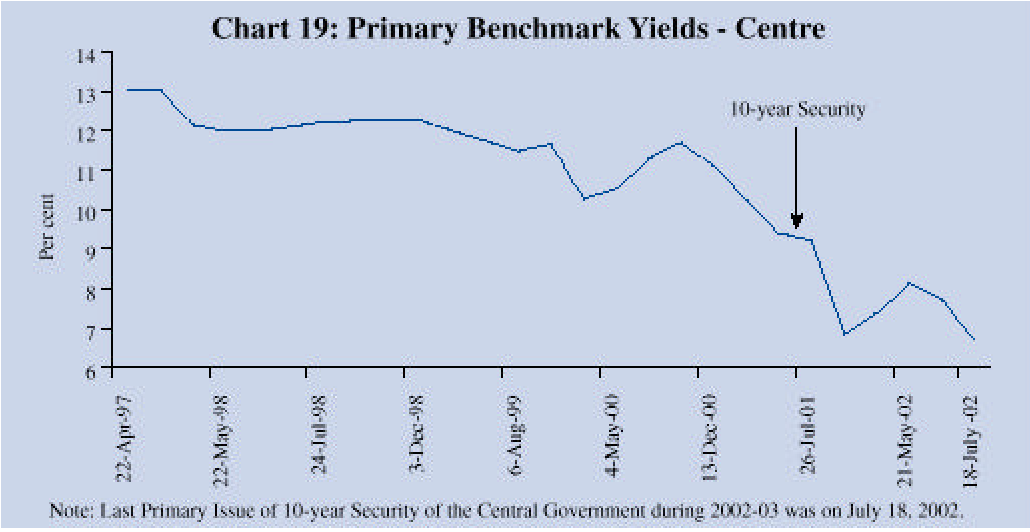
The financing pattern of fiscal deficits has undergone shifts since the 1990s. Among the domestic sources of financing which generally constitute 99 per cent of the combined gross fiscal deficit (GFD) of the Centre and States, the share of market borrowings rose from 19.7 per cent in 1990-91 to 53.0 per cent in 2002-03. The share of other domestic financing items including small savings, provident funds, deposits, reserve funds and others underwent a corresponding decline from 74.4 per cent to 52.7 per cent (Chart 18). In particular, the share of small savings and provident funds taken together has contracted in recent years. The share of external finance declined sharply from 11.8 per cent in 1991-92 to barely 2.4 per cent in 2001-02. Large repayments (inclusive of prepayment) resulted in net outflows under external assistance in 2002-03 (-5.7 per cent of GFD).



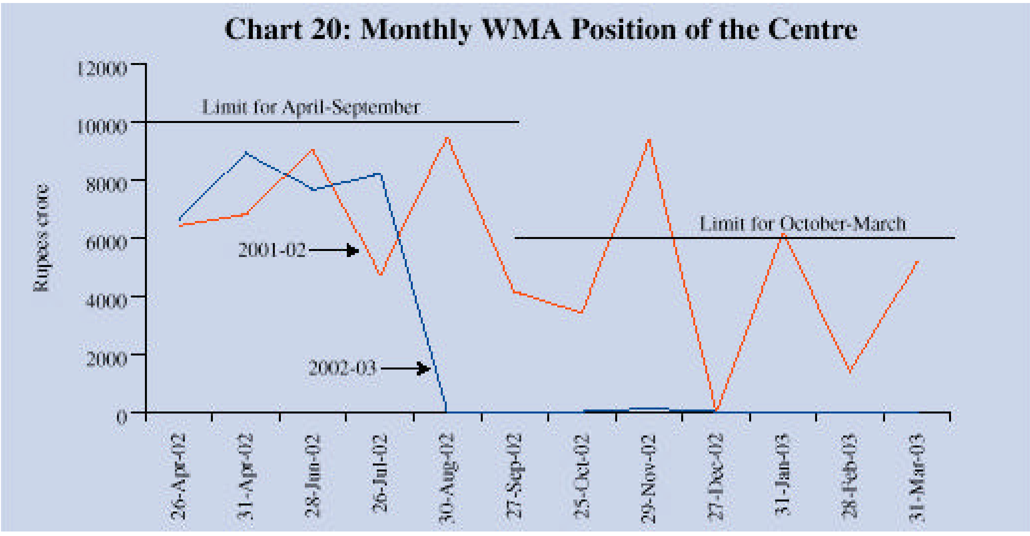
Financing of the Union Budget

Gross market borrowings of the Centre were budgeted at Rs.1,42,867 crore and net market borrowings at Rs.95,859 crore for 2002-03. The revised estimates for 2002-03 have placed the net borrowings at Rs.1,12,865 crore which exceeded the budget estimates by 17.7 per cent.

The Reserve Bank continued its practice of combining auctions with private placement to avoid strain on yields. Comfortable liquidity conditions enabled a decline in the interest rates on market borrowings by the Centre after May 2002 (Chart 19). The yield on the 10-year benchmark security in the primary market declined to 6.72 per cent by July 18, 2002.



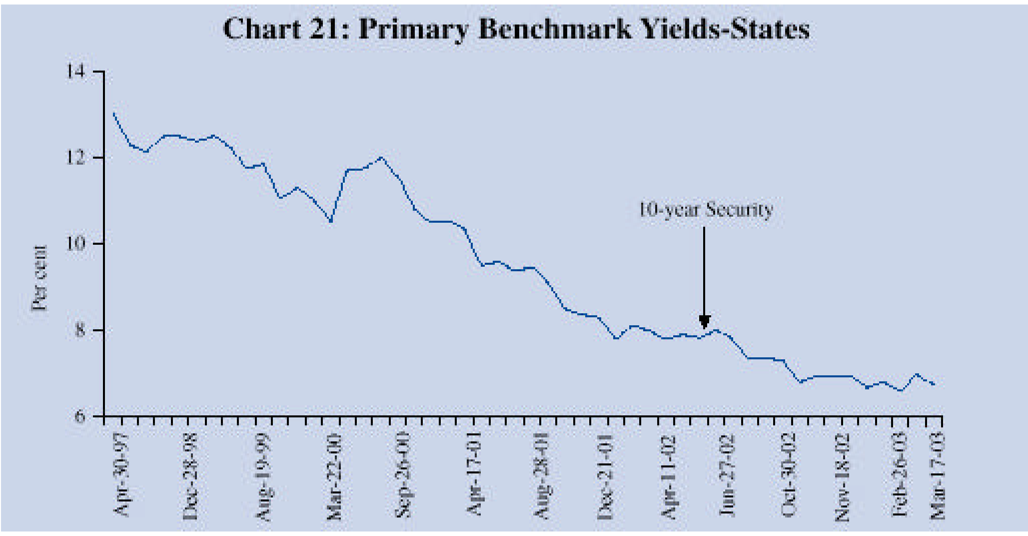
The agreed limits on the Centre's Ways and Means Advances (WMA) from the Reserve Bank for the first and second halves of 2002-03 were fixed at Rs.10,000 crore (April-September) and Rs. 6,000 crore (October-March), the same as in the previous year. The average utilisation of WMA at Rs.4,182 crore during 2002-03 was lower than in the previous year (Chart 20).



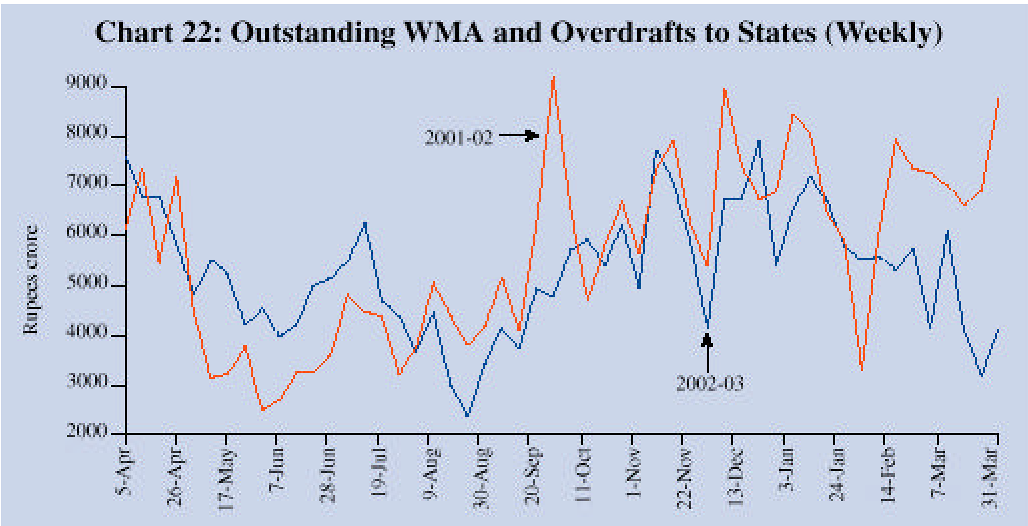
Financing of State Budgets

The gross and net market borrowings allocated to States in 2002-03 (including additional allocation of Rs.10,000 crore under the debt-swap scheme) amounted to Rs.30,933 crore and Rs.29,144 crore, respectively. States raised Rs.30,853 crore of which Rs.27,880 crore (90.4 per cent) was raised through tap issues at coupon rates between 6.6 – 7.8 per cent and Rs.2,973 crore (9.6 per cent) through auctions at interest rates ranging between 6.7 - 8.0 per cent. States that raised funds through auction were Andhra Pradesh (Rs.545 crore), Gujarat (Rs.445 crore), Jammu and Kashmir (Rs.70 crore), Karnataka (Rs.200 crore), Kerala (Rs.445 crore), Madhya Pradesh (Rs.247 crore), Maharashtra (Rs.509 crore), Punjab (Rs.85 crore), Tamil Nadu (Rs.275 crore) and West Bengal (Rs.153 crore).

The average interest rate on market borrowings of States has declined continuously in recent years. During 2002-03, the interest rate on market borrowings remained in the range of 6.6 - 8.0 per cent as compared with 11.5 per cent in case of loans from the Centre (Plan loans) and 10.5 per cent on loans against small saving collections. The coupon rate for the tap tranche held in August 2002 was fixed 50 basis points over the then prevailing yield on Government of India (GoI) 10-year security. In the tranche conducted in December 2002, the spread was lower at 37 basis points over the yield on GoI 10-year security. The yield on primary issue of 10-year security fell to 6.75 per cent on March 17, 2003 from a peak of 8.0 per cent on April 11, 2002 (Chart 21).

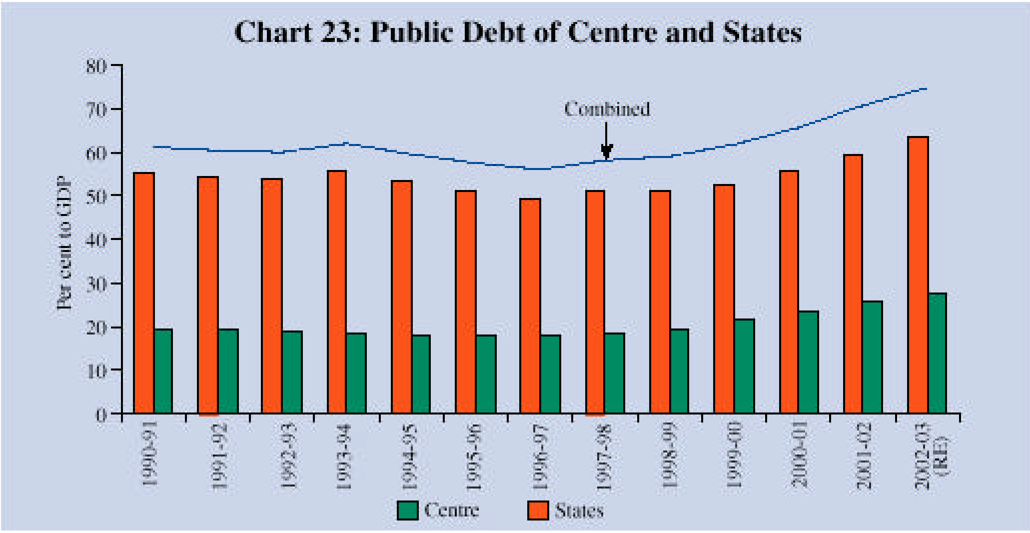


The outstanding WMA and overdrafts of State Governments was lower by 52.9 per cent at Rs.4,128 crore as at end-March 2003 as compared with the outstanding amount of Rs.8,758 crore as at end-March 2002 (Chart 22). The revised scheme of WMA 2003 has been implemented with effect from March 1, 2003.



Public Debt

The combined debt-GDP ratio of the Centre and States is estimated to have risen to 75.3 per cent in 2002-03 (Chart 23). During the year, the weighted average maturity of government securities was lower at 13.8 years as compared with 14.3 years in the previous year. The weighted average coupon rate also fell to 7.34 per cent from 9.44 per cent in the preceding year. There was an issue of floating rate bonds on July 2, 2002 with the rate linked to the 364-day treasury bill rate with a mark-up of 34 basis points.



The Fiscal Outlook

Information on the outlook for State finances would become available by August 2003. The Union budget 2003-04 aims to pursue fiscal consolidation through expenditure reprioritisation and revenue augmentation. With moderate growth rates of 7.2 per cent in revenue receipts and 8.6 per cent in aggregate expenditure, all major deficit indicators are expected to be lower as proportions to GDP in 2003-04 as compared with the revised estimates for 2002-03 – the gross fiscal deficit at 5.6 per cent of GDP, the revenue deficit at 4.1 per cent and the primary deficit at 1.1 per cent.

Under revenue receipts, tax revenue is projected to increase by 12.2 per cent; consequently, the gross tax-GDP ratio of the Central Government would show a modest rise to 9.2 per cent during 2003-04 from 9.0 per cent in the revised estimates for 2002-03. As regards aggregate expenditure, revenue expenditure is budgeted to grow by 7.2 per cent, while capital expenditure would be higher by 16.4 per cent (Table 10). Non-Plan revenue expenditure would account for 79.0 per cent of the revenue expenditure. Among the major non-Plan revenue expenditure items, interest payments, defence expenditure and subsidies taken together would account for 75.2 per cent of non-Plan revenue expenditure and would absorb 85.6 per cent of revenue receipts. The interest payments alone would pre-empt 48.5 percent of the revenue receipts in 2003-04. Non-Plan capital expenditure would account for 39.2 per cent of the total capital expenditure in 2003-04 and would rise by 35.8 per cent. Plan capital expenditure is budgeted to rise by 6.5 per cent during 2003-04.

Net market borrowings are budgeted lower at Rs.1,07,194 crore for 2003-04 than Rs.1,12,865 crore in the revised estimates for 2002-03. Net market borrowings would finance 69.8 per cent of the GFD (as against 77.6 per cent in the revised estimates for 2002-03). Inclusive of repayments, the gross market borrowings for 2003-04 are placed at Rs.1,66,230 crore. The debt-GDP ratio of the Centre is budgeted to rise to 64.9 per cent by the end of fiscal year 2003-04 as against 63.3 per cent placed in revised estimates for 2002-03. The Union budget has proposed improved cash management and debt restructuring by way of prepayment of external debt, buy-back of high cost debt from banks and debt swaps with State Governments.

Table 10: Union Budget 2003-04 at a Glance

	2002-03 (RE)	2003-04 (BE)	Variation (3 over 2)	
			Rupees crore	Per cent
1	2	3	4	5
Revenue Receipts	2,36,936	2,53,935	16,999	7.2
	(9.6)	(9.3)		
Tax Revenue	1,64,177	1,84,169	19,992	12.2
	(6.7)	(6.7)		
Non-Tax Revenue	72,759	69,766	-2,993	-4.1
	(3.0)	(2.5)		
Non-Plan Expenditure	2,89,924	3,17,821	27,897	9.6
of which:	(11.8)	(11.6)		
Interest Payments	1,15,663	1,23,223	7,560	6.5
	(4.7)	(4.5)		
Defence	56,000	65,300	9,300	16.6
	(2.3)	(2.4)		
Subsidies	44,618	49,907	5,289	11.9
	(1.8)	(1.8)		
Plan Expenditure	1,14,089	1,20,974	6,885	6.0
	(4.6)	(4.4)		
Revenue Expenditure	3,41,648	3,66,227	24,579	7.2
	(13.9)	(13.3)		
Capital Receipts	1,67,077	1,84,860	17,783	10.6
	(6.8)	(6.7)		
Capital Expenditure	62,365	72,568	10,203	16.4
	(2.5)	(2.6)		
Gross Fiscal Deficit	1,45,466	1,53,637	8,171	5.6
	(5.9)	(5.6)		
Revenue Deficit	1,04,712	1,12,292	7,580	7.2
	(4.3)	(4.1)		
Gross Primary Deficit	29,803	30,414	611	2.1
	(1.2)	(1.1)		

BE: Budget Estimates; RE: Revised Estimates.

Note: Figures in brackets are proportions to GDP in per cent.

III. Monetary and Liquidity Conditions

Monetary Trends

Monetary conditions remained stable during 2002-03. Large and persistent capital inflows were sterilised by timely open market and repo operations. Consequently, base money expansion remained moderate. Money supply, in terms of broad money (M_3) excluding the effects of mergers as well as the residency based new monetary aggregate (NM_3), remained in alignment with initial expectations. The revival in non-food bank credit, which was evident in the last quarter of 2001-02, firmed up throughout 2002-03 reflecting the improvement in the industrial climate. Nevertheless, liquidity in the financial system was ample. This was reflected in the broader measures of liquidity (L_1, L_2 and L_3) (Table 11). Despite the Centre's market borrowing moderately exceeding the budgeted level, there was a softening of interest rates with varying sensitivity across the spectrum.

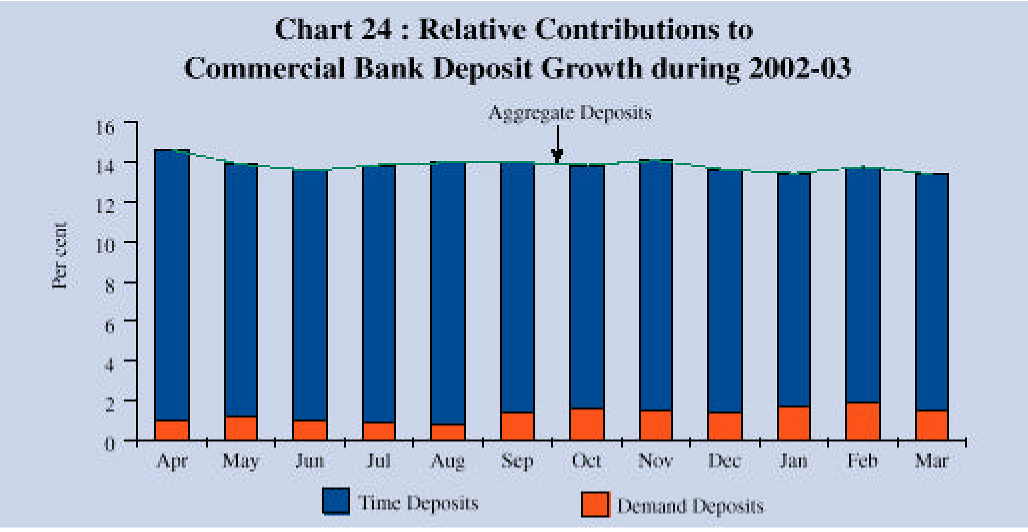
Table 11 : Monetary Indicators

Variable	**Outstanding** as on **March 31, 2003** (Rupees crore)	**(Variation in per cent)** Point-to-point **Basis** 2001-02	2002-03	**Monthly Average** Basis 2001-02	2002-03
1	2	3	4	5	6
I. Reserve Money	3,68,931	11.4	9.2	11.1	9.2
II. NM3*	15,97,482	15.7	14.3	15.5	15.0
III. a) L1*	16,46,712	16.0	14.4	15.7	15.2
b) L2*	16,52,322	15.7	14.0	15.5	14.8
c) L3**	16,38,412	14.7	14.0	15.2	14.3
IV. Broad Money (M3)	16,94,907	14.2	13.0	16.1	14.0
a) Currency with the Public	2,71,662	15.2	12.5	12.7	13.8
b) Aggregate Deposits	14,19,971	14.2	13.1	16.8	14.1
i) Demand Deposits	1,96,473	7.2	10.2	10.3	9.7
ii) Time Deposits	12,23,498	15.4	13.6	18.0	14.8
V. Major Sources of Broad Money					
a) Net Bank Credit to the Government (i+ii)	6,74,352	14.6	15.0	16.6	13.4
i) Net Reserve Bank Credit to Government	1,20,102	-1.1	-21.1	1.5	-17.5
Of which: to the Centre	1,16,015	-3.5	-17.9	0.6	-17.7
ii) Other Banks' Credit to					

Government	5,54,250	21.3	27.6	23.8	25.2
b) Bank Credit to Commercial Sector	8,59,945	11.3	13.7	12.7	12.1
Of which: Scheduled Commercial Banks' Non-food Credit	6,31,344	13.6	17.8	11.8	16.3
c) Net Foreign Exchange Assets of Banking Sector	3,99,235	26.0	26.8	24.6	31.4

Data provisional.
* Data pertain to end-February.
**Data pertain to end-December.
Note: M_3, NM_3, L_1, L_2, L_3 and deposits are adjusted for the full impact of mergers while credit is adjusted for the initial impact of mergers since May 3, 2002.

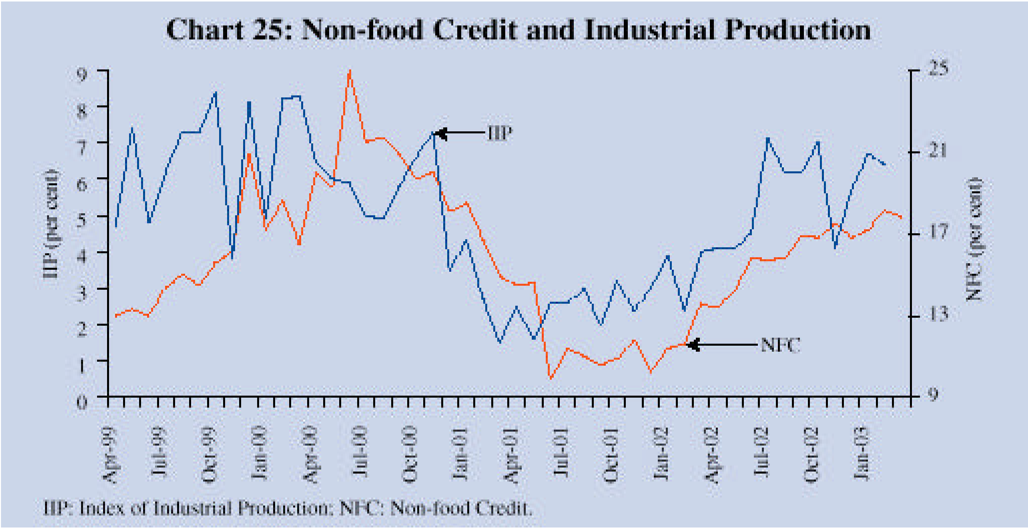
M_3 (net of the full impact of mergers) moved in consonance with its projected trajectory of 14.0 per cent during 2002-03. Lower currency expansion relative to trend as well as slower time deposit growth restrained the monetary expansion. On the other hand, the relative contribution of demand deposits to aggregate deposits growth rose, indicating a shortening of time preference at the margin (Chart 24). On a year-on-year basis, M_3 expansion was 13.3 per cent as on April 4, 2003 as compared with 14.0 per cent a year ago.



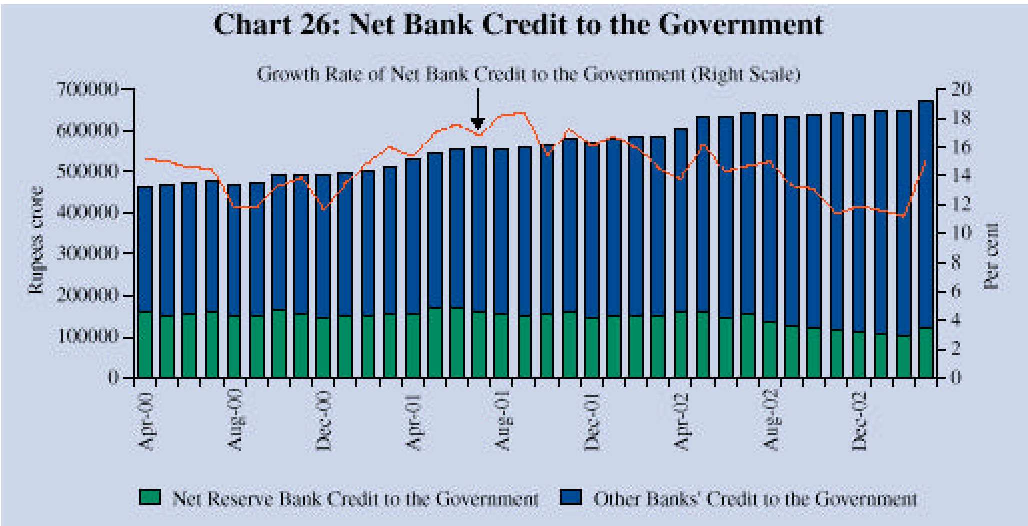
Credit Behaviour

Food credit from commercial banks declined by Rs.4,499 crore in 2002-03 due to a significant fall in procurement operations and increase in off-take. Non-food credit to the commercial sector, inclusive of non-SLR investments by banks but excluding the initial impact of mergers, posted a recovery reflecting the improvement in industrial activity (Chart 25).

Net bank credit to the Government during 2002-03 increased marginally on a year-on-year basis and was 41.4 per cent of adjusted domestic credit (including commercial banks' non-SLR investments) at end-March 2003. The share of the Reserve Bank in net bank credit to the Government declined from 25.9 per cent at the end of March 2002 to 17.8 per cent by end-March 2003 on account of the large open market operations conducted during the year.

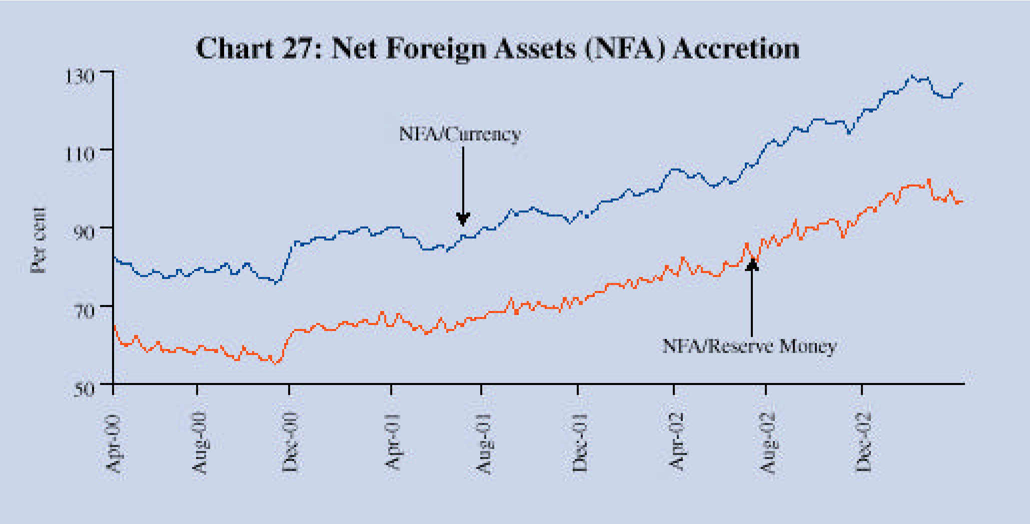


Commercial banks exhibited a strong appetite for Government paper in primary auctions as well as in secondary operations by the Reserve Bank (Chart 26).



Reserve Money

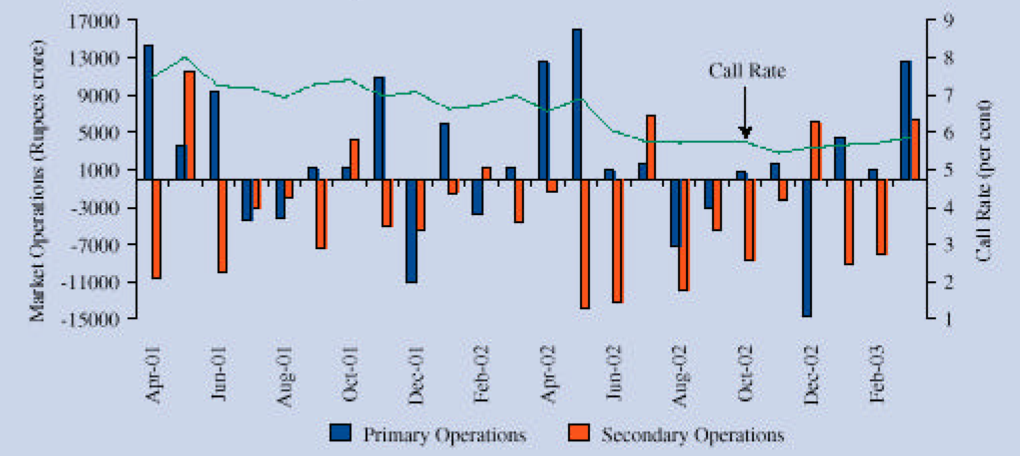
Accretions to the foreign currency assets of the Reserve Bank continued to be the principal component of reserve money as in the previous year. The Reserve Bank's foreign currency assets (adjusted for revaluation) increased by Rs.82,090 crore during 2002-03 on top of an increase of Rs.55,836 crore in 2001-02. The ratios of net foreign currency assets of the Reserve Bank to currency as well as to reserve money improved steadily during the year reflecting prudent monetary management in the context of capital flows (Chart 27).



Market liquidity was augmented by the Reserve Bank's primary subscription to the Central Government's market borrowing programme (Rs.36,175 crore) and release of resources by way of lowering the cash reserve ratio (CRR) (around Rs.10,000 crore). Primary subscriptions included Rs.13,000 crore towards prepayment of loans drawn from multilateral agencies. This part of the increase in the Reserve Bank's credit to the Centre is offset by a corresponding decline in NFA; as such, it has no monetary or fiscal impact and is neutral to market liquidity. The Reserve Bank's secondary operations in the form of cumulative net open market sales and net repos of Rs.54,182 crore substantially offset the injections through primary operations (Chart 28). Accordingly, reserve money expansion at 9.2 per cent (Rs.30,960 crore) during 2002-03 was lower than in the preceding year (11.4 per cent). The year-on-year expansion in reserve money was 10.5 per cent on April 18, 2003 as compared with 13.0 per cent a year ago.

The Reserve Bank's holding of Government securities came down sharply as a result of open market operations in an environment of ample liquidity and declining interest rates. Net Reserve Bank credit to the Centre declined by 17.9 per cent (Rs.25,369 crore) during 2002-03. The contraction began in the second quarter on the back of large open market sales. Subsequently, net open market sales remained sizeable and, along with retirement of ways and means advances, exerted a contractile effect on net Reserve Bank credit to the Centre (Table 12).

Chart 28: Market Operations of the Reserve Bank and Call Rate



Surges in capital flows have significantly influenced the composition of the Reserve Bank's balance sheet during the 1990s. Net foreign assets of the Reserve Bank, which formed only 8.5 per cent of the average outstanding reserve money in 1990-91, constituted 91.3 per cent by 2002-03 (Chart 29). This has implications in terms of approaching the limit to sterilisation and the constraints it presages on discretion in the conduct of monetary policy.

Table 12 : Net Reserve Bank Credit to the Centre: Quarterly Variation

(Rupees crore)

Variable	2001-02				2002-03			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9
Net Reserve Bank Credit to the Centre (1+2+3+4-5)	19,523 (13.3)	-20,140 (-12.1)	-4,770 (-3.3)	236 (0.2)	1,455 (1.0)	-19,555 (-13.7)	-17,882 (-14.5)	10,612 (10.1)
1. Loans and Advances	3,619	-7,791	-1,223	5,176	2,472	-7,648	0	0
2. Treasury Bills held by the Reserve Bank	-3	-480	0	18	-18	0	0	3
3. Reserve Bank's Holdings of Dated Securities	13,150	-11,907	-3,529	63	-6,107	-11,761	-17,979	11,116
4. Reserve Bank's Holdings of Rupee Coins	39	38	-18	24	64	-146	97	-106
5. Central Government Deposits	-2,718	0	-1	5,045	-5,044	0	0	401
*Memo Items**								
1. Market Borrowings of Dated Securities by the Centre #	46,000	31,000	24,000	13,213	49,000	35,000	23,000	18,000
2. Reserve Bank's Primary Subscription to Dated Securities	21,000	679	4,000	3,213	22,018	1,157	0	13,000
3. Repos (-) / Reverse Repos (+) (LAF), net position £	1,355	1,410	-1,160	-4,605	-20,355	9,288	10,371	295
4. Net Open Market Sales #	10,929	13,985	5,273	148	7,020	19,918	15,693	11,150
5. Primary Operations $	27,376	-7,273	1,178	3,368	29,598	-8,642	-12,527	18,217

* At face value. # Excludes Treasury Bills. £ At book value
$ Adjusted for Centre's surplus investment.
Figures in parentheses are percentage variations over the previous quarter.
Quarterly variations are based on March 31 for Q4 and last reporting Fridays for other quarters.

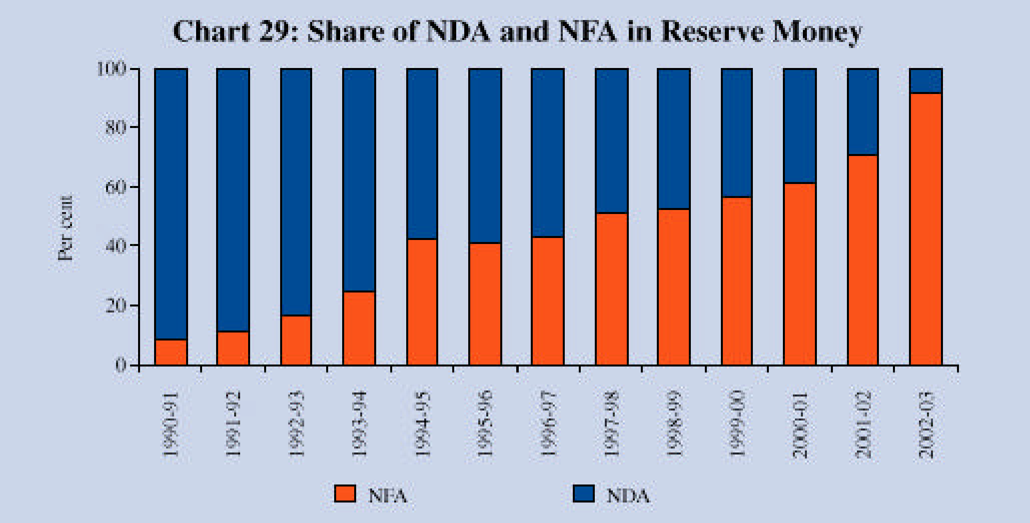


Chart 29: Share of NDA and NFA in Reserve Money

Liquidity Management

In line with international practices, market liquidity is the operating target for monetary policy in India. The Reserve Bank modulates liquidity in the market through its repo/reverse repo and open market operations, changes in reserve requirements and by direct interest rate signals through the Bank Rate and repo rate. During 2002-03, the strategic counterbalancing of the autonomous liquidity (AL[1]) flows with changes in both the quantum and the rate of policy or discretionary liquidity (DL) was effective in maintaining orderly conditions in the money market (Chart 30).

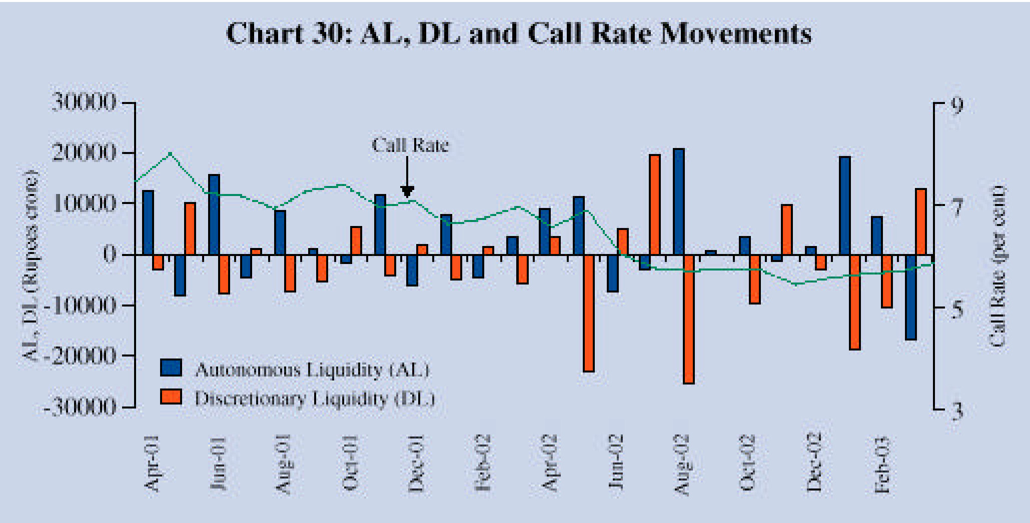
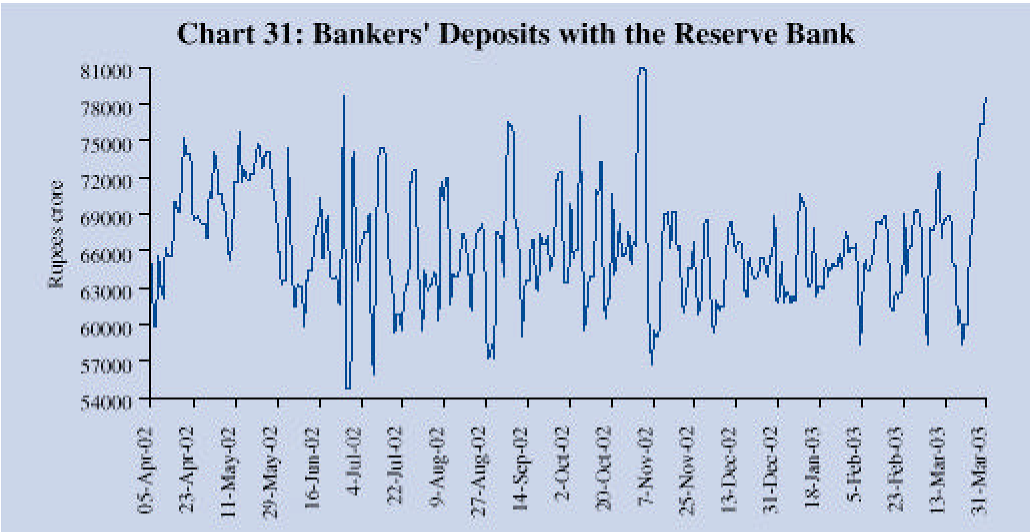


Chart 30: AL, DL and Call Rate Movements

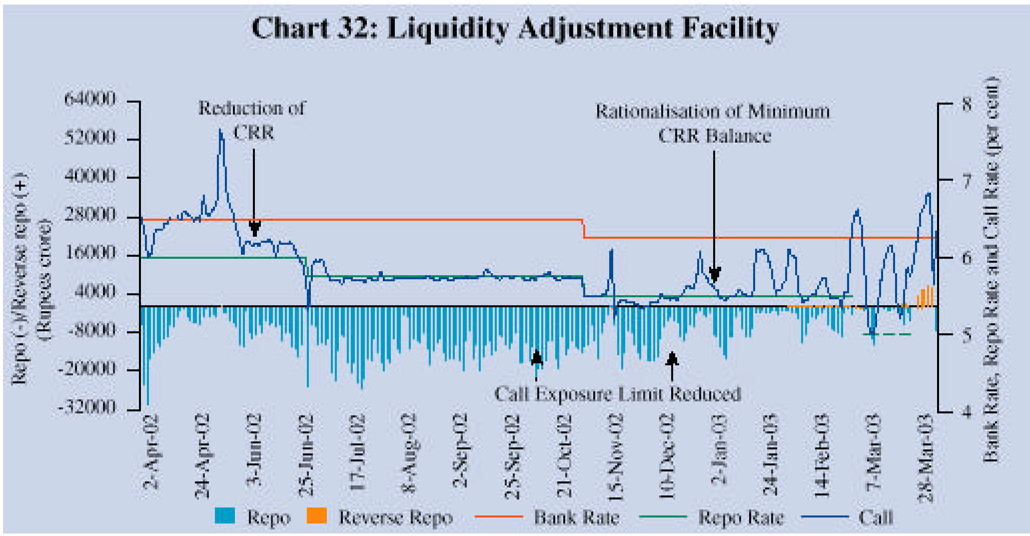
In the recent period, several changes in the operating procedures of monetary policy have enabled improved liquidity management by market participants. Progressive rationalisation of the maintenance requirements, including the withdrawal of all exemptions except on inter-bank liabilities, has been undertaken in consonance with a phased lowering of the height of the CRR towards its statutory minimum in the medium term. This was carried forward in 2002-03 by a cumulative 75 basis points reduction in the CRR, resetting the daily maintenance requirement to a uniform 80 per cent of the required reserves for a fortnight (lowered to 70 per cent since December 28, 2002) from differential intra-fortnight stipulations, phasing out of the collateralised lending facility (CLF) and making remaining standing facilities more market-based by splitting them equally between normal and back-stop facilities as against the earlier ratio of 2:1. Greater transparency of money and gilt market operations of the Reserve Bank also contributed to improved liquidity planning by banks as evident in the dampening of the variability of daily balances maintained by them with the Reserve Bank, especially in the second half of the year (Chart 31).

Liquidity Adjustment Facility

The Liquidity Adjustment Facility (LAF), operative since June 2000, has been effective in meeting day to day liquidity mismatches in the system, restricting volatility in short-term money market rates and in steering the movements in these rates consistent with monetary policy objectives. The LAF itself is evolving and is being fine-tuned to market conditions.



Conditions of comfortable liquidity in the beginning of the year were modulated through repo operations under the LAF. With the intensification of the Centre's market borrowing programme, liquidity tightened in May 2002. A combination of partial acceptance of repo bids, undertaking devolvements/private placements of primary issuance of government securities and advancing the date of a pre-announced 50 basis points CRR cut to June 1, 2002 assuaged liquidity pressures. Liquidity conditions eased in June and the weighted average call money borrowing rate fell below the repo rate on June 24, 2002, prompting a reduction of the repo cut-off rate by 25 basis points to 5.75 per cent subsequently (Chart 32). Ample liquidity conditions, however, led to a virtual vacation of recourse to standing facilities ahead of the phasing out of the CLF.



The coordinated reduction in the Bank Rate and the repo rate by 25 basis points each at the end of October 2002, followed by a 25 basis point cut in the CRR and the application of a uniform daily reserve maintenance in November 2002 were undertaken with a view to aligning the call rate with the informal corridor of the LAF. Liquidity conditions balanced as the CRR reduction became effective.

The minimum average daily CRR maintenance was reduced by 10 percentage points (from 80 per cent earlier), with effect from the fortnight beginning December 27, 2002. The liquidity conditions eased thereafter and the repo bid amounts increased. Money market conditions were temporarily strained in the second half of January and February 2003, resulting in low absorption through repos. The repo rate reduction by 50 basis points to 5.0 per cent on March 3, 2003 brought an easing of liquidity. Reverse repos were employed to inject liquidity and assuage the usual tightening at the end of the year. As the liquidity conditions eased, the average daily repo outstanding amount rose from Rs. 6,306 crore during the fortnight ended April 4, 2003 to Rs. 26,260 crore during the fortnight ended April 18, 2003.

---

[1] AL = Reserve Bank's net claims on the Government (adjusted for net open market (including repo) operations) + Claims on banks (other than credit to scheduled commercial banks) + Credit to the commercial sector (other than credit to PDs) + Net foreign assets – Notes in circulation – 'Other' deposits – Net non-monetary liabilities, in flow terms.

DL = Net open market (including repo) operations + Credit to scheduled commercial banks and primary dealers netted for cumulative changes in reserve requirements, in flow terms.

III. Monetary and Liquidity Conditions

Monetary Trends

Monetary conditions remained stable during 2002-03. Large and persistent capital inflows were sterilised by timely open market and repo operations. Consequently, base money expansion remained moderate. Money supply, in terms of broad money (M_3) excluding the effects of mergers as well as the residency based new monetary aggregate (NM_3), remained in alignment with initial expectations. The revival in non-food bank credit, which was evident in the last quarter of 2001-02, firmed up throughout 2002-03 reflecting the improvement in the industrial climate. Nevertheless, liquidity in the financial system was ample. This was reflected in the broader measures of liquidity (L_1, L_2 and L_3) (Table 11). Despite the Centre's market borrowing moderately exceeding the budgeted level, there was a softening of interest rates with varying sensitivity across the spectrum.

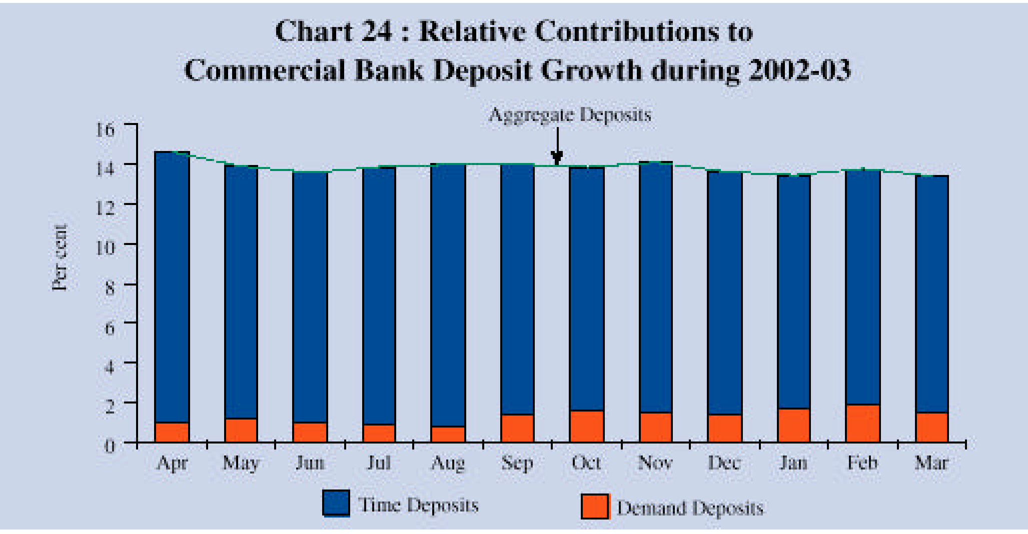
Table 11 : Monetary Indicators

Variable	**Outstanding** as on **March 31, 2003** (Rupees crore)	**(Variation in per cent)** Point-to-point **Basis**		**Monthly Average** Basis	
		2001-02	2002-03	2001-02	2002-03
1	2	3	4	5	6
I. Reserve Money	3,68,931	11.4	9.2	11.1	9.2
II. NM3*	15,97,482	15.7	14.3	15.5	15.0
III. a) L1*	16,46,712	16.0	14.4	15.7	15.2
b) L2*	16,52,322	15.7	14.0	15.5	14.8
c) L3**	16,38,412	14.7	14.0	15.2	14.3
IV. Broad Money (M3)	16,94,907	14.2	13.0	16.1	14.0
a) Currency with the Public	2,71,662	15.2	12.5	12.7	13.8
b) Aggregate Deposits	14,19,971	14.2	13.1	16.8	14.1
i) Demand Deposits	1,96,473	7.2	10.2	10.3	9.7
ii) Time Deposits	12,23,498	15.4	13.6	18.0	14.8
V. Major Sources of Broad Money					
a) Net Bank Credit to the Government (i+ii)	6,74,352	14.6	15.0	16.6	13.4
i) Net Reserve Bank Credit to Government	1,20,102	-1.1	-21.1	1.5	-17.5
Of which: to the Centre	1,16,015	-3.5	-17.9	0.6	-17.7
ii) Other Banks' Credit to					

Government	5,54,250	21.3	27.6	23.8	25.2
b) Bank Credit to Commercial Sector	8,59,945	11.3	13.7	12.7	12.1
Of which: Scheduled Commercial Banks' Non-food Credit	6,31,344	13.6	17.8	11.8	16.3
c) Net Foreign Exchange Assets of Banking Sector	3,99,235	26.0	26.8	24.6	31.4

Data provisional.
* Data pertain to end-February.
**Data pertain to end-December.
Note: M_3, NM_3, L_1, L_2, L_3 and deposits are adjusted for the full impact of mergers while credit is adjusted for the initial impact of mergers since May 3, 2002.

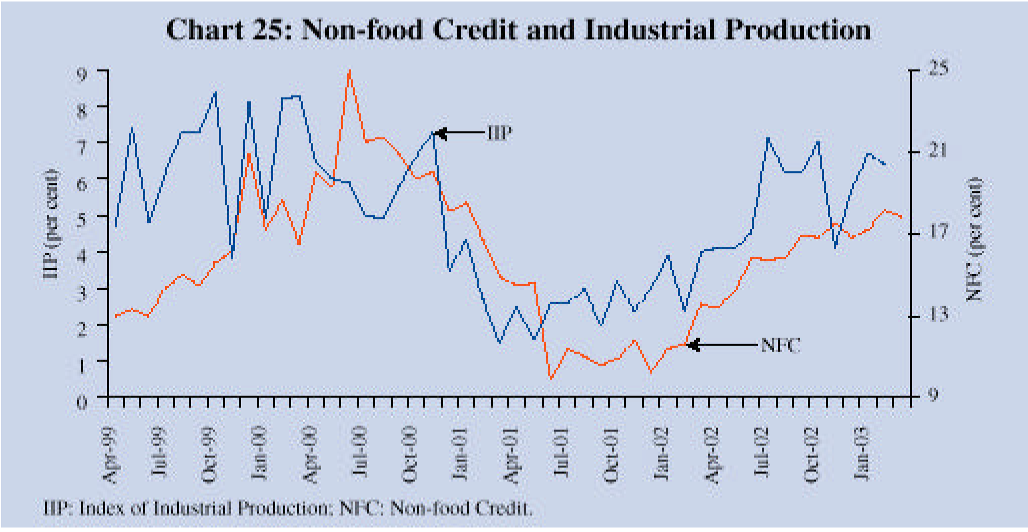
M_3 (net of the full impact of mergers) moved in consonance with its projected trajectory of 14.0 per cent during 2002-03. Lower currency expansion relative to trend as well as slower time deposit growth restrained the monetary expansion. On the other hand, the relative contribution of demand deposits to aggregate deposits growth rose, indicating a shortening of time preference at the margin (Chart 24). On a year-on-year basis, M_3 expansion was 13.3 per cent as on April 4, 2003 as compared with 14.0 per cent a year ago.



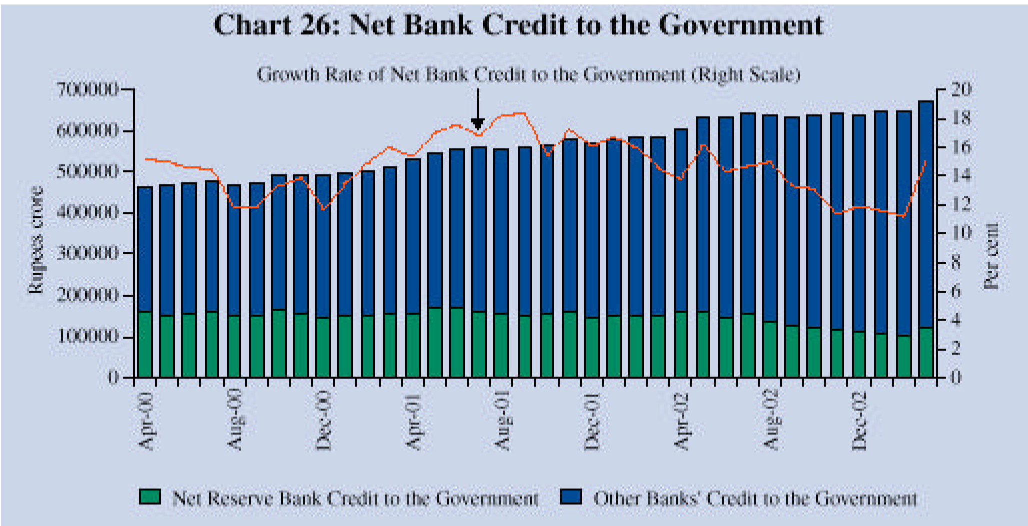
Credit Behaviour

Food credit from commercial banks declined by Rs.4,499 crore in 2002-03 due to a significant fall in procurement operations and increase in off-take. Non-food credit to the commercial sector, inclusive of non-SLR investments by banks but excluding the initial impact of mergers, posted a recovery reflecting the improvement in industrial activity (Chart 25).

Net bank credit to the Government during 2002-03 increased marginally on a year-on-year basis and was 41.4 per cent of adjusted domestic credit (including commercial banks' non-SLR investments) at end-March 2003. The share of the Reserve Bank in net bank credit to the Government declined from 25.9 per cent at the end of March 2002 to 17.8 per cent by end-March 2003 on account of the large open market operations conducted during the year.

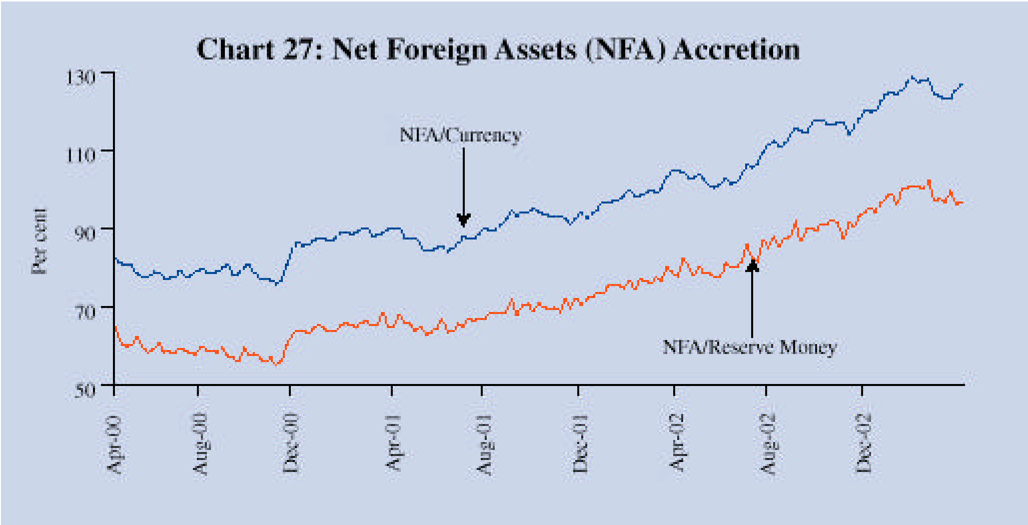


Commercial banks exhibited a strong appetite for Government paper in primary auctions as well as in secondary operations by the Reserve Bank (Chart 26).



Reserve Money

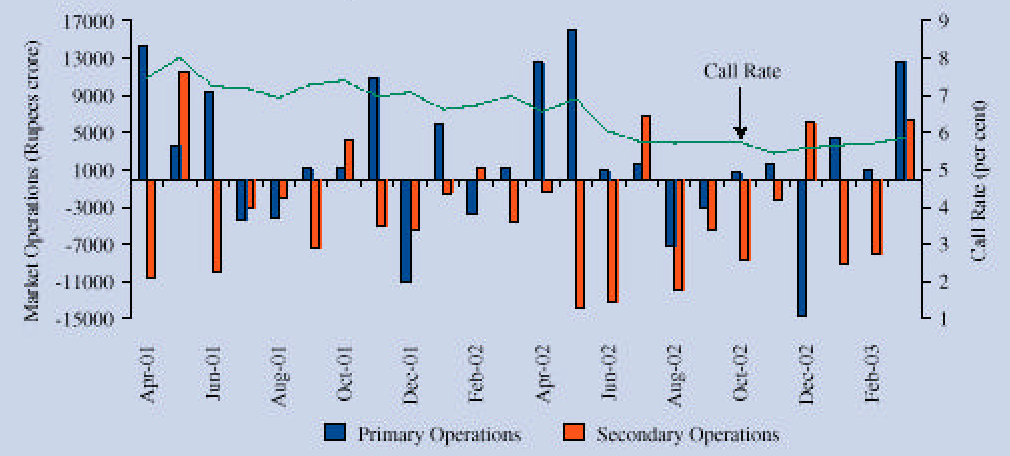
Accretions to the foreign currency assets of the Reserve Bank continued to be the principal component of reserve money as in the previous year. The Reserve Bank's foreign currency assets (adjusted for revaluation) increased by Rs.82,090 crore during 2002-03 on top of an increase of Rs.55,836 crore in 2001-02. The ratios of net foreign currency assets of the Reserve Bank to currency as well as to reserve money improved steadily during the year reflecting prudent monetary management in the context of capital flows (Chart 27).



Market liquidity was augmented by the Reserve Bank's primary subscription to the Central Government's market borrowing programme (Rs.36,175 crore) and release of resources by way of lowering the cash reserve ratio (CRR) (around Rs.10,000 crore). Primary subscriptions included Rs.13,000 crore towards prepayment of loans drawn from multilateral agencies. This part of the increase in the Reserve Bank's credit to the Centre is offset by a corresponding decline in NFA; as such, it has no monetary or fiscal impact and is neutral to market liquidity. The Reserve Bank's secondary operations in the form of cumulative net open market sales and net repos of Rs.54,182 crore substantially offset the injections through primary operations (Chart 28). Accordingly, reserve money expansion at 9.2 per cent (Rs.30,960 crore) during 2002-03 was lower than in the preceding year (11.4 per cent). The year-on-year expansion in reserve money was 10.5 per cent on April 18, 2003 as compared with 13.0 per cent a year ago.

The Reserve Bank's holding of Government securities came down sharply as a result of open market operations in an environment of ample liquidity and declining interest rates. Net Reserve Bank credit to the Centre declined by 17.9 per cent (Rs.25,369 crore) during 2002-03. The contraction began in the second quarter on the back of large open market sales. Subsequently, net open market sales remained sizeable and, along with retirement of ways and means advances, exerted a contractile effect on net Reserve Bank credit to the Centre (Table 12).

Chart 28: Market Operations of the Reserve Bank and Call Rate



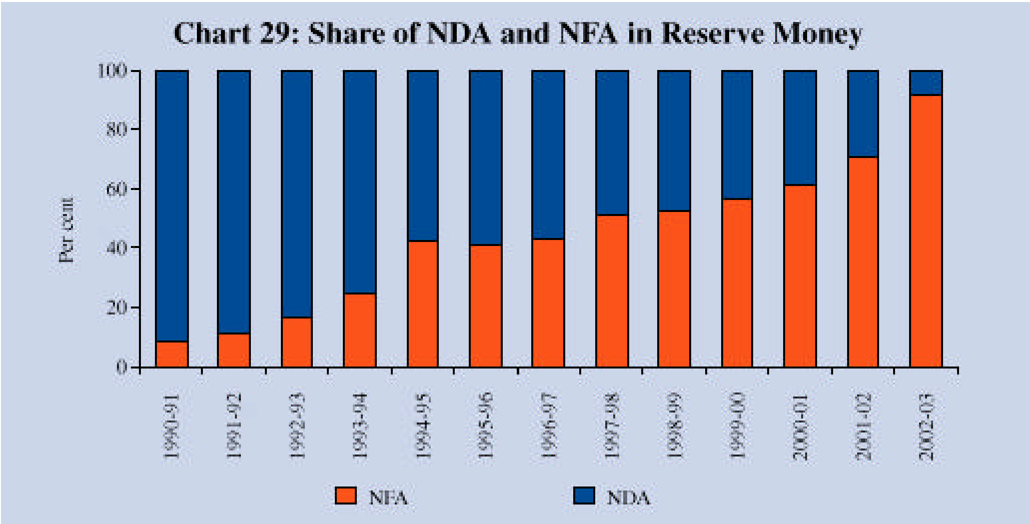
Surges in capital flows have significantly influenced the composition of the Reserve Bank's balance sheet during the 1990s. Net foreign assets of the Reserve Bank, which formed only 8.5 per cent of the average outstanding reserve money in 1990-91, constituted 91.3 per cent by 2002-03 (Chart 29). This has implications in terms of approaching the limit to sterilisation and the constraints it presages on discretion in the conduct of monetary policy.

Table 12 : Net Reserve Bank Credit to the Centre: Quarterly Variation

(Rupees crore)

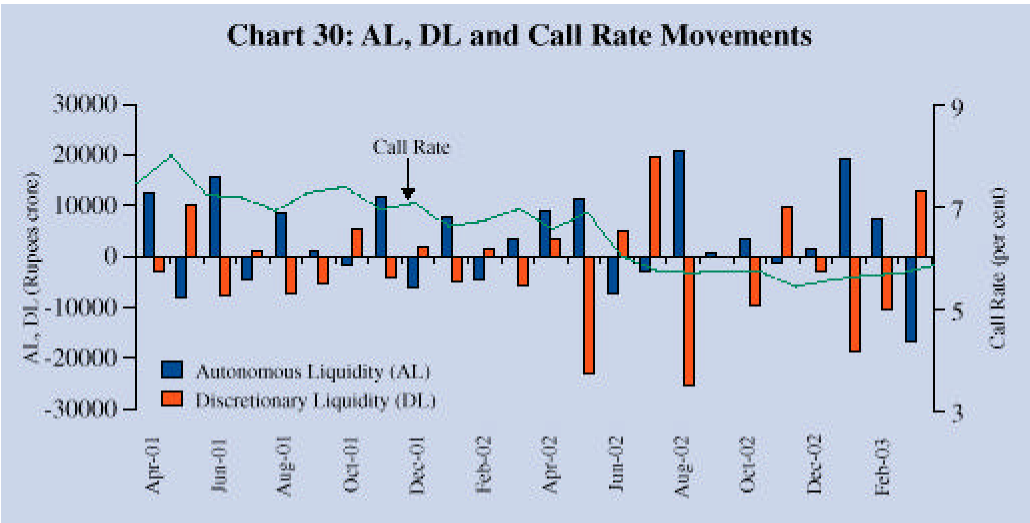
Variable	2001-02				2002-03			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9
Net Reserve Bank Credit to the Centre (1+2+3+4-5)	19,523 (13.3)	-20,140 (-12.1)	-4,770 (-3.3)	236 (0.2)	1,455 (1.0)	-19,555 (-13.7)	-17,882 (-14.5)	10,612 (10.1)
1. Loans and Advances	3,619	-7,791	-1,223	5,176	2,472	-7,648	0	0
2. Treasury Bills held by the Reserve Bank	-3	-480	0	18	-18	0	0	3
3. Reserve Bank's Holdings of Dated Securities	13,150	-11,907	-3,529	63	-6,107	-11,761	-17,979	11,116
4. Reserve Bank's Holdings of Rupee Coins	39	38	-18	24	64	-146	97	-106
5. Central Government Deposits	-2,718	0	-1	5,045	-5,044	0	0	401
*Memo Items**								
1. Market Borrowings of Dated Securities by the Centre #	46,000	31,000	24,000	13,213	49,000	35,000	23,000	18,000
2. Reserve Bank's Primary Subscription to Dated Securities	21,000	679	4,000	3,213	22,018	1,157	0	13,000
3. Repos (-) / Reverse Repos (+) (LAF), net position £	1,355	1,410	-1,160	-4,605	-20,355	9,288	10,371	295
4. Net Open Market Sales #	10,929	13,985	5,273	148	7,020	19,918	15,693	11,150
5. Primary Operations $	27,376	-7,273	1,178	3,368	29,598	-8,642	-12,527	18,217

* At face value. # Excludes Treasury Bills. £ At book value
$ Adjusted for Centre's surplus investment.
Figures in parentheses are percentage variations over the previous quarter.
Quarterly variations are based on March 31 for Q4 and last reporting Fridays for other quarters.



Liquidity Management

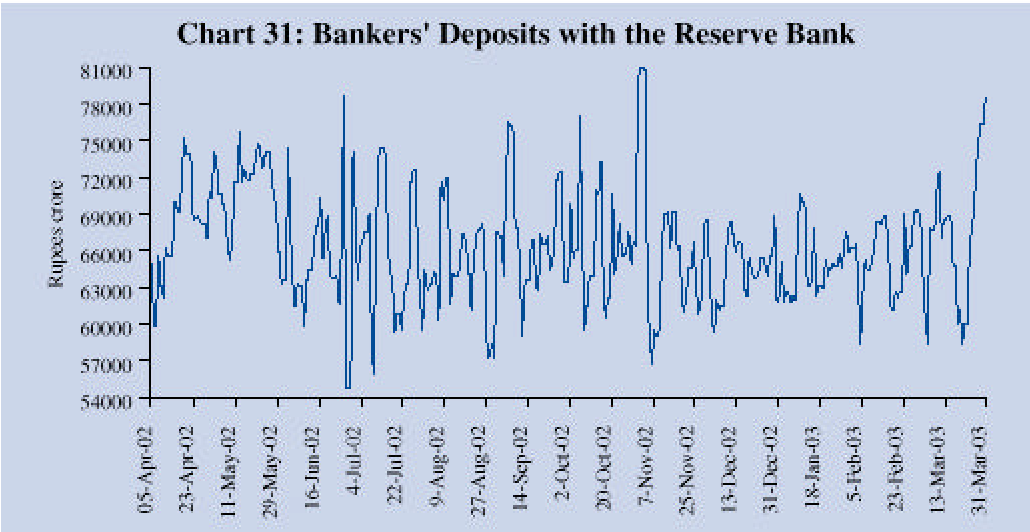
In line with international practices, market liquidity is the operating target for monetary policy in India. The Reserve Bank modulates liquidity in the market through its repo/reverse repo and open market operations, changes in reserve requirements and by direct interest rate signals through the Bank Rate and repo rate. During 2002-03, the strategic counterbalancing of the autonomous liquidity (AL[1]) flows with changes in both the quantum and the rate of policy or discretionary liquidity (DL) was effective in maintaining orderly conditions in the money market (Chart 30).



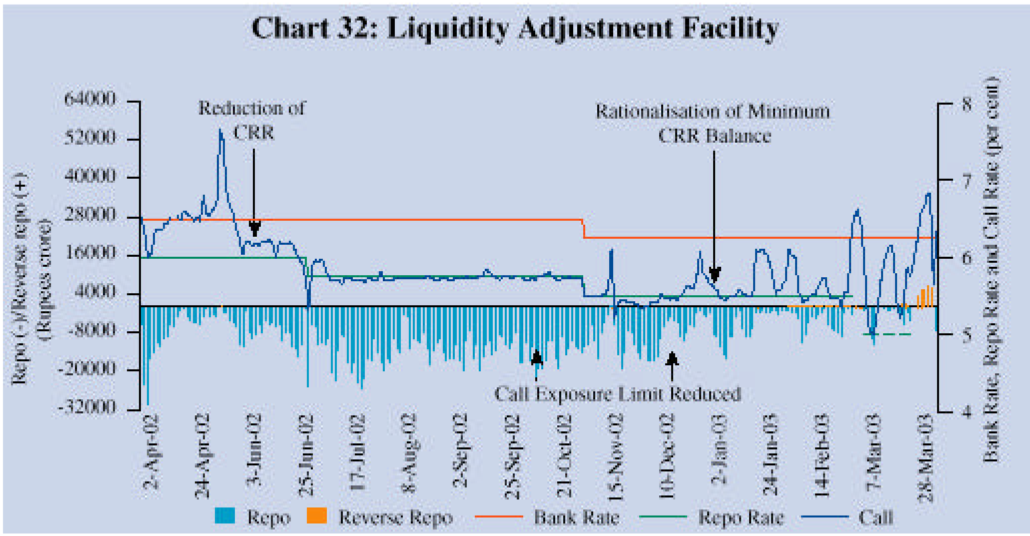
In the recent period, several changes in the operating procedures of monetary policy have enabled improved liquidity management by market participants. Progressive rationalisation of the maintenance requirements, including the withdrawal of all exemptions except on inter-bank liabilities, has been undertaken in consonance with a phased lowering of the height of the CRR towards its statutory minimum in the medium term. This was carried forward in 2002-03 by a cumulative 75 basis points reduction in the CRR, resetting the daily maintenance requirement to a uniform 80 per cent of the required reserves for a fortnight (lowered to 70 per cent since December 28, 2002) from differential intra-fortnight stipulations, phasing out of the collateralised lending facility (CLF) and making remaining standing facilities more market-based by splitting them equally between normal and back-stop facilities as against the earlier ratio of 2:1. Greater transparency of money and gilt market operations of the Reserve Bank also contributed to improved liquidity planning by banks as evident in the dampening of the variability of daily balances maintained by them with the Reserve Bank, especially in the second half of the year (Chart 31).

Liquidity Adjustment Facility

The Liquidity Adjustment Facility (LAF), operative since June 2000, has been effective in meeting day to day liquidity mismatches in the system, restricting volatility in short-term money market rates and in steering the movements in these rates consistent with monetary policy objectives. The LAF itself is evolving and is being fine-tuned to market conditions.



Conditions of comfortable liquidity in the beginning of the year were modulated through repo operations under the LAF. With the intensification of the Centre's market borrowing programme, liquidity tightened in May 2002. A combination of partial acceptance of repo bids, undertaking devolvements/private placements of primary issuance of government securities and advancing the date of a pre-announced 50 basis points CRR cut to June 1, 2002 assuaged liquidity pressures. Liquidity conditions eased in June and the weighted average call money borrowing rate fell below the repo rate on June 24, 2002, prompting a reduction of the repo cut-off rate by 25 basis points to 5.75 per cent subsequently (Chart 32). Ample liquidity conditions, however, led to a virtual vacation of recourse to standing facilities ahead of the phasing out of the CLF.



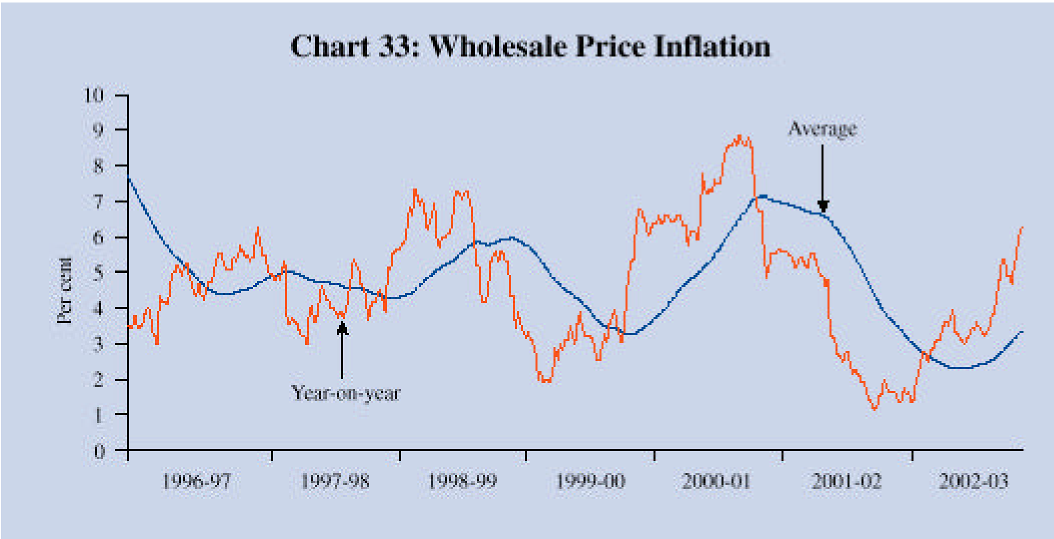
The coordinated reduction in the Bank Rate and the repo rate by 25 basis points each at the end of October 2002, followed by a 25 basis point cut in the CRR and the application of a uniform daily reserve maintenance in November 2002 were undertaken with a view to aligning the call rate with the informal corridor of the LAF. Liquidity conditions balanced as the CRR reduction became effective.

The minimum average daily CRR maintenance was reduced by 10 percentage points (from 80 per cent earlier), with effect from the fortnight beginning December 27, 2002. The liquidity conditions eased thereafter and the repo bid amounts increased. Money market conditions were temporarily strained in the second half of January and February 2003, resulting in low absorption through repos. The repo rate reduction by 50 basis points to 5.0 per cent on March 3, 2003 brought an easing of liquidity. Reverse repos were employed to inject liquidity and assuage the usual tightening at the end of the year. As the liquidity conditions eased, the average daily repo outstanding amount rose from Rs. 6,306 crore during the fortnight ended April 4, 2003 to Rs. 26,260 crore during the fortnight ended April 18, 2003.

[1] AL = Reserve Bank's net claims on the Government (adjusted for net open market (including repo) operations) + Claims on banks (other than credit to scheduled commercial banks) + Credit to the commercial sector (other than credit to PDs) + Net foreign assets – Notes in circulation – 'Other' deposits – Net non-monetary liabilities, in flow terms.
DL = Net open market (including repo) operations + Credit to scheduled commercial banks and primary dealers netted for cumulative changes in reserve requirements, in flow terms.

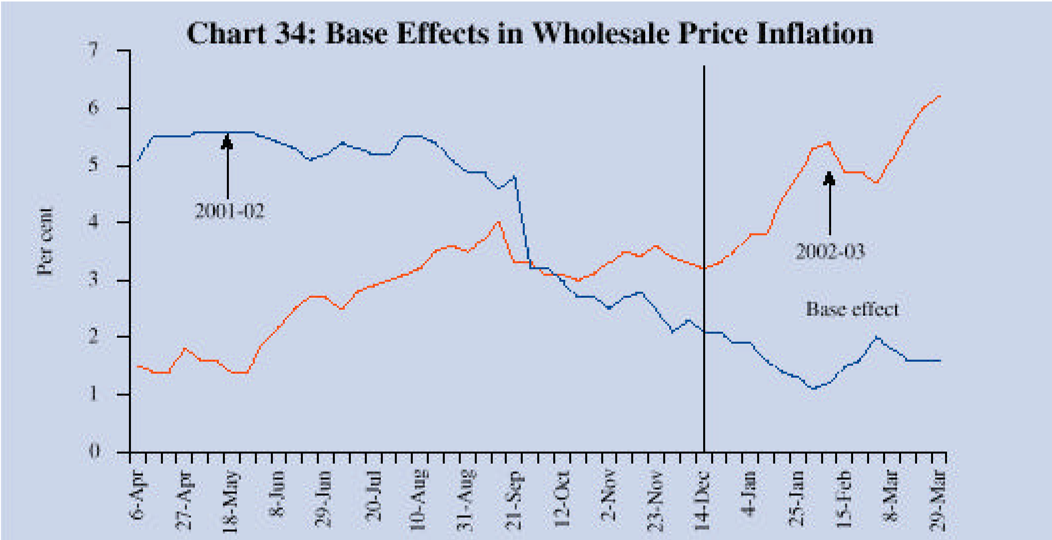
IV. Price Situation

The annual rate of inflation, measured by point-to-point changes in the wholesale price index (WPI), edged up to 6.2 per cent by end-March 2003 with the hardening of international oil prices. Underlying inflation, represented by the 52-week moving average of the WPI, however, fell throughout the first half of 2002-03. Despite a mild rise since mid-October, annual average inflation at 3.3 per cent in 2002-03 was lower than 3.6 per cent recorded in the preceding year (Chart 33).



Inflation (point-to-point/headline) remained below 2 per cent up to end-May 2002. A moderate hardening on the back of increases in petroleum product (POL) prices in June and July, was reinforced by the impact of drought conditions on the prices of oilseeds which rose by 22 per cent in the first half of the year. On September 14, inflation peaked at 4 per cent but lost momentum thereafter and eased to 3.2 per cent on December 14, as supply management strategies were put in place.

Between December 14, 2002 and February 22, 2003 inflation spurted to 4.9 per cent. Of this 1.7 percentage point increase, more than a third reflects the statistical effect of the base – the WPI declined over the period December 15, 2001 to February 23, 2002 and this overstates the inflation in the current year (Chart 34). The rise in prices of manufactures explained around 30 per cent of the increase. The upward revision of POL prices in January and February 2003 contributed 18 per cent. The increase in prices of primary articles – mainly oilseeds, tea, natural fibres and raw cotton - accounted for the rest.



From February 22, 2003 inflation rose further, reaching 6.2 per cent on March 29, a 1.3 percentage point increase. The 'base' effect receded completely. The hardening of international crude oil prices drove domestic POL prices up by 10.8 per cent which accounted for 46 per cent of the increase in inflation during February 22-March 29, 2003. The rest was contributed by prices of manufactures, as primary articles prices declined marginally (Table 13).

Table 13 : Disaggregated WPI Inflation

(Per cent)

Groups	December 14, 2002 (Inflation)	February 22, 2003 (Inflation)	March 29, 2003 (Inflation)	Weighted Variation (Feb 22, 2003 over Dec 14, 2002	Weighted Variation (Mar 29, 2003 over Feb 22, 2003)
1	2	3	4	5	6
Fuel Group	4.4	7.0	10.8	0.3	0.6
Primary Articles	3.3	6.1	5.9	0.3	0.0
Manufactured Products	2.8	3.7	4.8	0.5	0.7
Base Effect	–	–	–	0.6	0.0
All Commodities	3.2	4.9	6.2	1.7	1.3

In the first fortnight of April 2003 upward pressures persisted as inflation rose to 6.5 per cent on April 12. The impact of transport disruptions was reflected in a rise in prices of primary articles, mainly fruits and vegetables.

Components of Inflation

Disaggregated commodity price movements indicate shifts in the underlying constituents. Drought conditions associated with the uneven distribution of the south-west monsoon initially affected the prices of oil seeds and sugar cane. In spite of a shortfall of 22.1 million tonnes in foodgrains production in the *kharif* season, increased off-take under targeted public distribution programmes and other welfare schemes together with large open market sales and exports contained potential inflationary pressures on foodgrains. Primary food articles prices recorded a modest increase of 1.0 per cent in 2002-03 (Table 14).

Table 14 : Commodity-wise Break-up of Inflation

(Point-to-point)

(Per cent)

Commodity	Weight	Inflation rate							
		1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	Weighted Contri-bution 2002-03
1	2	3	4	5	6	7	8	9	10
All Commodities	100.0	5.4	4.5	5.3	6.5	4.9	1.6	6.2	100.0
I) Primary Articles	22.0	9.2	4.6	7.6	4.0	-0.4	3.9	5.9	21.6
Food Articles	15.4	12.4	3.0	2.7	3.8	-2.8	5.2	1.0	2.7
i) Cereals	4.4	15.9	-4.7	22.7	4.7	-5.5	0.8	4.6	3.4
ii) Pulses	0.6	-1.3	5.2	0.1	10.7	7.1	-3.3	-0.3	0.0
iii) Fruits and Vegetables	2.9	9.1	5.8	2.6	-0.7	-2.9	14.4	-1.1	-0.6
iv) Milk	4.4	6.4	7.0	8.1	15.8	0.4	4.7	0.6	0.5
v) Eggs, Fish and Meat	2.2	23.2	3.6	4.1	10.1	-2.1	9.3	-4.2	-1.9
vi) Condiments and Spices	0.7	-1.7	28.8	-2.8	1.0	-13.8	-0.2	7.5	0.9
vii) Other food articles (Tea and coffee)	0.2	24.9	22.3	-24.4	-2.8	-8.7	-25.7	27.9	0.6
Non-food Articles	6.1	-0.9	2.5	10.4	9.4	2.4	0.6	20.7	18.9
i) Fibres	1.5	-3.0	18.2	-6.3	-3.6	7.4	-17.9	28.2	5.5
ii) Oilseeds	2.7	4.4	3.7	4.9	-8.0	2.8	6.8	26.0	9.5
II) Fuel, Power, Light and Lubricants	14.2	13.3	13.7	3.2	26.7	15.0	3.9	10.8	35.2
i) Mineral Oils	7.0	20.8	13.5	-1.1	41.6	17.0	1.2	18.4	30.9
ii) Electricity	5.5	4.5	13.7	9.6	15.1	11.5	9.2	3.4	4.3
iii) Coal Mining	1.8	17.4	14.6	0.0	8.8	8.1	-1.9	0.0	0.0
III) Manufactured Products	63.8	2.4	2.3	4.9	2.4	3.8	0.0	4.8	43.6
i) Food Products	11.5	10.6	5.8	9.2	0.4	-3.7	0.3	7.4	12.7
ii) Sugar, Khandsari and Gur	3.9	11.2	6.3	14.6	2.9	-6.1	-3.2	-13.2	-7.4
iii) Edible Oil	2.8	1.0	6.9	12.7	-17.9	-4.8	12.5	26.9	8.7
iv) Oil Cakes	1.4	5.3	-1.2	-0.2	4.7	0.9	15.0	40.1	9.1
v) Cotton Textiles	4.2	-2.0	4.5	1.2	-1.9	6.3	-6.7	8.2	4.9
vi) Man-made Textiles	4.7	-18.6	-2.7	-7.8	6.6	2.0	-4.7	14.5	5.7
vii) Rubber and Plastic Products	2.4	-1.6	-0.2	0.1	0.2	0.8	0.8	5.7	1.7
viii) Chemicals and Chemical Products	11.9	4.9	0.7	11.0	5.5	4.0	2.5	4.0	8.0
ix) Fertilisers	3.7	4.9	0.0	3.9	8.7	3.4	3.6	2.1	1.3
x) Urea-N-Content	2.2	10.3	0.0	9.0	12.8	1.8	4.7	0.5	
xi) Cement	1.7	-6.9	-7.0	5.6	-0.7	20.3	-4.7	1.1	0.3
xii) Basic metals, Alloys and Metal products	8.3	3.7	3.3	1.0	3.2	3.2	-0.9	6.5	7.5
xiii) Iron and Steel	3.6	7.0	4.6	0.9	1.4	1.3	0.0	9.2	4.6
xiv) Non-metallic Mineral Products	2.5	-3.6	-2.4	2.9	-0.9	15.7	-2.8	3.3	1.2

xv) Machinery and Tools	8.4	3.0	-1.5	1.1	-0.5	10.0	2.0	0.9	1.0
xvi) Non-electrical Machinery	3.4	8.8	1.0	3.9	1.1	6.9	5.4	1.9	1.2
xvii)Electrical Machinery	5.0	-1.4	-3.5	-1.3	-1.9	11.8	-1.1	-0.4	-0.2
xviii)Transport Equipment and Parts	4.3	5.0	3.1	2.3	4.7	5.8	1.3	-1.3	-0.8

The effects of moisture stress impacted on the prices of primary non-food articles which steadily increased from August 2002 onwards. Prices of agro-based products in the manufacturing category rose sympathetically (Chart 35).

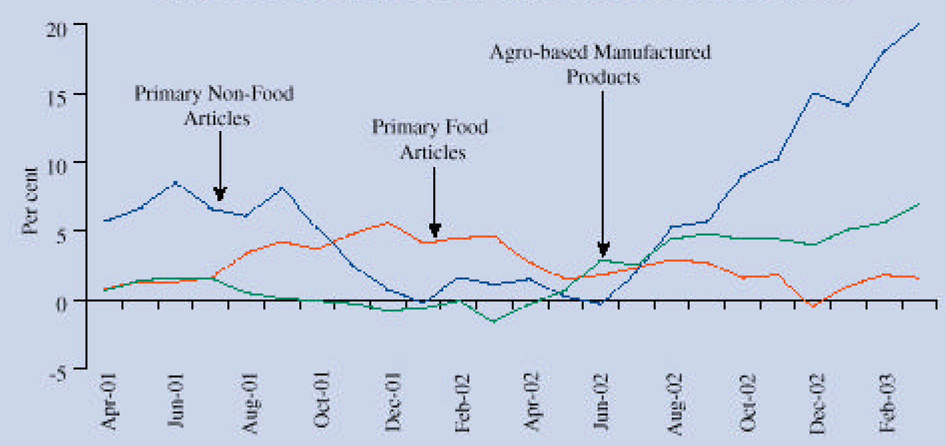


Chart 35: Agro-based Commodity Price Movements

Prices of oil seeds and edible oils rose more sharply. Shortfalls in the domestic production of oilseeds have necessitated imports of edible oils which account for about half of domestic demand. Consequently, the domestic prices of edible oils display close co-movement with international prices of edible oils (Chart 36).

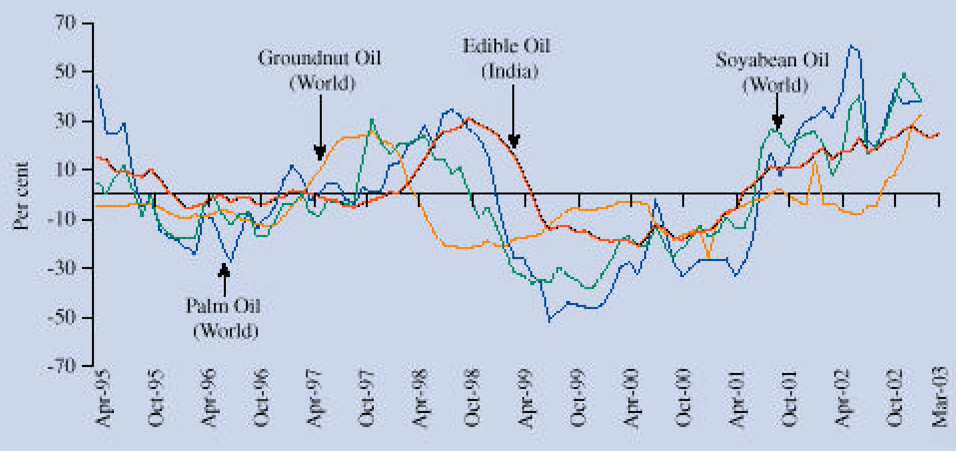
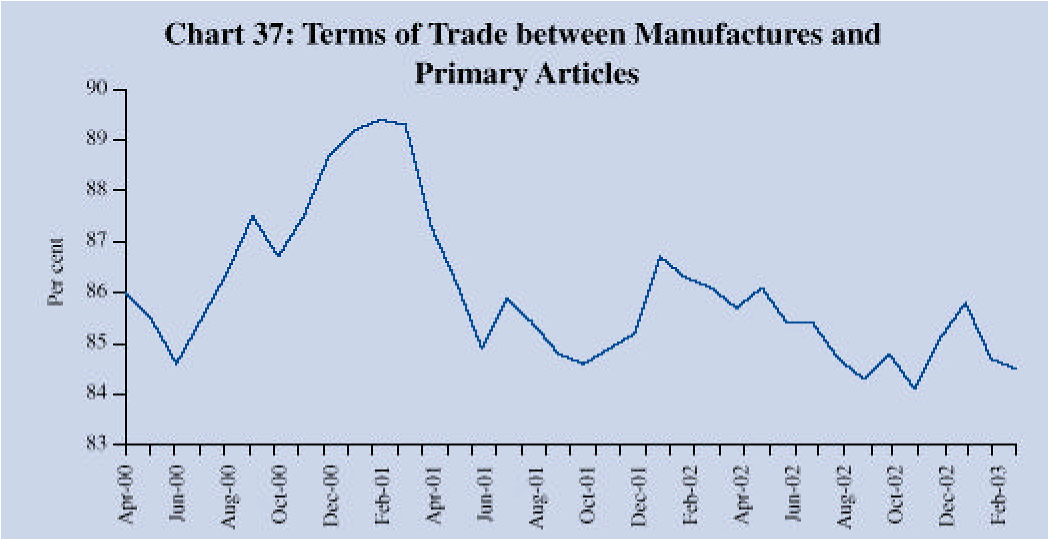


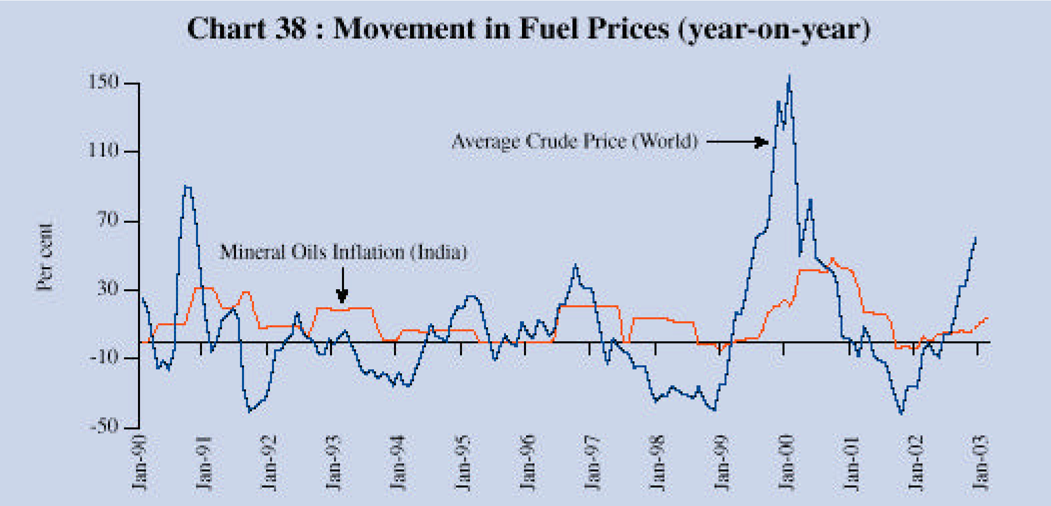
Chart 36 : Movement in Global Prices of Edible Oil

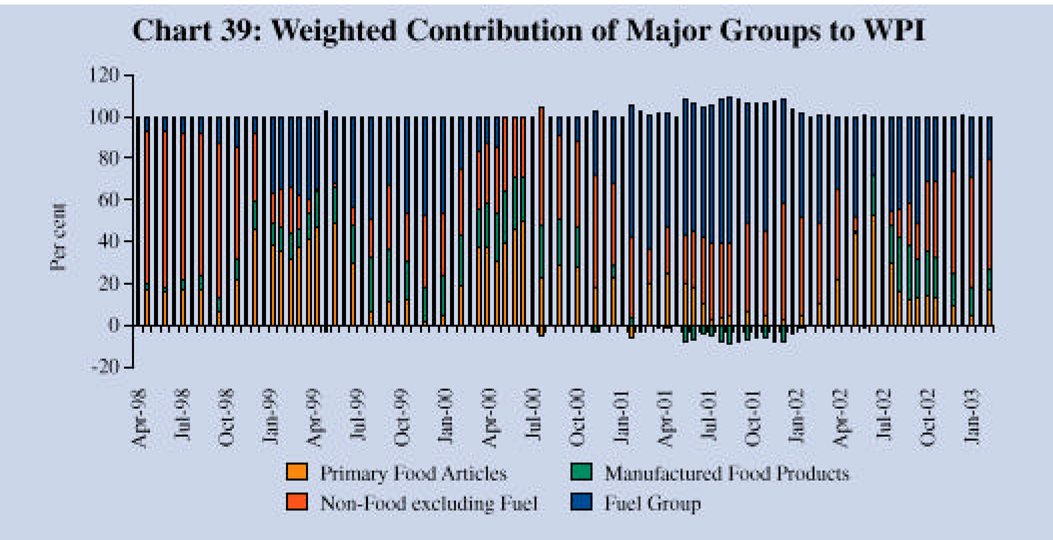
Prices of manufactured products recovered from lows in early 2002 –when they touched zero and even dipped below – and rose mildly through the year. Between February 22, 2003 and March 29, 2003 however, prices of manufactures increased somewhat faster. Edible oil, oil cakes, cotton textiles, iron and steel, manmade textiles and chemicals and chemical products were the prime movers. Provisional information indicates that the strengthening of prices of manufactures continued in early April 2003. The firming up of prices of manufactured goods arrested the erosion of the internal terms of trade between manufactures and primary articles which improved towards the close of 2002-03 (Chart 37).



Fuel group inflation was moderate up to mid-December 2002 except for some firming up in June and July 2002 on account of upward revision in domestic POL prices. From the second half of December 2002, however, international crude prices began hardening as tensions in Iraq mounted. Domestic fuel prices were revised upward successively, following the formal dismantling of the administered pricing mechanism (APM) (Chart 38). In the first week of April 2003, domestic fuel prices edged down as international crude prices softened with the dissipation of war uncertainties.

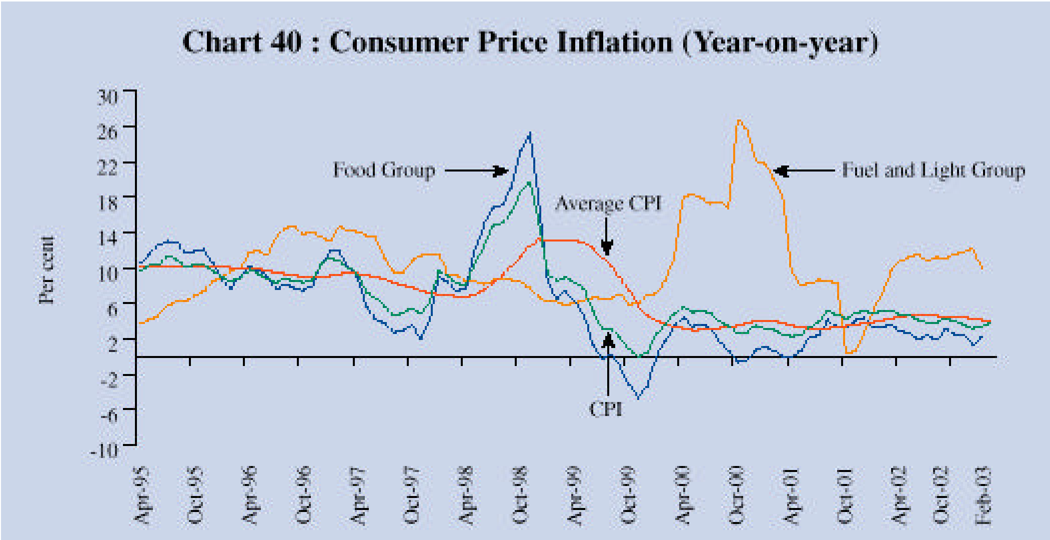
Underlying inflation (measured by average WPI) during 2002-03 was dominated by the behaviour of the manufactured products group whose weighted contribution to overall inflation rose to 43.7 per cent from 29.6 per cent during the previous year. The contribution of the fuel group declined to 32.4 per cent from 48.0 per cent, while the contributions of the primary articles group was stable at around 23.2 per cent during the same period. The inflation record of 2002-03 was, thus, dominated by the prices of non-food items (composite) which contributed 84.6 per cent to overall inflation; in contrast, it was food items (composite) which drove inflation in the preceding year, contributing 53.3 per cent to overall inflation (Chart 39).





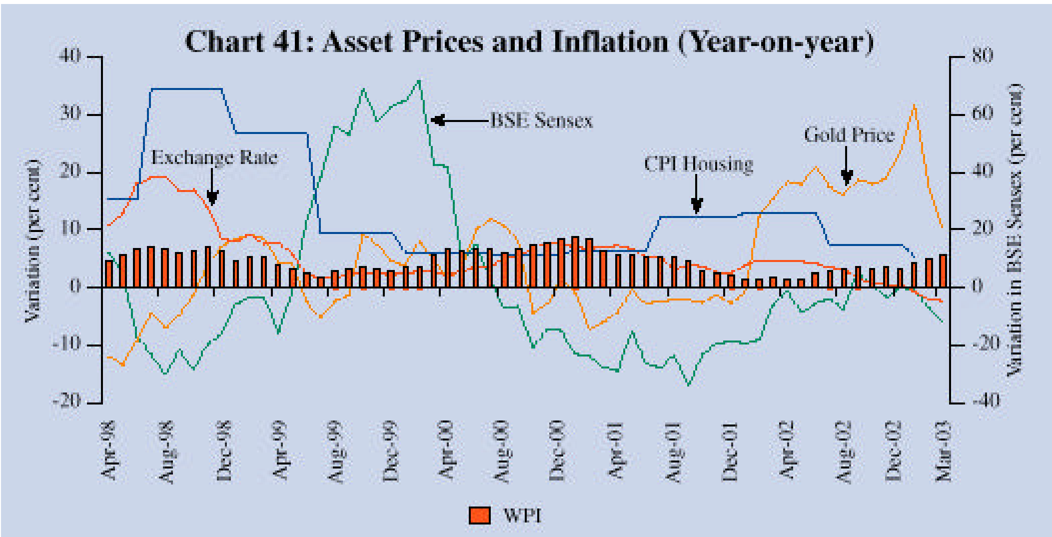
Consumer Price Inflation

Retail price inflation, measured by the annual variation in the average consumer price index for industrial workers (CPI-IW) remained stable at 4.1 per cent in February 2003, the same as in the preceding year. On a point-to-point basis, the CPI-IW displayed variability, reflecting lagged adjustment of consumer prices to agricultural supply disturbances (Chart 40).

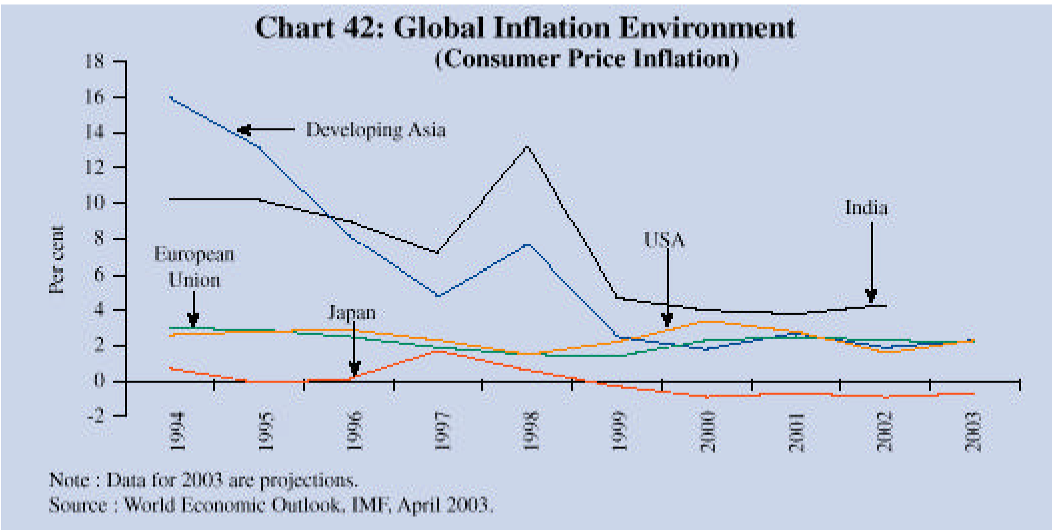


Asset Prices and Global Trends

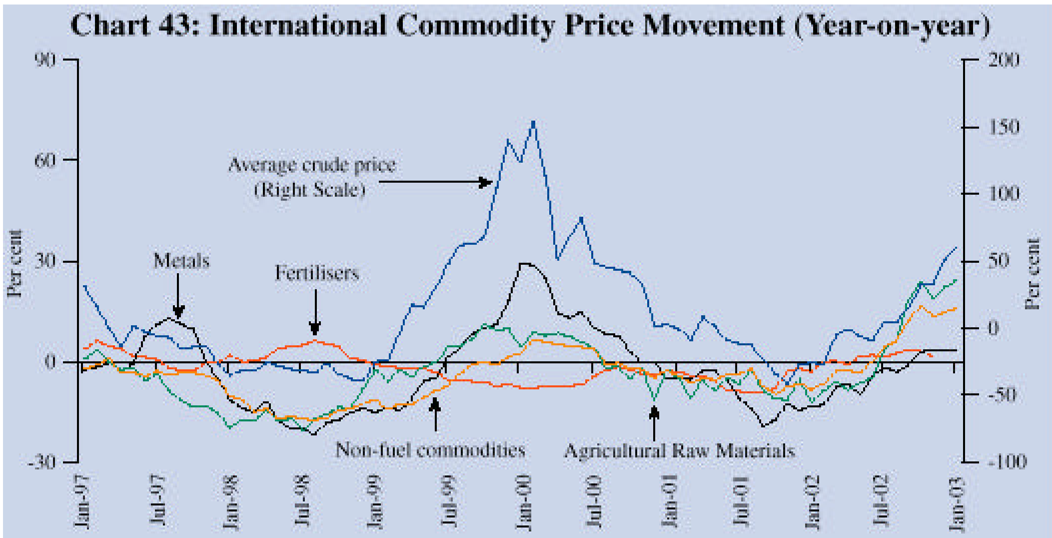
A key issue in the inflationary process is the manner in which economic agents read current and past information to assess how the future will unfold. In turn, understanding the formation of inflation expectations has implications for the efficiency of forward-looking monetary policy. Stabilising inflation expectations becomes the principal objective of monetary policy action. Accordingly, it becomes crucial to obtain a reliable gauge on inflation expectations in the economy. The various measures of inflation have displayed conflicting signals in tracking inflation. The current long phase of low inflation has resulted in a loss of practical utility in core measures of inflation. This warrants the need to develop and monitor a broader set of conditions including asset prices to assess underlying inflation and inflation expectations (Chart 41).



Current inflation conditions render the inflation outlook considerably uncertain. Over more than a decade, the world has experienced an unprecedented period of low inflation. In the second half of the 1990s, most monetary authorities in the world have had to contend with the need to arrest the downturn in economic activity and even the threat of deflation. Despite the accommodative stance of monetary policy, aggregate demand remains weak in large parts of the world (Chart 42).



International commodity prices recovered in the second half of 2002 after bottoming out in late 2001 from a prolonged decline in the aftermath of the Asian crisis. Non-fuel commodity prices, however, remain bound by weak demand and inventory drawdown. Metal prices declined through the 1990s and again in 2001. In 2002 metal prices recovered weakly. International prices of food items, agricultural raw materials and beverages firmed up in 2002 after a trough starting in late 1998. International crude prices declined from 1992 onwards, interrupted by periods of hardening in 1995-97 and 1999-2000. Since early August 2002, spot oil prices rose markedly owing to concerns about the geo-political situation in the Middle-East (Chart 43). In the aftermath of the war in Iraq, the outlook for international oil prices is soft.



These global developments are expected to have a bearing on the domestic inflation situation in the year ahead. The overall inflation outlook is contingent upon a set of imponderables like the prospects for global growth, continuing geo-political uncertainties and international oil prices in addition to the performance of the monsoon this year. Sharp changes in the future behaviour of international oil prices, in particular, would warrant a revision in the inflation outlook.

The outlook for inflation in 2003-04 is expected to remain benign in India. International crude prices have started easing and upside risks for domestic inflation are waning. A downward revision in domestic POL prices with effect from April 16, 2003 is expected to enable a further decline in inflation. Information on the spread and intensity of rainfall needs to be juxtaposed with initial forecasts of the monsoon in the approaching season to obtain reliable gauge of the impact on prices of primary articles. The recent firming up of prices of manufactures would depend on sustained acceleration in industrial activity to influence the near-term inflation outlook in India.

V. Domestic Financial Markets

Financial markets were characterised by conditions of ample liquidity and a general easing of yields during 2002-03. In the money market, call rates fell below the repo rate in June 2002 and intermittently from November 2002 onwards, despite successive repo rate cuts. Interest rates in other money market segments moved in tandem, particularly the Treasury Bill segment. In the foreign exchange market, excess supply conditions resulted in a modest appreciation of the spot exchange rate against the US dollar and an easing of the forward premia to around 3.5 per cent by March 2003. Persistent rallies drove down gilt yields even as turnover rose (Chart 44). The pronounced reduction of yields in the longer tenors flattened the yield curve notwithstanding some correction in February 2003. Risk premia on corporate bonds declined during the year.

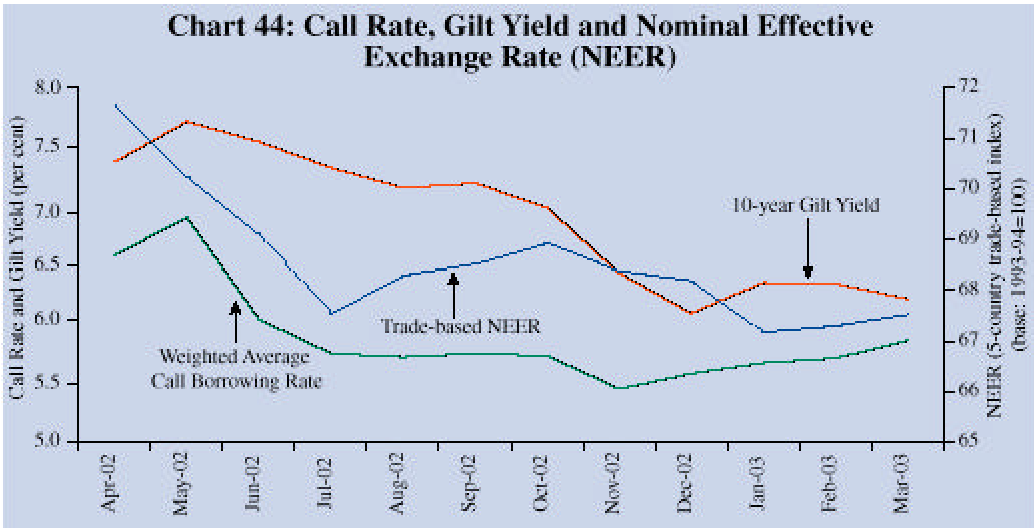


Chart 44: Call Rate, Gilt Yield and Nominal Effective Exchange Rate (NEER)

In the credit market, banks responded to liquidity conditions and policy signals by reducing deposit rates; however, lending rates did not decline commensurately. Spreads below the prime lending rates, nevertheless, widened. The recovery in non-food credit demand stemmed mainly from medium and large industry, housing and wholesale trade. Equity markets remained bound by bearish sentiments, geo-political uncertainties and heightened risk aversion in international equity markets (Table 15).

Table 15 : Developments in the Money, Foreign Exchange, Gilt and Capital Markets, 2002-03

Commercial Banks' Borrowings From the RBI* (Rs. Crore)	Average Daily Inter-bank Foreign Exchange	Turnover in Central Govt. Dated Securities	Average Daily Call/ Notice Turnover (Rs. Crore)	Monthly Average Exchange Rate (Rs. per US Dollar)	RBI's net Foreign Currency Sales (-)/ Purch-Ases (+)	Net OMO Sales (-)/ Purch-ases (+) (Rs. crore)	Average Daily Repos (LAF) out-standing@	Average Daily Reverse Repo (LAF) out-	Liquidity Support to PDs (as at end of the month)	Average Call Money Borrow-ing Rates (Per cent)	Forward premia 3-Month (Per cent)	BSE Sensex (Average)

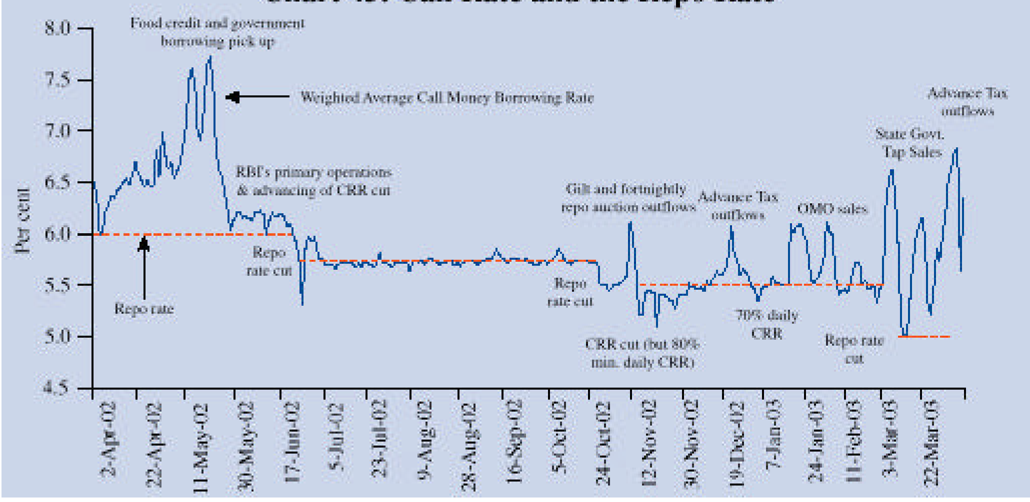
		Turnover (US $ mn)	Market # (Rs. crore)			(US $ mn)		(Rs. crore)	standing@ (Rs. crore)	(Rs. crore)			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2002													
April	3,523	6,541	1,93,091	41,616	48.92	477	-3,461	8,119	1,322	1,013	6.58	6.12	3435
May	826	4,966	1,20,173	39,326	49.00	86	-163	1,924	17	121	6.90	6.23	3303
June	336	4,836	1,16,846	28,905	48.97	241	-191	10,329	0	0	6.04	5.37	3257
July	22	4,922	2,35,586	32,386	48.76	1,829	-6,539	14,636	0	0	5.75	4.40	3215
Aug.	15	4,564	2,44,717	32,269	48.59	1,179	-14,359	11,825	0	0	5.72	4.09	3053
Sep.	12	4,429	1,70,345	28,883	48.44	965	-1,475	12,181	0	0	5.75	3.94	3086
Oct.	8	4,156	2,48,038	30,469	48.37	1,171	688	14,656	0	0	5.73	3.81	2950
Nov.	30	5,093	3,34,605	25,821	48.25	2,115	-9,504	8,141	2	0	5.45	3.66	3058
Dec.	34	5,054	2,95,943	24,305	48.14	1,679	-19,091	6,855	0	0	5.58	3.32	3316
2003													
Jan.	8	4,941	3,55,821	24,034	47.93	1,785	-5,332	5,005	13	0	5.66	3.42	3328
Feb.	5	5,206	1,39,689	20,682	47.73	2,335	-14,990	3,786	45	0	5.71	3.55	3279
Mar.	79	6,444	1,31,947	24,357	47.64	-	-2,443	2,221	1,570	37	5.86	3.60	3156

* Outstanding as on last reporting Friday of the month; # Outright only; @ Excludes fornightly repos.
OMO : Open Market Operations; LAF : Liquidity Adjustment Facility; PD : Primary Dealers; BSE : Bombay Stock Exchange

Money Market

The weighted average call money borrowing rate was generally close to the floor of the informal LAF corridor (set by the repo rate) over the greater part of 2002-03, occasionally dipping under (Chart 45). Short lived spurts in call rates were associated with shifts in liquidity conditions created by the launch of the Central Government's borrowing programme in the first two months of the year, adverse sentiments arising out of border tensions in May 2002 and auctions/open market sales in the third and fourth quarters. Liquidity in the market was modulated through continuous repo operations and a combination of private placements of government securities with the Reserve Bank and cuts in the repo rate.

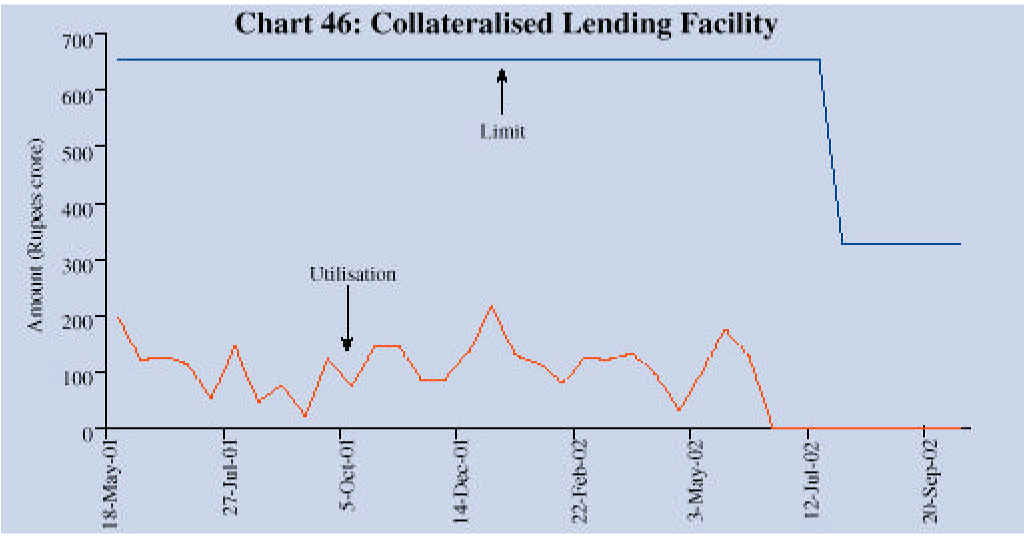
Chart 45: Call Rate and the Repo Rate



During the first week of April 2002, increased expenditure by the Central and State Governments, temporary float pending distribution of food credit subsidy amongst eligible banks and other transient factors drove the call rates below the repo rate. The liquidity conditions tightened with the pick-up in food credit and the Centre's market borrowing firming up the weighted average call money borrowing rates above 7.7 per cent around mid-May 2002. The Reserve Bank's primary market operations, a 50 basis point cut in the CRR, and redemption inflows comforted the money market in June 2002. The call rates remained range-bound between

6.0-6.2 per cent during the first three weeks but went below the repo rate by the fourth week of the month. Easy liquidity conditions prompted a reduction in the repo cutoff rate by 25 basis points to 5.75 per cent on June 27, 2002.

The call rates hovered around the repo rate during the third quarter of 2002-03 with the curtailing of the Collateralised Lending Facility (CLF) in July 2002 not causing any strain to the money market conditions. As mentioned earlier, the CLF was deactivated in October 2002. Banks brought down their utilisation of CLF to zero, well ahead of the phasing out of this facility (Chart 46).



The market adapted smoothly to the first stage of prudential limits on borrowings and lendings of scheduled commercial banks and on lendings of primary dealers in the call/notice money market which became operative effective October 5, 2002. The repo rate was further lowered by 25 basis points to 5.5 per cent from October 30, 2002. The call rates edged up temporarily around mid-November 2002 due to outflows towards gilt auctions and fortnightly repo auctions at a time when the banks were preparing to switch towards higher minimum average daily CRR maintenance. The usual advance tax outflows and hike in the notified amount of 91-day Treasury Bill auctions in December 2002 tightened the liquidity conditions and firmed up the call rates. The second stage of prudential limits of call money lendings and borrowings of banks became effective from the fortnight beginning December 14, 2002. Open market sales in January 2003 and tap sales of State Government securities in February 2003 raised the call rates. After softening in tune with the reduction in the repo rate by 50 basis points on March 3, 2003, the call rates edged up later in the month again reflecting the usual end-of-the year tightness in liquidity conditions.

Turnover in the call/notice money market declined as the year progressed, reflecting lower reliance of market participants on call/notice funds. The low volatility in the call money market during 2002-03 was co-incident with the easing of the call rates (Table 16).

Table 16 : Call Money Market

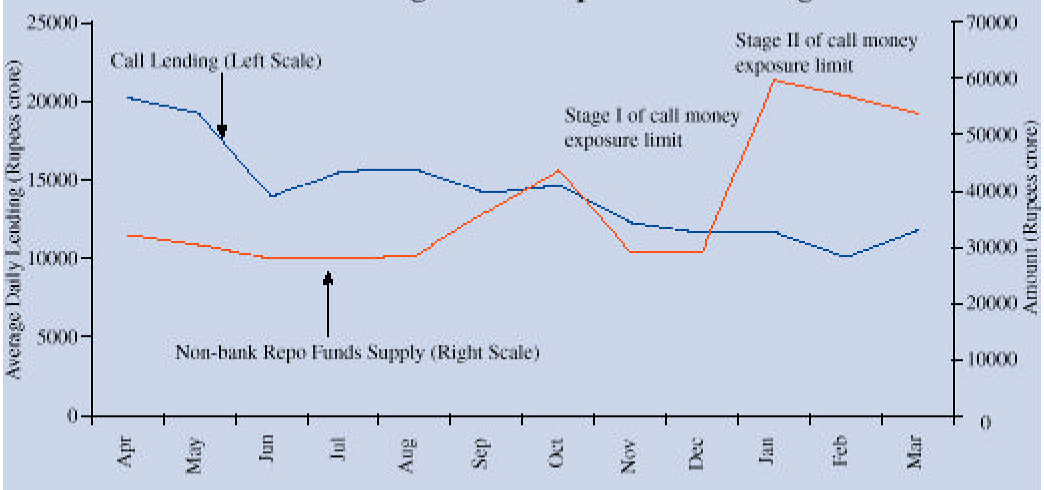
Month	Call Money Borrowing Rate	CV	Average Daily Call/ Notice

	(Weighted Average) (Per cent)		Turnover (Rupees crore)
1	2	3	4
April 2002	6.58	0.11	41,616
May 2002	6.90	0.06	39,326
June 2002	6.04	0.04	28,905
July 2002	5.75	0.01	32,386
August 2002	5.72	0.01	32,269
September 2002	5.75	0.01	28,883
October 2002	5.73	0.01	30,469
November 2002	5.45	0.04	25,821
December 2002	5.58	0.03	24,305
January 2003	5.66	0.04	24,034
February 2003	5.71	0.06	20,682
March 2003	5.86	0.09	24,357

CV: Coefficient of variation.

One of the factors facilitating the smooth progression of the banks towards reduction of call money exposures during 2002-03 was the increased supply of funds by the non-bank participants (*i.e.*, non-banking financial institutions and mutual funds) in the repo market, especially during the two stages of implementation of prudential call money exposure limits for banks (Chart 47).

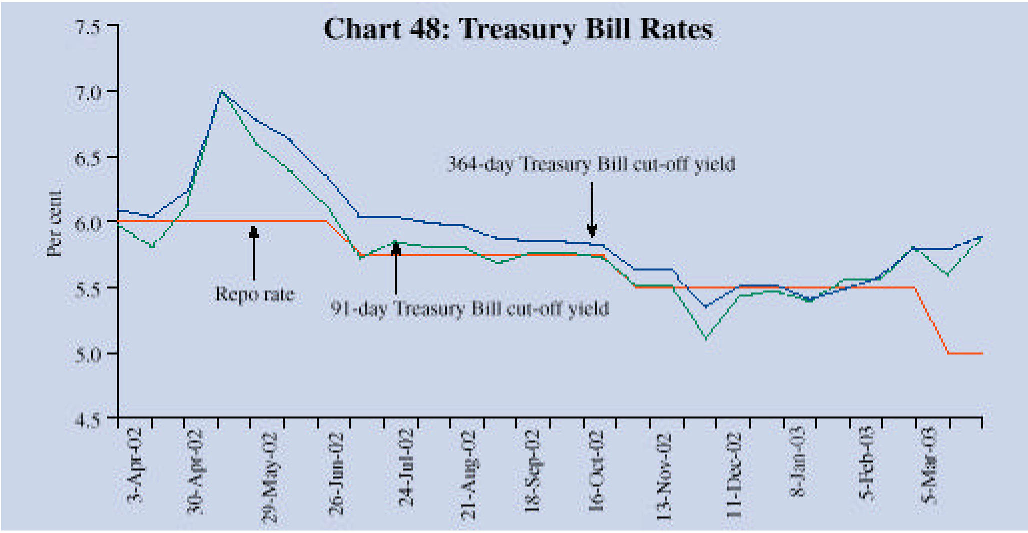
Chart 47: Call Lending and the Repo Market during 2002-03



Comfortable liquidity conditions in the beginning of 2003-04 (up to April 21) drove down the weighted average call money borrowing rate to 4.80 per cent as on April 21, 2003, *i.e.*, below the repo rate, from 6.01 per cent on April 1, 2003. The average daily call/notice money market turnover remained buoyant at around Rs. 17,365 crore during April 1-21, 2003.

Treasury Bills

The Treasury Bill segment of the money market reflected the underlying liquidity conditions as also interest rate expectations. Easy liquidity conditions in the beginning of 2002-03 elicited a keen response from market participants. Bid-cover ratios (competitive bid amount received to notified amount) touched 4.6 and 2.9 for the 91-day and 364-day Treasury Bills, respectively, during the first half of April 2002. The implicit 91-day cut-off yields touched sub-repo rate levels and 364-day Treasury Bills yields hovered marginally above the repo rate. Treasury Bills market mirrored the tightening of call money market conditions during the first half of May 2002; however, easing of monetary conditions softened the Treasury Bill yields which hovered close to the repo rate from July 2002 and occasionally strayed below (Chart 48).



The lowering of Treasury Bill yields during the first three quarters of 2002-03 also reflected aggressive bidding by the market participants, particularly, the primary dealers, in order to meet bidding commitments and success ratios (Table 17).

Table 17 : Average Cut-off Yields of Treasury Bills @

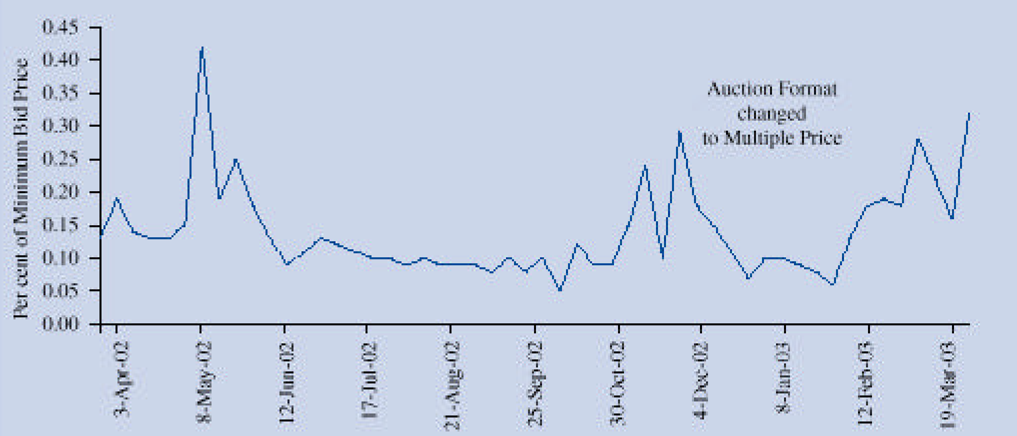
(Per cent)

Month	91-day Average Implicit Yield at minimum cut-off Price	364-day Average Implicit Yield at minimum cut-off Price
1	2	3
March 2002	6.08	6.18
April 2002	5.94	6.12
May 2002	6.73	6.88
June 2002	6.31	6.49
July 2002	5.80	6.03
August 2002	5.79	5.98
September 2002	5.73	5.86
October 2002	5.70	5.76
November 2002	5.38	5.49
December 2002	5.39	5.51
January 2003	5.48	5.45
February 2003	5.72	5.69
March 2003	5.81	5.84

@ As per dates of auction.

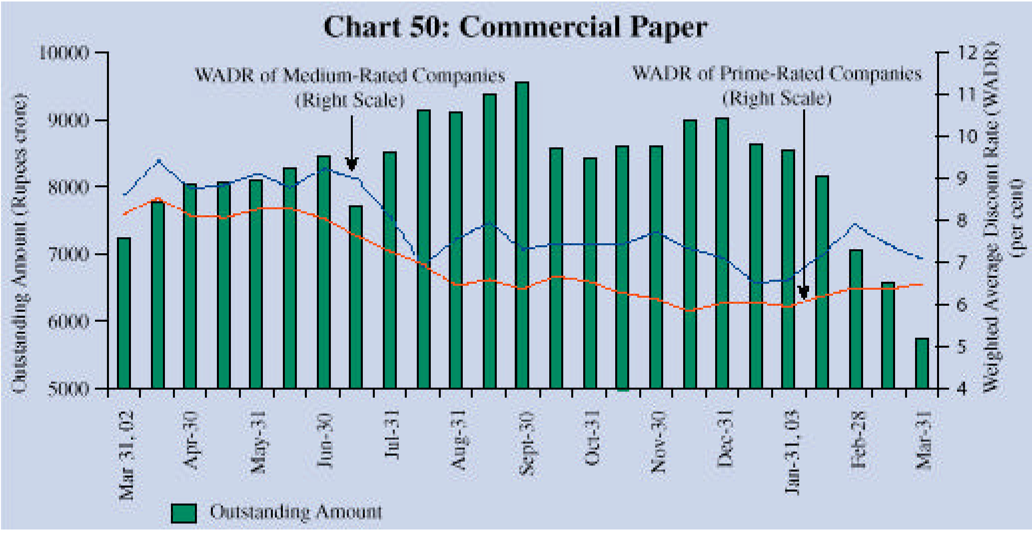
The spread indicator, measured by the differential between maximum and minimum bid prices, reflects the quality of bidding. With a view to correcting the distortions in the short end of the yield curve as also providing additional opportunity for deploying surplus funds to banks following the imposition of call money exposure restrictions, the notified amount of the 91-day Treasury Bill auction was enhanced from Rs.250 crore per auction to Rs.1,000 crore and the auction format was modified from uniform price to multiple price method from December 11, 2002. The narrowing of spreads reflected more restrained bidding (Chart 49). The liquidity conditions tightened since February 2003 and the notified amount was reduced to Rs.500 crore from February 5, 2003. The Treasury Bill yields firmed up during February and March 2003. The typical beginning-of-the-year flush of liquidity softened the 91-day and 364-day Treasury Bill yields to 5.06 per cent and 5.21 per cent, respectively, on April 16, 2003.

Chart 49: Bid Price Spreads in 91-day Treasury Bill Auctions

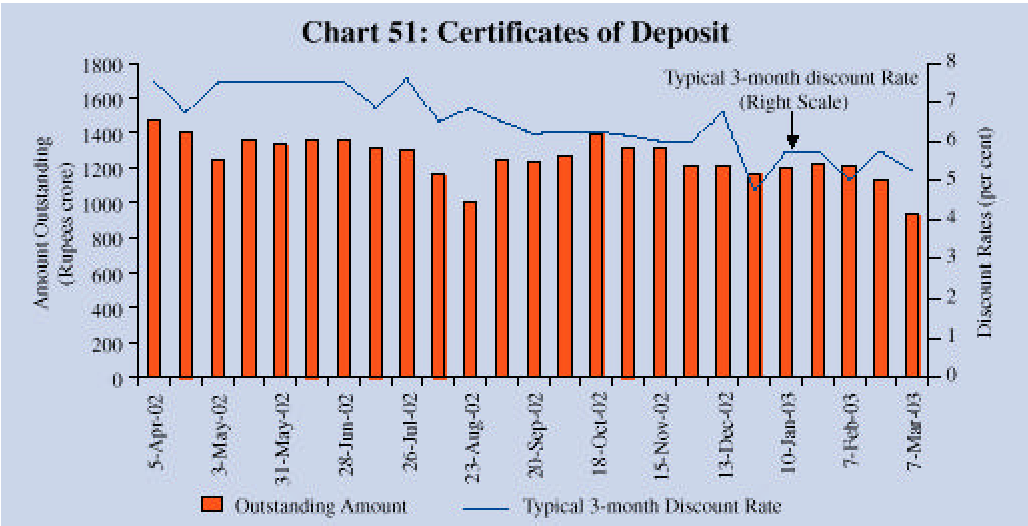


Other Money Market Instruments

Comfortable liquidity conditions enabled a rise in the outstanding amount of commercial paper (CPs) from Rs.7,783 crore as on April 15, 2002 to Rs.8,645 crore on January 15, 2003 before declining to Rs.5,749 crore by March 31, 2003 (Chart 50). There was, however, a marginal decline in the cumulative flow of primary issuances of CPs during 2002-03 in relation to the preceding year. This reflected primarily a fall in primary issuances by the manufacturing companies. On the other hand, the primary issuances of leasing and finance companies and those of financial institutions moved up. The weighted average discount rate (WADR) of the CP softened to 6.5 per cent during the fortnight ended March 30, 2003 from 8.6 per cent during the fortnight ended April 15, 2002. The spread between the prime-rated and medium-rated companies narrowed from 89 basis points in mid-April 2002, to 59 basis points in end-March 2003.



The outstanding amount of certificates of deposit (CDs) remained low reflecting comfortable liquidity conditions. The outstanding amount of CDs moved down to Rs.928 crore as on March 7, 2003 from Rs.1,474 crore as on April 5, 2002. The typical discount rate for 3 month CDs witnessed some softening during the second half of the year (Chart 51).



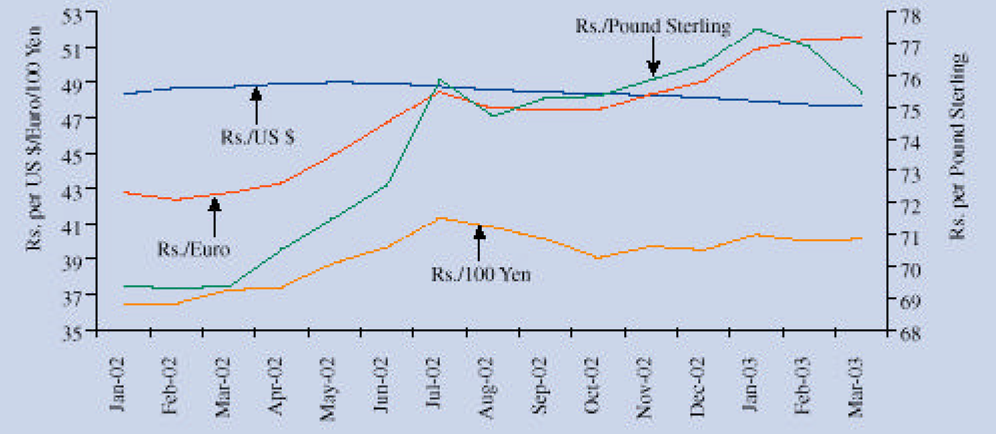
There was a sharp increase in the volume in Forward Rate Agreements (FRAs)/Interest Rate Swaps (IRS) market during the year. FRAs/IRS transactions, rose from 4,487 contracts amounting to Rs.88,814 crore as on April 5, 2002 to 9,412 contracts for Rs.2,44,161 crore by March 21, 2003. National Stock Exchange-Mumbai Inter-bank offered rate (NSE-MIBOR) and Mumbai Inter-bank forward offered rate (MIFOR) were used as the benchmark rates in a majority of these contracts. The other benchmark rates used include 3-month benchmark rate on Reuters, yield for 1-year government paper, primary cut-off yield on 364-day Treasury Bills, *etc.* Participation in the market continues to be confined to select foreign and private sector banks and a primary dealer.

Foreign Exchange Market

The foreign exchange market remained broadly stable during the first four months of 2002-03 interrupted by a brief period of uncertainty due to border tensions in May 2002. Over the remaining months, large inflows dominated market conditions. The exchange rate of the Rupee *vis-a-vis* the US dollar moved within a range of Rs.47.51-49.06 per US dollar during the year, appreciating by 2.7 per cent between April 2002 and March 2003. The exchange rate of the Rupee was Rs. 47.37 per US dollar on April 17, 2003.

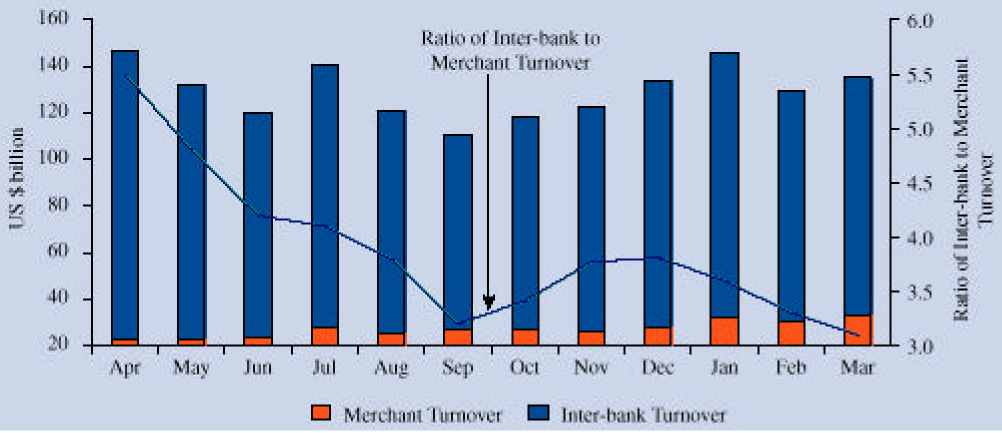
The Rupee depreciated against the Euro, the Pound Sterling and the Yen primarily reflecting the depreciation of the US dollar against these currencies (Chart 52).

Chart 52: Indian Rupee *vis-a-vis* Major International Currencies



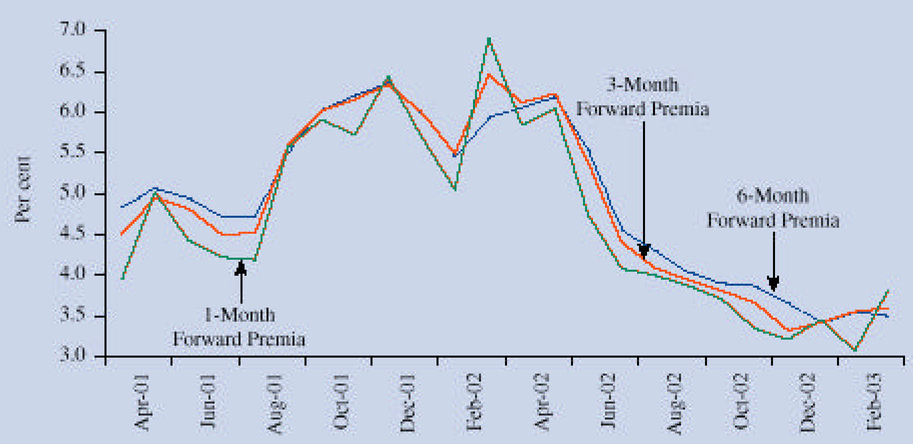
The average monthly turnover in the foreign exchange market increased to US $ 129.7 billion during 2002-03 from US $ 118.5 billion in 2001-02. The monthly turnover in the foreign exchange market moved within the range of US $ 22.5-33.2 billion in the merchant segment and between US dollar 84.1-124.3 billion in the inter-bank segment. The inter-bank to merchant turnover ratio, an indicator of market activity, fell steadily from 5.5 in April 2002 to 3.2 in September 2002 and moved in the range of 3.1-3.8 over the rest of the year (Chart 53).

Chart 53: Foreign Exchange Market Turnover in 2002-03



In the swap segment of the foreign exchange market, the forward premia hardened for all maturities during April-May 2002. With the return of stability in the spot segment of the foreign exchange market, the forward premia declined steadily during the following months (Chart 54). The one-month, the three-month and the six-month forward premia averaged 3.8 per cent, 3.6 per cent and 3.5 per cent, respectively, during March 2003 and fell further to 1.2 per cent, 1.5 per cent and 1.8 per cent, respectively, on April 22, 2003.

Chart 54: Movements in Forward Premia



Credit Market

In view of easy liquidity conditions and lower market interest rates, public sector banks reduced one-year and above deposit rates from a range of 7.25-8.75 per cent in March 2002 to 5.25-7.00 per cent by March, 2003. Deposit rates of the private and foreign banks also eased. Comparable reductions were, however, not fully reflected in the prime lending rates (PLRs). Public sector banks (PSBs) reduced their maximum PLR by 25 basis points and the minimum PLR by 100 basis points during 2002-03. The maximum PLR charged by the private sector and foreign banks, however, generally remained unchanged. The minimum PLR in the foreign bank group was reduced by 225 basis points and by 300 basis points in the private bank group (Table 18). Deposit and lending rates of the various bank groups remained broadly unchanged in the first three weeks of April, 2003.

Table 18 : Movements in Deposit and Lending Rates

(Per cent)

Interest Rates	March 2002	June 2002	September 2002	December 2002	March 2003
1	2	3	4	5	6
1. Domestic Deposit Rates					
Public Sector Banks					
a) Up to 1 year	4.25 – 7.50	4.25-6.75	4.25-6.75	4.25-6.25	4.00-6.00
b) 1 year up to 3 years	7.25 – 8.50	7.00-8.00	6.50-7.75	6.00-7.00	5.25-6.75
c) Over 3 years	8.00 – 8.75	7.50-8.25	7.00-8.25	6.50-7.25	5.50-7.00
Private Sector Banks					
a) Up to 1 year	5.00 – 9.00	4.00-8.75	4.00-8.75	3.50-8.00	3.50-7.50
b) 1 year up to 3 years	8.00 – 9.50	7.25-9.50	7.25-9.50	6.50-8.25	6.00-8.00
c) Over 3 years	8.25 – 10.0	8.00-10.0	7.50-9.50	6.50-8.50	6.00-8.00

Foreign Banks					
a) Up to 1 year	4.25 – 9.75	4.25-9.75	4.00-9.75	3.25-7.75	3.00-7.75
b) 1 year up to 3 years	6.25 – 10.0	6.25-10.0	5.50-10.0	4.50-8.00	4.10-8.00
c) Over 3 years	6.25 – 10.0	6.25-10.0	5.50-10.0	4.75-8.50	4.75-8.00
2. Prime Lending Rates					
Public Sector Banks	10.00–12.50	10.00-12.50	10.00-12.50	9.00-12.50	9.00-12.25
Private Sector Banks	10.00–15.50	10.00-15.50	9.50-15.50	9.00-15.50	7.00-15.50
Foreign Banks	9.00 –17.50	7.90-17.50	7.40-17.50	6.50-17.50	6.75-17.50
3. Actual Lending Rates*					
Public Sector Banks		6.50-16.50	6.50-16.50	6.00-16.00	
Private Sector Banks	N.A.	5.00-19.75	5.00-19.75	5.00-19.75	N.A.
Foreign Banks		6.90-25.00	6.20-25.00	4.60-25.00	

* Comprising lending rates on non-export demand and term loans above Rs.2 lakh excluding lending rates at the extreme 5 per cent on both sides.

Sub-PLR lending of the banking system (excluding exports, the bulk of which is at sub-PLR) constituted over one-third of total outstanding lending above Rs.2 lakh. The spreads around PLRs of public sector banks (excluding 5 per cent of the credit sanctioned at lending rates at the extreme 5 per cent on either side) for term loan ranged from (-) 3.3 per cent to 4.5 per cent for the quarter ended September 2002 and widened to (-)5.3 per cent to 4.5 per cent by December 2002.

Bank credit, net of the initial impact of mergers, accelerated during 2002-03 due to the expansion in non-food credit off-take. The expansion of non-food gross bank credit was mainly absorbed by medium- and large-scale industries. Housing and non-banking financial companies were the other sectors recording acceleration in credit off-take (Table 19).

Table 19 : Sectoral and Industry-wise Deployment of Gross Bank Credit of Scheduled Commercial Banks (Fiscal Year Variations) – Select Categories

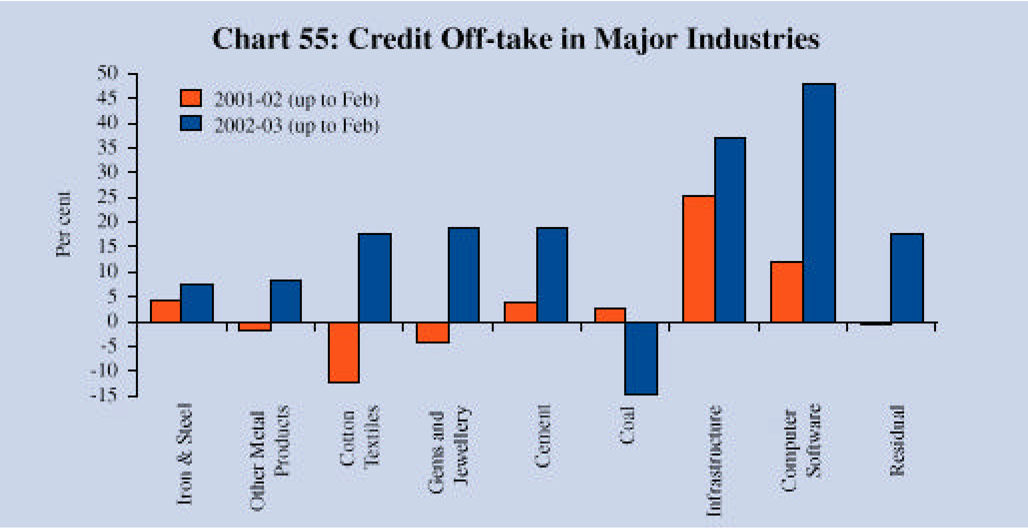
(Rupees Crore)

	Sector/Industry	2001-02 (up to February)		2002-03 (up to February)	
		Absolute	Per cent	Absolute	Per cent
	1	2	3	4	5
1.	Priority sector	14,550	9.4	19,548	11.2
	Agriculture	6,074	11.7	7,424	12.2
	Small Scale	-383	-0.7	2,119	3.7
	Others	8,859	19.1	10,005	17.5
2.	Industry (Medium & Large)	6,574	4.0	22,070	12.8
	Petroleum	-2,335	-20.2	-1,331	-11.8
	Infrastructure	2,852	25.1	5,466	36.9
	Cement	223	5.8	804	19.0
	Cotton Textiles	-1,607	-12.1	2,072	17.6
	Iron and Steel	841	4.3	1,479	7.4
	Fertilisers	163	3.1	479	8.8
	Gems and Jewellery	-263	-4.0	1,219	18.9
3.	Housing	5,457	33.8	9,974	44.6
4.	Non-banking financial companies	1,447	18.5	2,914	30.2
5.	Wholesale Trade	1,608	9.0	2,192	10.7
6.	Export Credit	-3,353	-7.7	3,710	8.6

Excluding investments in eligible securities.

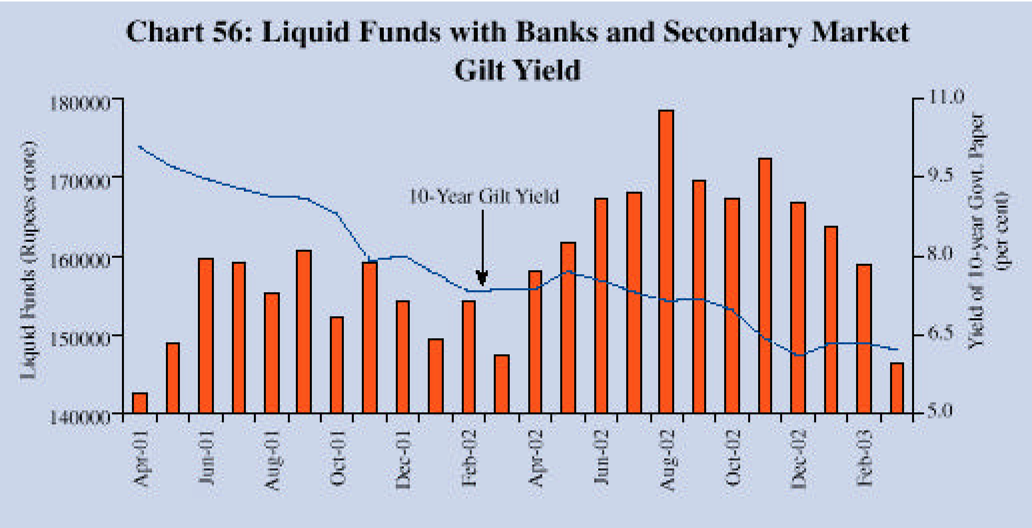
Note : Data are provisional and relate to select scheduled commercial banks which account for about 90 per cent of bank credit of all scheduled commercial banks.

Higher credit off-take in the medium- and large-scale industries was on account of infrastructure (power, roads and port), iron and steel, cotton textiles, gems and jewellery, other metal products, paper and paper products, fertilisers, cement, computer software and drugs and pharmaceuticals. In the case of industries like coal, engineering, sugar, petroleum, tobacco and tobacco products, chemical, dyes and paints, *etc.*, credit demand remained subdued (Chart 55).



Government Securities Market

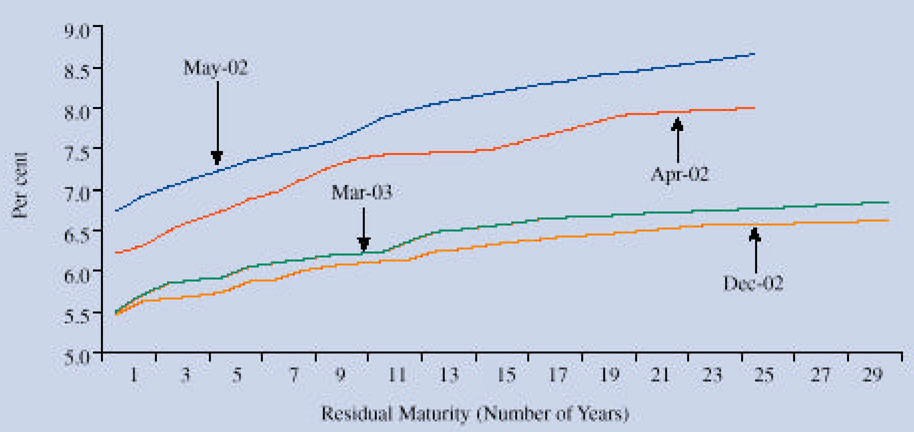
The gilt market was propelled by rallies in the prices of government securities during the first three quarters of the year, fuelled by surplus liquidity (surplus of net demand and time liabilities available less statutory pre-emptions and credit off-take) with the banking system and expectations of periodic interest rate cuts (Chart 56). The decline in yields was halted only in mid-January 2003 due to selling pressure in the face of war fears. The escalation of war tensions in Iraq created market uncertainty, leading to a fall in the turnover.



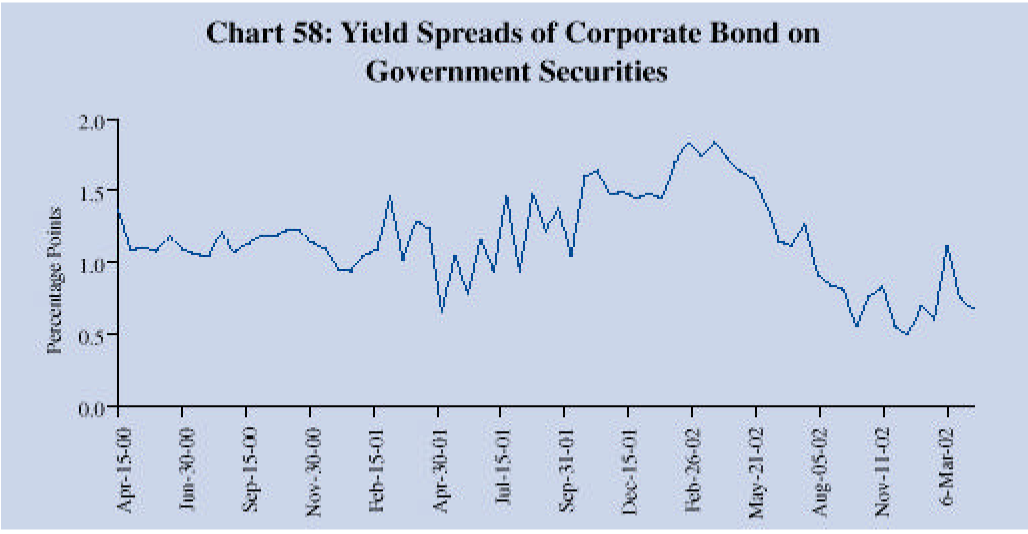
Comfortable liquidity conditions enabled the successful completion of the Centre's borrowing programme, despite some overshooting. The total private placement of dated securities with the Reserve Bank amounted to Rs.23,175 crore (excluding private placement/devolvement to support prepayment of Government's external debt) during 2002-03 with the Reserve Bank effectively neutralising the monetary effect by conduct of outright OMO sales of government securities amounting to Rs.53,780 crore. The announcement of core calendar for issuance of dated securities for the first and the second half of the year facilitated liquidity planning and enhanced transparency of the Central Government's borrowing programme. Issuance of government paper with put and call options exercisable on or after five years in July 2002 and two 30-year government bonds in August and October 2002 provided additional flexibility to market participants. In order to facilitate easier access and wider participation, the facility to buy and sell government securities through stock exchanges was provided from January 16, 2003.

The weighted average yield on government borrowing through dated securities issued during 2002-03 declined by 210 basis points to 7.34 per cent from 9.44 per cent during 2001-02. Yields fell during the first week of April 2002 amidst the usual beginning-of-the-year easy liquidity conditions. The commencement of the government borrowing programme as well as open market sales turned the market sentiment cautious with a correction of yields of longer tenor paper. Gilt yields moved up and turnover fell in May 2002 until the Reserve Bank's private placements of government securities relieved the liquidity stress (Chart 57). Monetary policy easing in June 2002 infused bullish sentiment in the market. The gilt yields fell continuously up to mid-January 2003, facilitated by a Bank Rate cut, another round of CRR and the repo rate reduction announced in October 2002. OMO sales as well as renewed tensions of war in the Middle-East in January 2003 halted the rally and the yields firmed up by end-January 2003. The turnover in the government securities market fell during the first three weeks of February 2003 reflecting uncertainty in the market conditions. The yields remained volatile during the month. The reduction in the administered interest rates on small savings in the Union Budget 2003-04, accompanied by repo rate and saving deposit rate reductions, reactivated the government securities market temporarily after the presentation of the Union Budget. Continuing uncertainty due to military action in Iraq and the usual end-of-the-year profit booking operations reversed most of the post-Budget gains and lowered the turnover in government securities market in March 2003.

Chart 57: Yield Curves for Central Government Dated Securities



The decline in yields in the 2 to 5 year segment averaged around 60 basis points while in the 6 to 10 year and 11 to 20 year tenors the fall in yields was of the order of 102 and 115 basis points, respectively, on account of active trading interest in a period of low interest rates during 2002-03. On the other hand, the relative stability of the overnight call rates checked similar reductions in the yields of government securities of the shorter tenors. This resulted in flattening of the yield curve during the year. The spread between AAA-rated corporate bonds and government securities (5-year tenor) narrowed to 68 basis points in March 2003 from 173 basis points, a year ago (Chart 58).



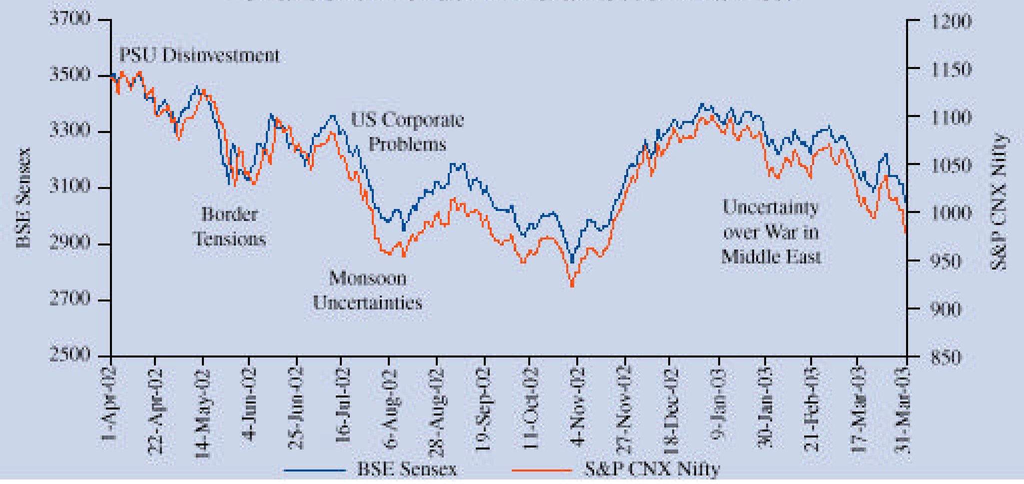
An indicative calendar for issue of dated securities for the first half year of 2003-04 (April-September) was issued on March 31, 2003. Out of the gross borrowing requirement of Rs. 1,66,230 crore for the year 2003-04, Rs. 9,000 crore were raised through dated securities up to April 17, 2003 as compared with Rs. 7,000 crore during the corresponding period of the previous year. The sentiment in the secondary government securities market remained positive during April 2003 with easy liquidity conditions, the ebbing of war risks and softening of global oil prices. Yields for the 10-year paper fell by 23 basis points to 5.87 per cent by April 21, 2003.

Capital Market

Equity Market

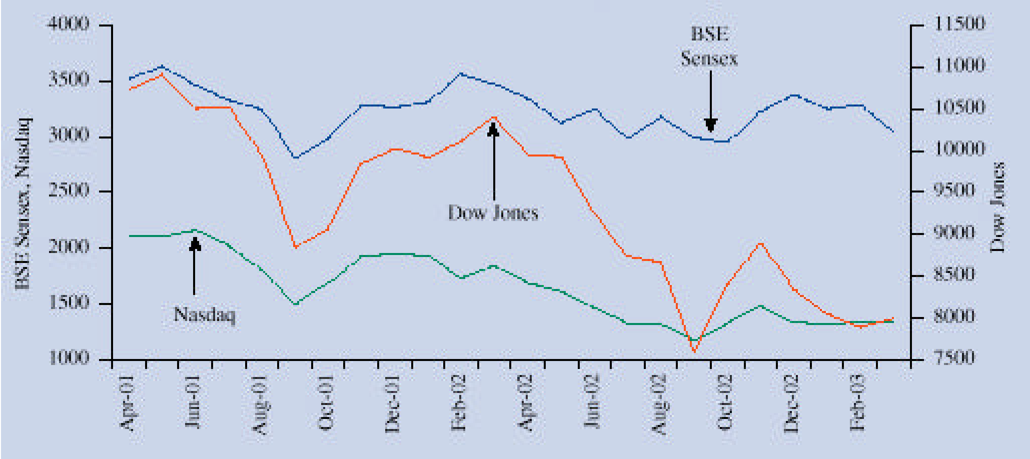
The stock markets witnessed subdued conditions during 2002-03. The market sentiment was adversely affected, *inter alia*, by border tensions, an unsatisfactory monsoon and international uncertainties (Chart 59). International equity markets continued to decline during the year especially as extreme risk aversion followed the spate of accounting irregularities and financial restatements in the US.

Chart 59: Trends in Indian Stock Markets



The domestic markets began the year on a positive note, led by a rally in scrips of Public Sector Undertakings (PSUs) with the announcement of disinvestment initiatives by the Government. Sentiment turned bearish by end-May 2002 as border tensions mounted and certain quarterly corporate performances did not meet market expectations. A recovery in early June 2002 with the easing of border tensions was dissipated by end-July 2002, reflecting monsoon uncertainties and a weakening of international markets following the discovery of accounting discrepancies in large US firms (Chart 60).

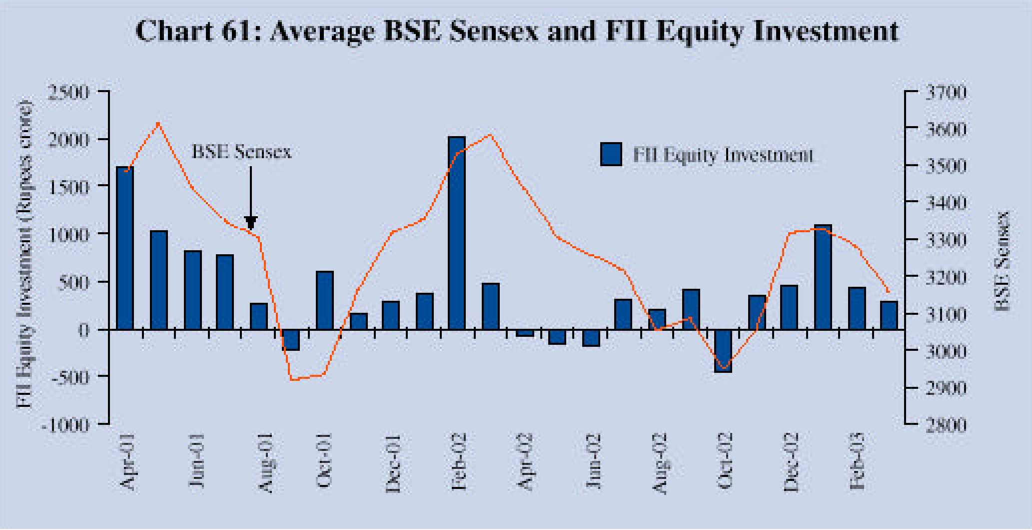
Chart 60: Movements in BSE Sensex, Nasdaq and Dow Jones



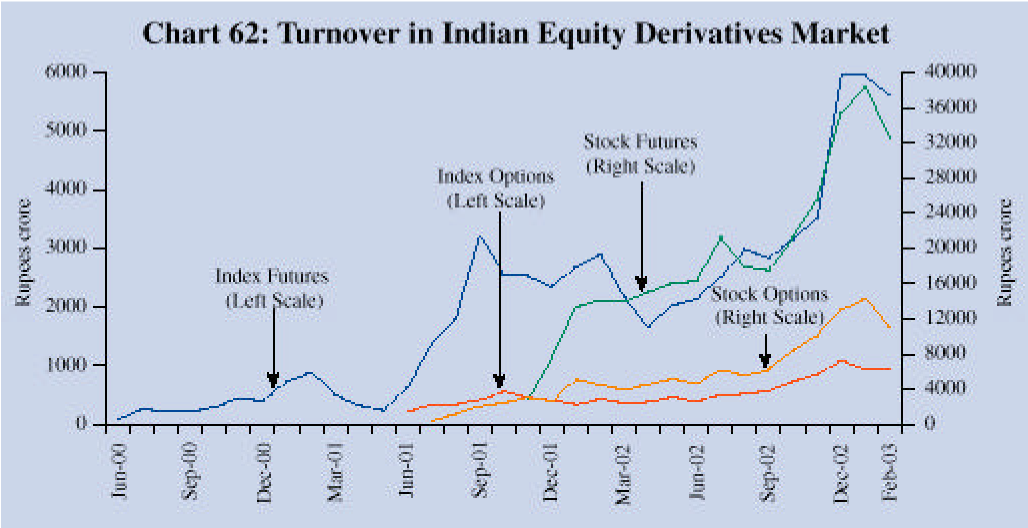
The markets declined again by October 2002 on account of lower than expected quarterly performances of corporates and continuing uncertainty regarding PSU disinvestments. With the revival of disinvestment initiatives, market sentiment turned positive by end-November 2002, aided by bargain buying by institutional investors especially in technology scrips, and revival in international markets. By end-January 2003, uncertainties in the Middle East and the possibility of oil prices hardening dampened markets again. The downtrend persisted for the rest of the year, reinforced by the reactions to the military action in Iraq. The BSE Sensex slipped below the 3000 mark to reach 2997 on April 21, 2003 following uncertainties regarding the performance of infotech scrips.

The average BSE Sensex at 3206 during 2002-03 was lower by 3.8 per cent than 3332 during the preceding year. The volatility in share prices, measured by the coefficient of variation, was lower (4.9 per cent) than in 2001-02 (7.3 per cent). There was a strong buying interest in mid-caps, especially PSU scrips, reflecting a defensive and diversified portfolio strategy in the face of market uncertainties. As a result, the BSE 500 recorded an increase of 10.6 per cent, on average basis, as against a decline of 3.8 per cent in the BSE Sensex. Bank scrips recorded a sharp increase in prices following improvement in profitability and relaxations in respect of foreign direct investment (FDI) in private sector banks. The average price-earning (P/E) ratio of the BSE Sensex scrips, at 14.5 during 2002-03, was lower than 16.6 during the preceding year. The market capitalisation of the BSE was also lower at Rs.5,72,198 crore as at end-March 2003 as compared with Rs.6,12,224 crore as at end-March 2002. The average monthly turnover of the BSE, at Rs.26,710 crore during 2002-03 (up to February), was comparable with Rs.25,598 crore during the corresponding period of the previous year. The settlement cycle was shortened to T+3 basis effective April 1, 2002 and further to T+2 basis, effective April 1, 2003 in line with the international best practices.

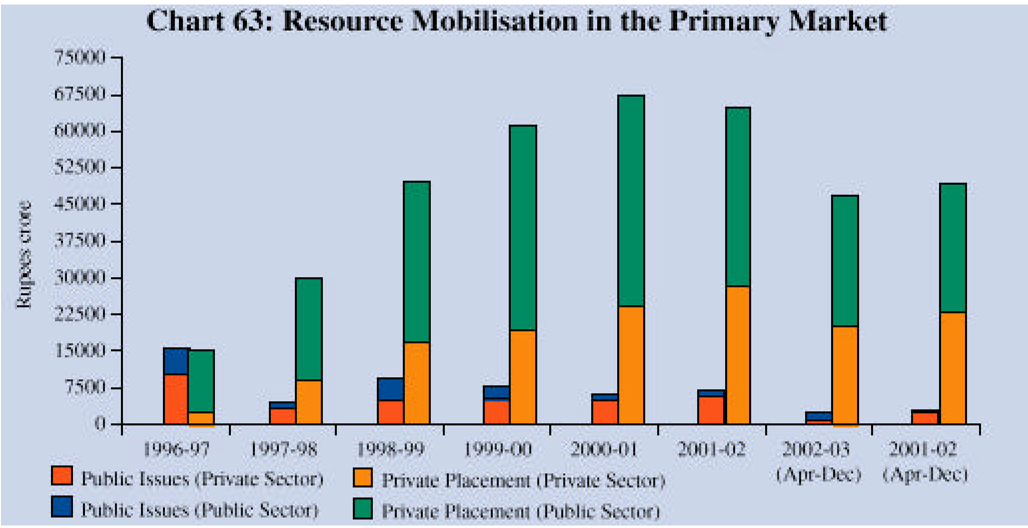
Net FII inflows in the equity markets declined to Rs.2,669 crore during 2002-03 from Rs.8,273 crore during the preceding year (Chart 61). Mutual funds remained net sellers in equity markets during 2002-03.



The derivative segment continued to expand with the total turnover in respect of all products rising to Rs.50,080 crore during February 2003 from Rs.20,535 crore during March 2002 (Chart 62).

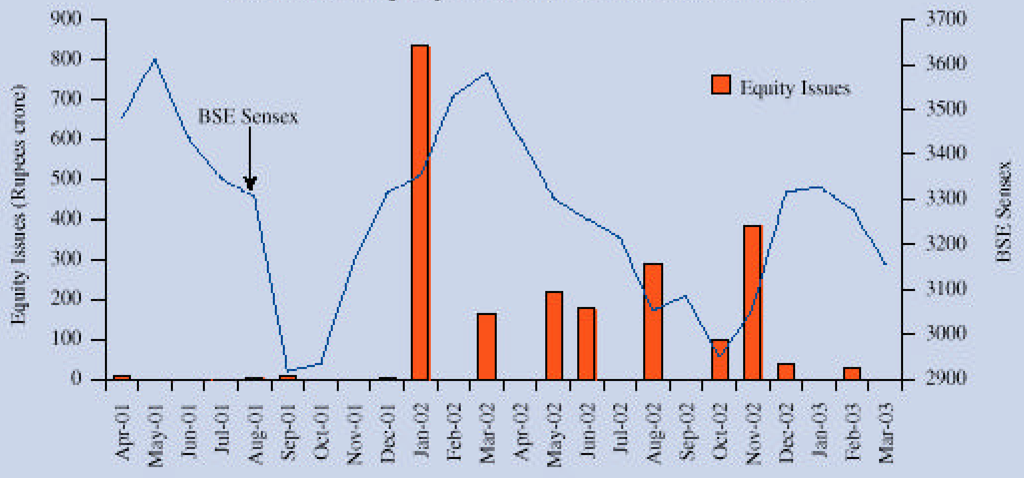


Resource mobilisation in the public issues market amounted to Rs.4,867 crore through 17 issues during 2002-03 as compared with Rs.7,112 crore raised through 24 issues during 2001-02 (Chart 63). The public sector entities accounted for a much higher share in resources mobilised than other participants.



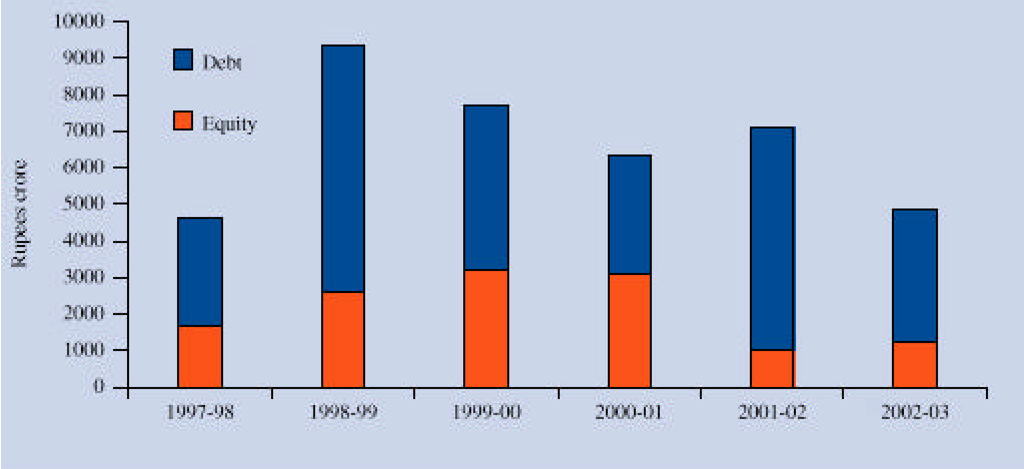
The non-Government public limited companies (private sector) floated five equity issues aggregating Rs.460 crore during 2002-03 as compared with six equity issues aggregating Rs.860 crore during 2001-02. Three public sector banks floated equity issues aggregating Rs.773 crore during 2002-03 as compared with a single issue of Rs.165 crore during the previous year (Chart 64).

Chart 64: Equity Issues and the BSE Sensex



There were four debt issues from the private sector of Rs.1,418 crore during 2002-03 as compared with 13 issues aggregating Rs.4,832 crore during 2001-02. The public sector all-India financial institutions (AIFIs) came out with five bond issues aggregating Rs.2,216 crore during 2002-03 as compared with four bond issues of Rs.1,255 crore during the previous year (Chart 65).

Chart 65: Public Issues Market by Instrument Type



There was a slowdown in resource mobilisation in the private placement market. Resources mobilised in the private placement market aggregated Rs.46,647 crore during April-December 2002, a decline of 5.6 per cent over Rs.49,437 crore mobilised during the corresponding period of the previous year (Chart 63).

There was an increase in resource mobilisation from the Euro issues market (in the form of ADRs, GDRs and FCCBs) as 11 issues aggregating Rs.3,426 crore (US $ 711 million) were floated during 2002-03 as compared with five issues aggregating Rs.2,385 crore (US $ 506 million) during the previous year.

The overall resource mobilisation by mutual funds (net sales), according to the SEBI, amounted to Rs.4,196 crore during 2002-03 registering a sharp decline of 41.5 per cent over the preceding year. The Unit Trust of India (UTI) recorded a net outflow of Rs.9,434 crore and resources raised by private sector mutual funds declined to Rs.12,069 crore while that of public sector improved somewhat to Rs.1,561 crore.

Financial assistance sanctioned and disbursed by the term-lending institutions during 2002-03, at Rs.22,901 crore and Rs.20,151 crore, respectively, declined sharply by 32.2 per cent and 33.6 per cent (excluding ICICI) as compared with decline of 37.2 per cent and 16.2 per cent, respectively, during 2001-02.

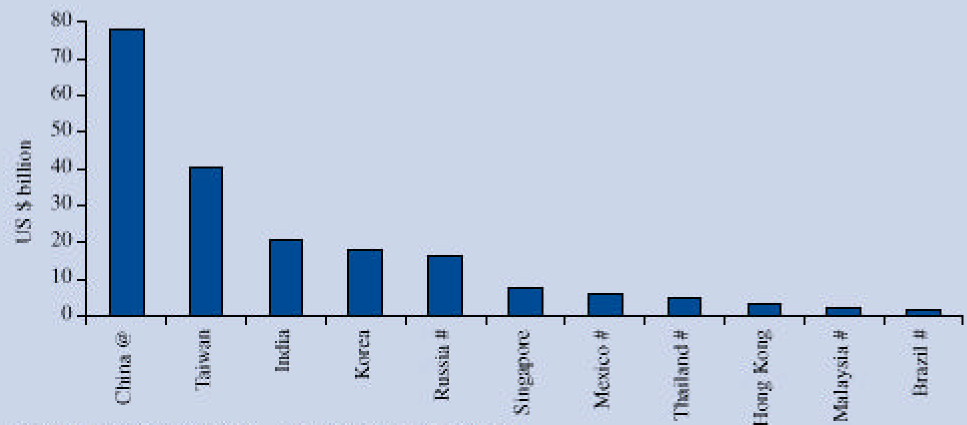
Insurance Market

The process of liberalisation of the insurance market continued during 2002-03 with the entry of a number of private insurers. The Insurance and Regulatory Development Authority (IRDA) registered one new life insurance company and three general insurance companies taking the total number of life insurers and general insurers both to 13. According to the IRDA, the life insurance business (in terms of premium) expanded by 38.9 per cent during 2001-02 as compared with 37.4 per cent a year ago. The general insurance business (in terms of gross direct premium income) increased by 26.3 per cent during 2001-02 as compared with 5.9 per cent during the previous year. All insurance companies observed the solvency margins set by the IRDA.

VI. The External Economy

The Indian economy posted significant gains in the external sector during the year despite an international environment characterised by hesitant recovery of global output and trade and heightened risk aversion in financial markets. India emerged as among the fastest growing exporting countries in the world in 2002. Driven by the robust merchandise export performance and the highest ever net invisible earnings in any year, the current account balance recorded a larger surplus in 2002-03 than in 2001-02, despite a reasonably well-distributed pickup in imports. Net capital flows remained stable, particularly non-resident deposits. There were net outflows under long and medium-term commercial debt, reflecting the consolidation of external debt. These salutary developments resulted in a record accretion to foreign exchange reserves, the third largest increase among the emerging market economies (EMEs) during 2002-03 (Chart 66). India is currently the sixth largest reserve holding country among the EMEs.

Chart 66: Accretion to Reserves by EMEs during 2002-03



: April-February, 2002-03; @ : April-January, 2002-03.
Sources: International Financial Statistics, IMF; The Economist.

The large improvement in the external position is unprecedented in India's own history. Available information on the balance of payments indicates that a substantial portion of the accretion to reserves was by way of merchandise and software exports, private remittances and non-debt creating capital including repatriation of past export proceeds as well as advance export receipts which entail no future contractual obligation to service and are mostly non-reversible. The accretion to reserves occurred without increasing external debt and at a relatively low cost.

International Developments

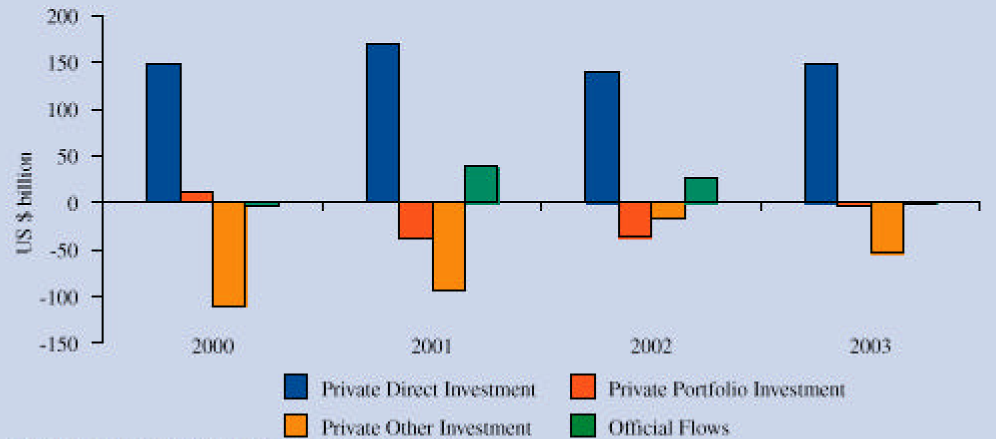
Global economic activity rose in 2002, though at a moderate pace as the strength of the growth observed in the first quarter could not be sustained towards the end of the year. Major equity markets declined for the third consecutive year in 2002 and equity prices fell by 40-60 per cent in relation to their early 2000 peaks. Bond yields and credit spreads generally reflected concerns relating to corporate earnings and undermining of investor confidence despite an accommodative monetary policy stance in major advanced countries. World output is estimated to have grown by 3.0 per cent during 2002, higher than that of 2.3 per cent during 2001. The emerging Asian economies exhibited strong growth at about 6.3 per cent in 2002, driven by improvement in both exports and domestic demand. World trade volume growth recovered from almost no increase in 2001 to 2.9 per cent in 2002. World trade prices also improved (Chart 67).

Chart 67: World Output and Trade

Source : World Economic Outlook, IMF, April 2003.

Private capital flows to EMEs recovered during 2002 (Chart 68). Region-wise, private capital flows to developing Asia increased to US $ 69.5 billion, which is the highest level achieved since 1996.

Chart 68: Net Capital Flows to EMEs



Source : World Economic Outlook, IMF, April 2003.

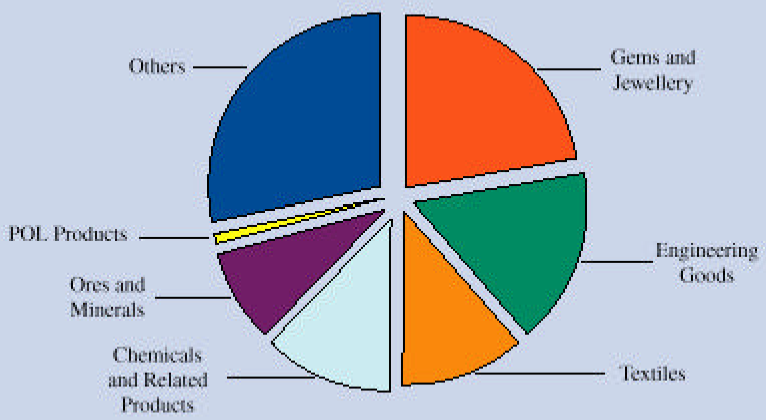
For 2003, the International Monetary Fund (IMF) projects world output growth to recover further to 3.2 per cent on the back of a turn in the inventory cycle, ebbing of the delayed effects of the bust in the equity markets and a continuation of the current monetary policy stance. International trade volumes and prices are expected to strengthen further in 2003. Downside risks to this outlook are the uncertainty in the aftermath of the war in Iraq, the volatility in international oil prices and a further decline in asset prices. IMF projections suggest that emerging Asia may maintain its growth performance in 2003, although the external environment may be less favourable for sustaining export growth. A moderation in the investor appetite for emerging market assets may affect the prospects of private capital flows to the emerging market economies in 2003; such flows to developing Asia are projected to decline to US $ 18.4 billion on account of outflows under portfolio and other investments.

Merchandise Trade (DGCI&S Data)

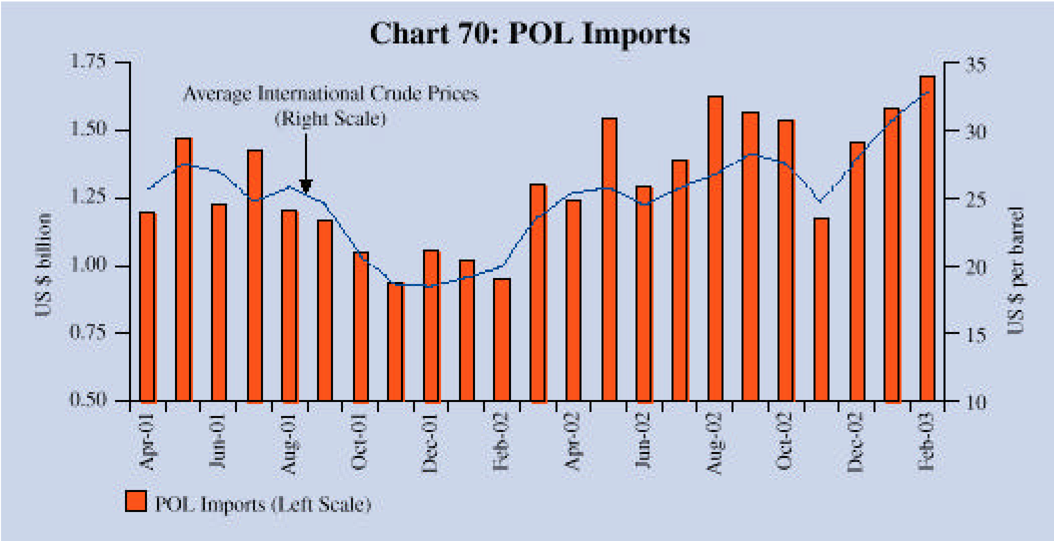
Provisional data of the Directorate General of Commercial Intelligence and Statistics (DGCI&S) indicate a vigorous recovery of merchandise exports from a slump in the preceding year. Export growth of 16.7 per cent during April-February 2002-03 was broad-based, led by 'gems and jewellery', engineering goods, 'chemicals and related products', textiles and 'ores and minerals' (Chart 69). In terms of markets, export growth was mainly to the USA, the Organisation of Petroleum Exporting Countries (OPEC), the European Union and Singapore.

Merchandise imports increased by 16.3 per cent in 2002-03 (April-February) from a marginal increase of 0.8 per cent during the corresponding period of the previous year. Both oil and non-oil imports contributed to higher overall imports. POL imports increased by 26.5 per cent, largely on account of the hardening of international crude prices to an average of US $ 27.3 per barrel during 2002-03 (April-February) from US $ 22.9 per barrel during the corresponding period of 2001-02 (Chart 70).

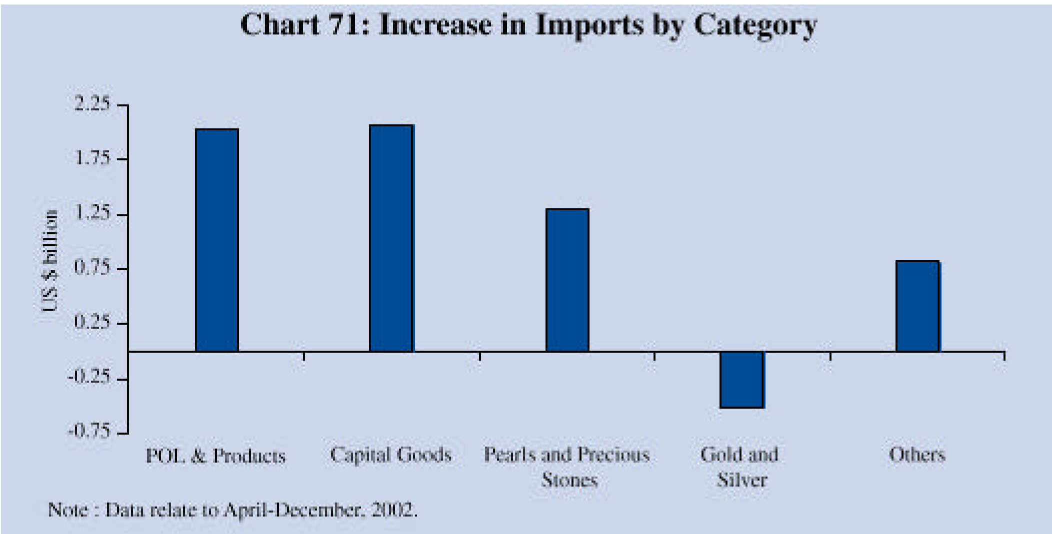
Chart 69: Export Growth by Category



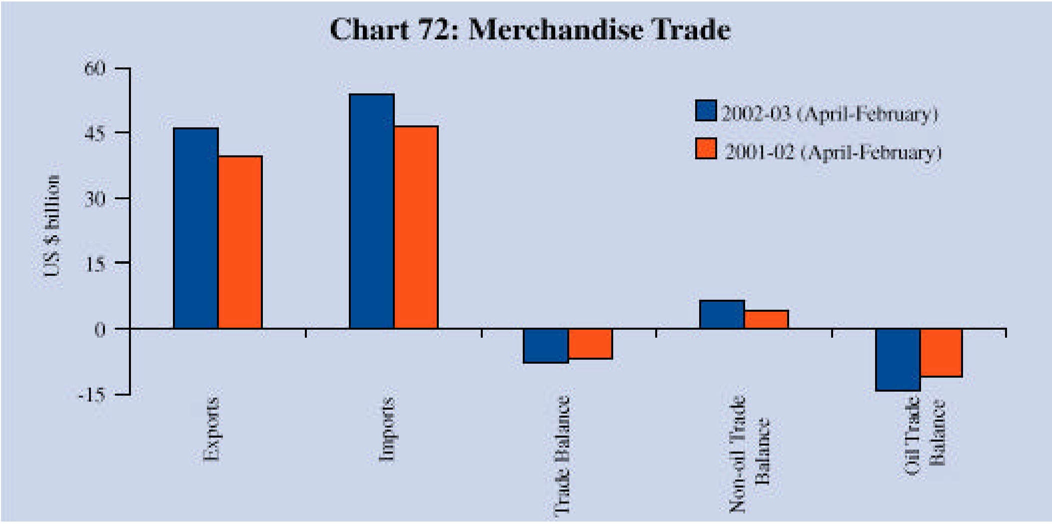
Note : Data relate to April-December, 2002.



Non-oil import growth at 12.5 per cent reflected the pick-up in domestic industrial activity. Capital goods imports and export-related imports were the major elements in the expansion of non-oil imports (Chart 71). With gold and silver imports recording a decline of 13.3 per cent in response to the hardening of international prices, non-oil non-gold imports recorded an increase of 17.6 per cent during April-December 2002. Country-wise, major sources of non-oil import growth during April-December 2002 were the European Union (largely Belgium) followed by non-SAARC Asian developing countries and the USA.



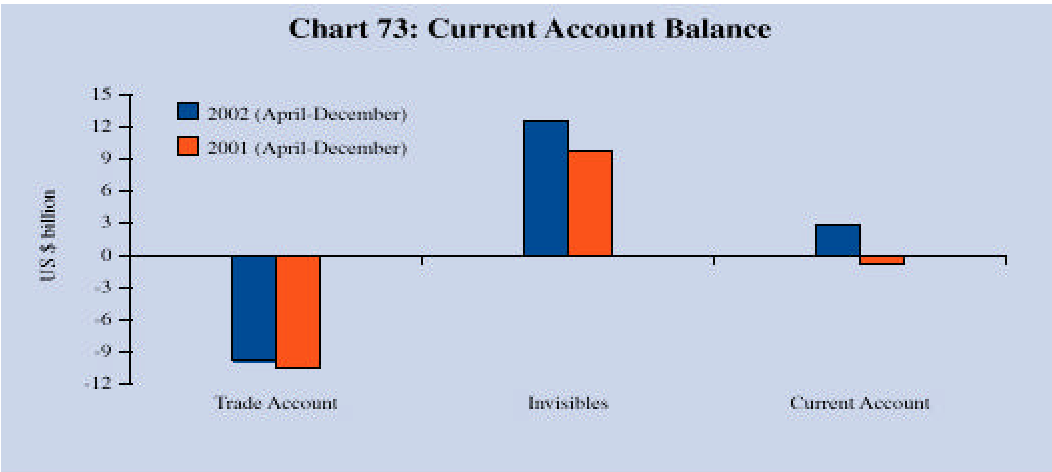
Reflecting higher imports, the merchandise trade deficit, on DGCI&S basis, increased to US $ 7.8 billion during 2002-03 (April-February) from US $ 6.8 billion during the corresponding period of 2001-02 (Chart 72).



Invisibles and Current Account

The buoyancy in the invisible account was sustained as the net invisible surplus (on account of transactions in services, transfers and income) increased to US $ 12.6 billion during April-December 2002. The higher surplus was mainly due to exports of business services, software and private transfers, partly offset by investment income payments for the servicing of external liabilities.

With the merchandise trade deficit (on balance of payments basis) contracting and the increased invisible surplus, the current account balance moved into a surplus of US $ 2.8 billion during April-December 2002 from a deficit of US $ 0.7 billion during the corresponding period of 2001 (Chart 73).

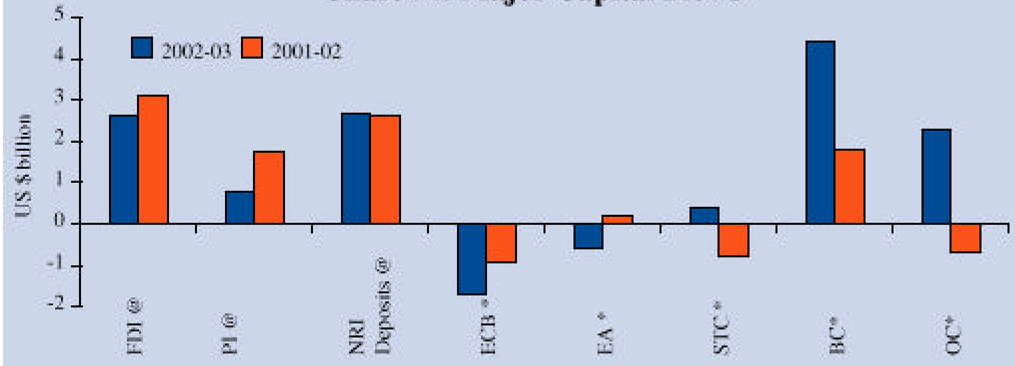


Capital Account

Net capital flows increased from US $ 5.9 billion during April-December 2001 to US $ 9.8 billion during April-December 2002. Positive exchange rate expectations, a freer trade and payments regime, burgeoning international reserves and improving fundamentals provided a congenial environment for larger inflows.

Amongst the major components, foreign investment flows, both direct and portfolio, were lower than in the previous year. Outflows under external commercial borrowings increased further as the appetite for external finance remained subdued, partly on account of ample domestic liquidity. Non-resident deposits were marginally higher than in the previous year (Chart 74). Short-term credits rose in line with the increase in POL imports.

Chart 74: Major Capital Flows

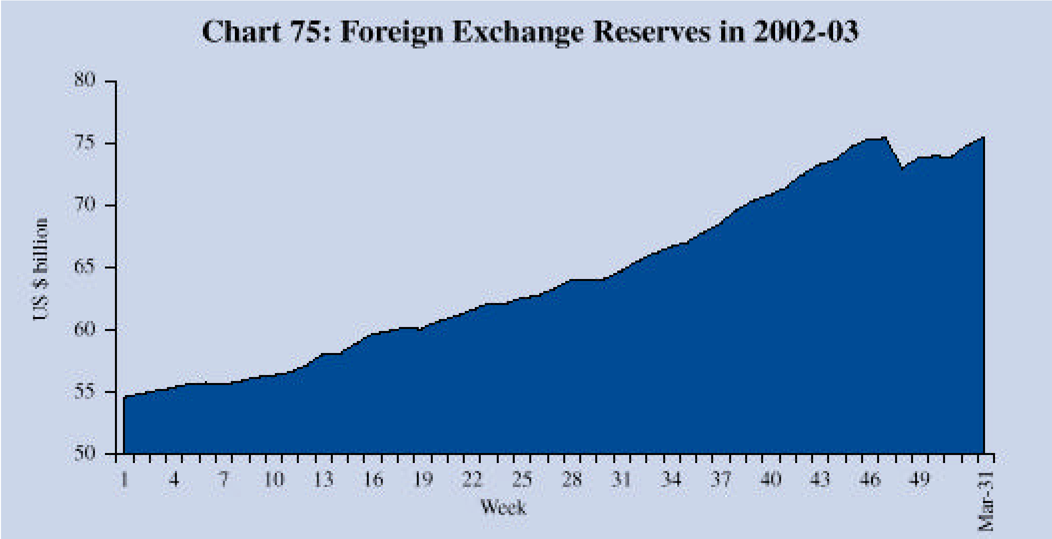


Note: FDI: Foreign Direct Investment; PI: Portfolio Investment; ECB: External Commercial Borrowings; EA: External Assistance; STC: Short-term Capital; BC: Banking Capital (excluding NRI Deposits); OC: Other Capital.
@: April-February; *: April-December.

The surpluses in the current and capital accounts led to an overall balance of payments surplus of US $ 12.7 billion during April-December 2002, more than double that in the corresponding period of 2001.

Foreign Exchange Reserves

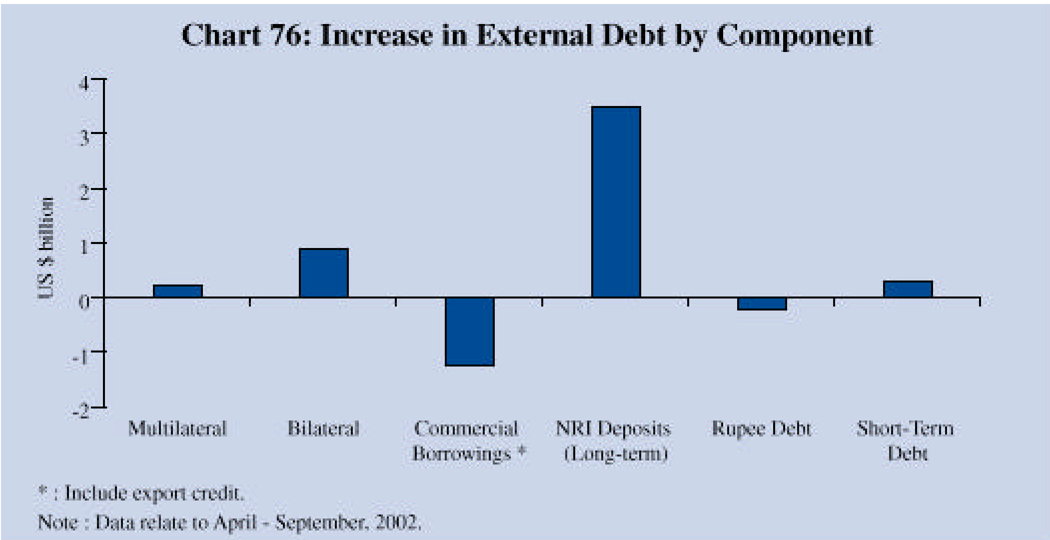
The foreign exchange reserves increased by US $ 21.3 billion during 2002-03 on top of an increase of US $ 11.8 billion during 2001-02 (Chart 75). At US $ 75.4 billion, the level of reserves was equivalent to more than a year's imports. The increase in reserves was almost entirely on account of foreign currency assets despite prepayment of the multilateral debt amounting to US $ 3.0 billion. Gold holdings of the Reserve Bank increased by US $ 0.5 billion. Currency valuation effects arising from the realignment of the US dollar with other major currencies accounted for US $ 3.9 billion of the nominal reserve accretion during 2002-03. Accretion to the reserves continued in April 2003 with their level reaching US $ 76.1 billion on April 18, 2003.



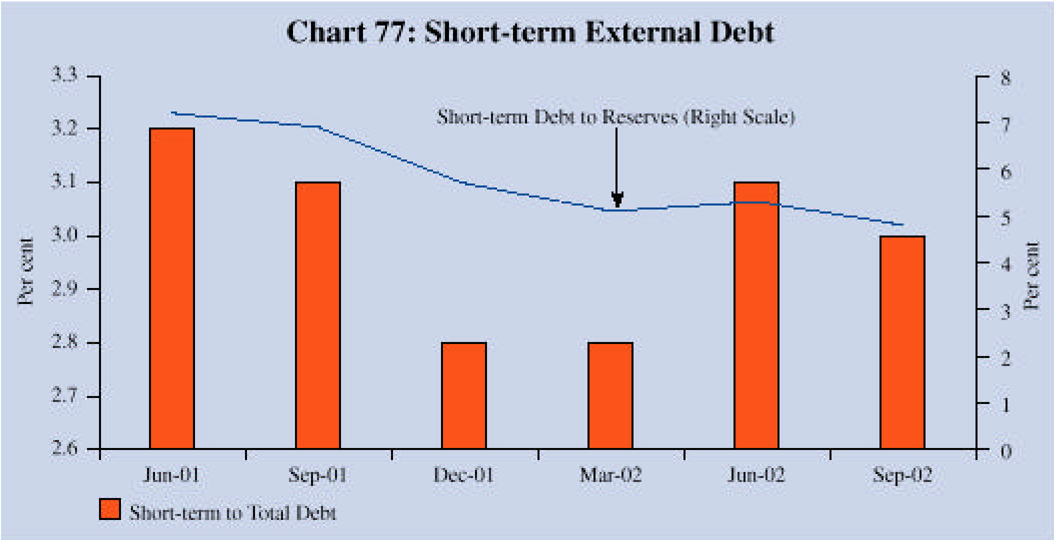
The sharp increases in the reserves in the recent period have raised issues about the costs and benefits of reserves. The financial cost of additional reserve accretion is estimated to be low. These costs are likely to be more than offset by the return on additional reserves. Furthermore, high reserves have provided important benefits in the form of precautionary lines of defence against unforeseen external shocks, the welfare gains from smoothing domestic consumption and investment, and the more visible benefits of ensuring financial stability despite an unsatisfactory international environment.

External Debt

External debt increased by US $ 3.5 billion during April-September 2002 mainly on account of non-resident deposits and official aid (Chart 76).



The external debt-GDP ratio is estimated to have declined from 20.9 per cent at end-March 2002 to 20.1 per cent at end-September 2002. The ratio of short-term debt to total debt as well as to total reserves continued to remain comfortable (3.0 per cent and 4.8 per cent, respectively) at end-September 2002 (Chart 77).



The strength of the foreign exchange reserves enabled the prepayment of foreign currency loans from the Asian Development Bank (ADB) and the World Bank amounting to US $ 3.0 billion in February 2003 by the Government of India. This would be reflected in a moderation of the 'multilateral' component in the stock of external debt at the end of March 2003.