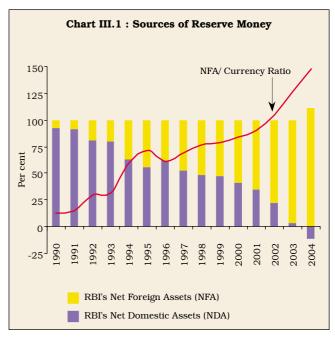


# MONEY, CREDIT AND PRICES

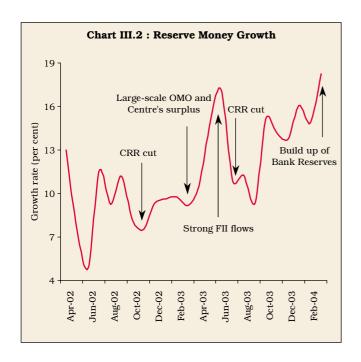
- 3.1 Monetary conditions continued to remain easy during 2003-04, driven by persistent capital inflows. Despite sterilisation operations, the sheer volume of accumulation of the Reserve Bank's net foreign assets (NFA) expanded reserve money at the rate of 18.3 per cent - the highest since 1994-95. Broad money (M<sub>2</sub>) expansion was also the highest since the late 1990s. As a consequence, financial markets operated in conditions of ample liquidity. Interest rates at the short end of the market continuum persistently ruled below the Reserve Bank's Liquidity Adjustment Facility (LAF) repo rate and generally softened across the maturity spectrum. Beginning in June 2002, the exchange rate appreciated through the year in nominal terms against the US dollar. Credit offtake remained weak in relation to initial expectations as bank finance was substituted by internally generated funds and cheaper funds raised overseas. The demand for bank credit picked up only in the latter half of the year. With the virtual absence of pressures from aggregate demand, inflation eased during the year, albeit haltingly in the second half of the year on account of transient supply pressures emanating from localised drought and the pass-through of hardening international crude prices into domestic prices of petroleum, oil and lubricant (POL) products.
- 3.2 The assessment of monetary and credit conditions in this Section highlights the rising cover of foreign assets for the monetary base and, thereby, the innate resilience being built against an unanticipated reversal of capital flows. An examination of the behaviour of reserve money shows that it was characterised by a large accumulation of cash balances by the Central Government and shifts in the Reserve Bank's portfolio on account of sterilisation operations. Money supply exceeded the indicative projections but was closely aligned with the surge in real activity. The analysis of domestic credit reflects a significant slowdown in net bank credit to the Government as well as a delayed pick-up in commercial credit. The commercial banking survey reveals a concentration of activity in the latter half of the year in terms of deposits, non-food credit, call/ term borrowings and two-way movements in foreign assets/liabilities. A review of the price situation traces the uneven easing of inflation during 2003-04 and highlights the growing influence of international price movements on domestic inflation.

#### **RESERVE MONEY**

- 3.3 Reserve money growth nearly doubled during 2003-04, led by strong capital inflows. The ratio of NFA to reserve money consequently rose to 120.7 per cent by February 2004 the highest level since the mid-1950s. The Reserve Bank's NFA/currency ratio reached 150.8 per cent in February 2004, and remained well above the benchmark of 70 per cent which was recommended by the Committee on Capital Account Convertibility (Chairman: Shri S. S. Tarapore) to ensure that the Reserve Bank possessed the wherewithal to meet reversals in the external sector. In response, the Reserve Bank's net domestic assets (NDA) registered an unprecedented contraction (Chart III.1).
- 3.4 Intra-year movements in primary liquidity highlight the sustained pressure from capital inflows (Chart III.2). Base money growth was strong in the first quarter, despite a 25 basis points (bps) cut in the cash reserve ratio (CRR) effective June 14, 2003. The reserve money expansion was driven by strong inflows on account of foreign institutional investors (FIIs) as well as ways and means advances from the Reserve Bank. Sizeable open market operations (OMO), along with the Centre's cash surplus with the Reserve Bank, were able to contract the



#### MONEY, CREDIT AND PRICES



monetary base in the second quarter. A mix of redemption of Resurgent India Bonds (RIBs), prepayment of external debt and a step-up in sterilisation operations moderated the expansionary effect of the massive accretion to the Reserve Bank's NFA in the third quarter. Reserve money expansion continued in the fourth quarter with sustained FII inflows and external commercial borrowings (ECBs). This was exacerbated further by a build-up of bank reserves of Rs.19,662 crore during March 26-31, 2004 reflecting year-end considerations as well as uncertainty following a holiday on March 30, 2004 (Table 3.1 and Appendix Tables III.1 and 2).

3.5 The net Reserve Bank credit to the Central Government (Centre) contracted by 67.3 per cent during 2003-04, pulling its share in reserve money down to 8.5 per cent at end-March 2004 from over 90 per cent in the late 1980s (Table 3.2). Private placements with the Reserve Bank during 2003-04 were mainly to enable prepayment of US \$ 3.8 billion

**Table 3.1: Reserve Money** 

(Rupees crore)

2003-04	2002-03		2003	3-04			200	2-03	
		Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
2	3	4	5	6	7	8	9	10	11
67,451 (18.3)	31,091 (9.2)	45,363	23,980	-18,235	16,342	25,233	7,917	6,791	-8,850
44,555	31,499	14,641	17,986	-5,955	17,882	11,561	11,205	-5,901	14,633
21,019	-801	29,297	5,961	-12,633	-1,606	13,048	-2,427	12,451	-23,873
1,877	393	1,426	33	352	65	625	-861	241	389
-75,772	-31,499	-5,669	-12,506	-53,146	-4,451	9,919	-17,427	-19,779	-4,212
-76,065 (-67.3)	-28,399 (-20.1)	-6,911	-15,844	-53,744	434	7,583	-17,882	-19,555	1,455
-2,728	-6,468	2,156	-796	-2,525	-1,564	844	8	-784	-6,537
1,26,169 (35.2)	94,275 (35.7)	25,808	51,931	25,720	22,710	20,611	34,766	19,619	19,279
		_ ·		• •	-				168
-19,557	25,922	-23,044	14,692	-11,642	437	6,265	9,587	-7,479	17,548
-58,719	-63,184	19,555	-27,951	-43,955	-6,368	4,622	-26,849	-12,828	-28,129
1,41,428	82,090	48,093	37,560	31,832	23,943	20,004	31,060	22,881	8,145
1,40,650	75,661	47,845	40,669	29,899	22,237	27,608	25,165	18,958	3,929
. ,	•	,	,	,	•	,	,	,	,
111.0	97.1	111.0	117.2	110.8	98.8	97.1	98.2	90.2	86.1
148.1	126.8	148.1	146.8	138.1	126.8	126.8	124.6	116.6	106.6
	2 67,451 (18.3) 44,555 21,019 1,877 -75,772 -76,065 (-67.3) -2,728 1,26,169 (35.2) 225 -19,557 -58,719 1,41,428 1,40,650 111.0	67,451 (18.3) (9.2)  44,555 31,499 21,019 -801 1,877 393  -75,772 -31,499 -76,065 -28,399 (-67.3) (-20.1)  -2,728 -6,468 1,26,169 94,275 (35.2) (35.7)  225 705 -19,557 25,922  -58,719 -63,184 1,41,428 82,090 1,40,650 75,661 111.0 97.1	Q4           2         3         4           67,451 (18.3)         31,091 (9.2)         45,363 (9.2)           44,555 (18.3)         31,499 (9.2)         14,641 (29.297 (1.877	Q4         Q3           2         3         4         5           67,451         31,091         45,363         23,980           44,555         31,499         14,641         17,986           21,019         -801         29,297         5,961           1,877         393         1,426         33           -75,772         -31,499         -5,669         -12,506           -76,065         -28,399         -6,911         -15,844           (-67.3)         (-20.1)         -796           1,26,169         94,275         25,808         51,931           (35.2)         (35.7)         25,808         51,931           -58,719         -63,184         19,555         -27,951           1,41,428         82,090         48,093         37,560           1,40,650         75,661         47,845         40,669           111.0         97.1         111.0         117.2	Q4         Q3         Q2           2         3         4         5         6           67,451 (18.3)         31,091 (9.2)         45,363         23,980         -18,235           44,555 (18.3)         31,499 (9.2)         14,641 (17,986 (17,986) (12,633) (17,987)         -5,955 (17,981) (12,633) (17,877)         393 (17,426) (17,986) (17,986) (12,633) (17,877)         333 (17,426) (17,986) (17,986) (17,987) (17,986) (17,987) (17,986) (17,987) (17,9	Q4         Q3         Q2         Q1           67,451 (18.3)         31,091 (9.2)         45,363 (9.2)         23,980 (9.2)         16,342 (18.3)           44,555 (18.3)         31,499 (9.2)         14,641 (17,986 (9.2))         -5,955 (17,882 (9.2))         17,882 (9.2)           21,019 (9.2)         -801 (9.2)         29,297 (9.6) (9.6)         -12,633 (9.6)         -1,606 (9.6)           1,877 (9.2)         -31,499 (9.2)         -5,669 (9.2) (9.2)         -5,3,146 (9.2)         -4,451 (9.2)           -75,772 (9.2)         -31,499 (9.2) (9.2)         -6,911 (9.2)         -15,844 (9.2)         -53,744 (9.2)         434 (9.2)           -2,728 (9.4) (9.2) (9.2) (9.2) (9.2) (9.2) (9.2) (9.2)         25,808 (9.2) (9.2)         51,931 (9.2)         25,720 (9.2)         22,710 (9.2)           -2,728 (9.4) (9.2) (9.2) (9.2) (9.2) (9.2) (9.2) (9.2) (9.2) (9.2) (9.2)         25,808 (9.2) (9.2	Q4         Q3         Q2         Q1         Q4           67,451 (18.3)         31,091 (9.2)         45,363         23,980         -18,235         16,342         25,233           44,555 (18.3)         31,499 (9.2)         14,641         17,986 (9.2)         -5,955 (17,882)         11,561         21,019 (9.2)         -801 (9.2)         29,297 (9.6)         5,961 (9.6)         -12,633 (9.2)         -1,606 (9.6)         13,048 (9.2)         13,048 (9.2)         13,048 (9.2)         14,641 (9.2)         -12,633 (9.2)         -1,606 (9.2)         13,048 (9.2)         13,048 (9.2)         14,641 (9.2)         -12,633 (9.2)         -1,606 (9.2)         13,048 (9.2)         13,048 (9.2)         14,641 (9.2)         -12,633 (9.2)         -1,606 (9.2)         13,048 (9.2)         13,048 (9.2)         14,441 (9.2)         -12,633 (9.2)         -1,606 (9.2)         13,048 (9.2)         14,441 (9.2)         -14,451 (9.2)         9,919 (9.2)         14,441 (9.2)         -1,564 (9.2)         844 (9.2)         14,641 (9.2)         -1,564 (9.2)         844 (9.2)         14,641 (9.2)         -1,564 (9.2)         14,621 (9.2)         14,622 (9.2)         14,692 (9.2)         -1,642 (9.2)         14,622 (9.2)         14,642 (9.2)         14,642 (9.2)         14,642 (9.2)         14,642 (9.2)         14,642 (9.2)         14,642 (9.2)         14,642 (9.2)         14,69	Q4         Q3         Q2         Q1         Q4         Q3           67,451         31,091         45,363         23,980         -18,235         16,342         25,233         7,917           44,555         31,499         14,641         17,986         -5,955         17,882         11,561         11,205           21,019         -801         29,297         5,961         -12,633         -1,606         13,048         -2,427           1,877         393         1,426         33         352         65         625         -861           -75,772         -31,499         -5,669         -12,506         -53,146         -4,451         9,919         -17,427           -76,065         -28,399         -6,911         -15,844         -53,744         434         7,583         -17,882           (-67.3)         (-20.1)         -2,728         -6,468         2,156         -796         -2,525         -1,564         844         8           1,26,169         94,275         25,808         51,931         25,720         22,710         20,611         34,766           (35.2)         (35.7)         24         43         74         84         124         157      <	Q4         Q3         Q2         Q1         Q4         Q3         Q2           67,451 (18.3)         31,091 (9.2)         45,363 (9.2)         23,980 (9.2)         -18,235 (9.2)         16,342 (9.2)         25,233 (9.2)         7,917 (18.3)         6,791 (18.3)           44,555 (19.2)         31,499 (9.2)         14,641 (29,297 (19.2)         17,986 (19.2)         -5,955 (17.882 (19.6)         11,561 (19.0)         11,205 (19.0)         -5,901 (19.4)           21,019 (19.7)         -801 (29,297 (19.7)         29,297 (5,961 (19.6)         -12,633 (33 (35.2)         -1,606 (65 (65 (65) (65 (625) (65 (625) (78.3)         11,427 (19.7)         -19,779 (19.7)           -75,772 (-67.3)         -31,499 (-69.1)         -12,506 (-69.1)         -53,146 (-53,744 (-69.1)         -4,451 (434 (7,583) (-17,882)         9,919 (-17,427 (19.7)         -19,779 (-19,555 (-67.3)         -17,882 (-19,555 (-67.3)         -17,882 (-19,555 (-1

NFA : Net Foreign Assets.

FCA: Foreign Currency Assets.

Note: 1. Data are based on March 31 for Q4 and on last reporting Friday for all other quarters.

2. Figures in parentheses are percentage annual variations.

of multilateral and bilateral debt. This was counterbalanced by a large build-up of cash balances by the Centre on account of disinvestment proceeds, revenue buoyancy, proceeds under the State Debt Swap Scheme and the higher mobilisation on account of saving bonds. Sustained OMO, including repo operations under the LAF, reduced the stock of marketable Government paper with the Reserve Bank to Rs.40,750 crore at end-March 2004 from Rs.52,546 crore at end-March 2003. This was despite the conversion of the available stock of non-marketable special securities (of Rs.61,818 crore) created out of the past *ad hoc* and tap Treasury Bills into tradable securities during the year.

3.6 Changes in the relative significance of sources of reserve money have important implications. First, a higher ratio of foreign assets to domestic assets in the central bank's balance sheet strengthens its credibility in conducting monetary policy and exchange market operations, supporting investor confidence in the economy. Second, monetisation of capital inflows is more likely to amplify the process of credit creation over time. It directly adds to bank liquidity unlike money financing of public expenditure

which often bypasses the banking system in the first round. Third, a higher share of foreign assets in the central bank's balance sheet exposes it to market risks in the event of a sharp appreciation of the domestic currency. Finally, the process of sterilising the monetary impact of the build-up of foreign exchange reserves carries quasi-fiscal costs which are cumulative in character and determine the span of time over which sterilisation operations can be sustained.

### **Developments during 2004-05**

3.7 Reserve money expansion during 2004-05 (up to August 13, 2004) was broadly of the order recorded in the corresponding period of 2003-04 and was largely driven by the accretion to the Reserve Bank's NFA. Reflective of the Reserve Bank's sterilisation operations, the Reserve Bank's net credit to the Centre recorded a sharp decline. The Reserve Bank's net credit to the Centre, in fact, occasionally turned negative in the first quarter of 2004-05 due to the build-up in the Centre's cash balances, including proceeds under the Market Stabilisation Scheme (MSS) (Table 3.3).

Table 3.2: Net Reserve Bank Credit to the Centre

(Rupees crore) Item 2003-04 2002-03 2003-04 2002-03 Q2 Q4 Q3 Q2 Q1 Q4 Q3 Q1 3 8 10 11 **Net Reserve Bank Credit to** the Centre (1+2+3+4-5) -76,065 -28,399 -6,911 -15,844 -53,744 7,583 -17,882 -19,555 1,455 434 1. Loans and Advances 0 -5,176 0 0 -8,145 8,145 0 0 -7,648 2,472 2. Treasury Bills held by the -3 -15 0 0 0 -3 3 0 0 -18 Reserve Bank 3. Reserve Bank's holdings -45,530 -17,979 -11,761 of Dated Securities -72.227 -24,731 398 -15.795 -11.300 11,116 -6,107 4. Reserve Bank's holdings of Rupee Coins 20 -92 -24 -51 -68 163 -106 97 -146 64 -5,044 5. Central Government Deposits 3,856 -1,614 7.287 -1 0 -3,4303,431 0 0 Memo Items\*: 1. Market Borrowings through Dated Securities by the Centre # 1,21,500 1,25,000 26,500 15,000 36,000 44,000 18,000 23,000 35,000 49,000 2. Reserve Bank's Primary Subscription to Dated Securities 21,500 36.175 16.500 0 0 5.000 13.000 0 22,018 1.157 3. Repos (-) / Reverse Repos -3,580 1,557 -25,052 (+) (LAF), net position @ -32.2301,940 -5,1553,079 10,371 8,845 -20,355 4. Centre's Surplus Investment 17,764 8,905 4,629 -2,35524,395 -8,905 -5,72412,624 2,005 0 5. Net Open Market Sales # 41,849 53,781 5,333 14,225 16,671 5,620 11,150 15,693 19,918 7,020 -8,642 6. Primary Operations + 23,616 -32,608 25,643 -12,527 -100 4.560 2.304 15,187 29,598 \*: At face value. #: Excluding Treasury Bills. @: Including fortnightly repos. + : Adjusted for Centre's surplus investment. Note: Quarterly variations are based on March 31 for Q4 and on last reporting Fridays for other quarters.

<sup>32</sup> 

Table 3.3: Reserve Money – As on August 13, 2004

(Rupees crore)

	Yea	ar-on-yea	ar Variations	
Item	As or	n	As o	n
	August 13	, 2004	August 15	5, 2003
	Absolute	Per	Absolute	Per
		cent		cent
1	2	3	4	5
Reserve Money	52,715	13.8	46,279	13.8
Major Components				
Currency in Circulation	40,246	13.5	35,127	13.4
2. Bankers' Deposits with the RB	l 11,627	14.3	11,106	15.8
Major Sources				
1. Net RBI credit to Government	-70,715	-81.2	-49,880	-36.4
of which: to Centre	-69,051	-83.0	-50,820	-37.9
Deposits of the				
Central Government	45,924		0	
of which: MSS Account	45,925		0	
2. Net Foreign Assets				
(NFA) of the RBI	1,53,837	39.2	97,642	33.1
	(1,25,896)		(1,04,484)	

Note: Figures in parentheses are foreign currency assets, net of revaluation.

#### **MONETARY SURVEY**

3.8 Broad money (M<sub>3</sub>) growth was higher than projected in the Monetary and Credit Policy for

2003-04 (Table 3.4 and Appendix Table III.3). A distinctive feature of the intra-year development of monetary conditions during 2003-04 was the sharp acceleration in  $\rm M_3$  growth towards the end of the year. The large monetary expansion occurred in spite of a bullet redemption of the RIBs in October 2003. During the first half of the year, a revival in cash demand coupled with weak credit demand resulted in a slowdown of the annual  $\rm M_3$  growth rate to a 28-year trough of 11.5 per cent in May 2003. Monetary expansion resumed in September, driven by the abundant liquidity emanating from capital flows, the cut in CRR in June 2003 and the strengthening of the credit offtake.

3.9 The increase in the residency-based  $NM_3$  aggregate during 2003-04 was higher than that of the conventional  $M_3$  aggregate, as the latter directly reflected the contractionary impact of the redemption of the RIBs (Appendix Table III.4). The broader liquidity aggregates,  $\emph{viz.}$ ,  $L_1$  ( $NM_3$ + postal deposits),  $L_2$  ( $L_1$ + term deposits with financial institutions) and  $L_3$  [ $L_2$ + public deposits with non-banking financial companies (NBFCs)] also registered higher growth in 2003-04 (Appendix Table III.5). Postal deposits continued to grow in view of the attractive rates of return in

**Table 3.4: Monetary Indicators** 

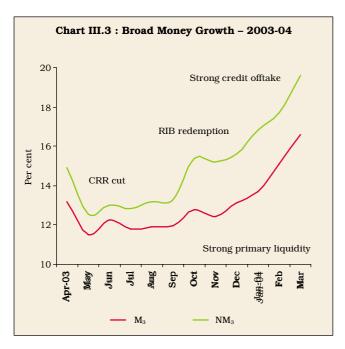
(Per cent)

Item	Outstanding as on				
	March 31, 2004	200	03-04	2002	2-03
	(Rupees crore)	Point-to-point	Monthly average	Point-to-point	Monthly average
1	2	3	4	5	6
I. Reserve Money	4,36,512	18.3	13.9	9.2	9.3
II. Broad Money (M <sub>3</sub> )	20,03,102	16.6	13.0	12.7	13.8
a) Currency with the Public	3,15,493	16.2	13.9	12.8	13.9
b) Aggregate Deposits	16,82,491	16.6	12.8	12.7	13.8
i) Demand Deposits	2,56,039	28.8	17.1	10.9	9.7
ii) Time Deposits	14,26,451	14.6	12.2	12.9	14.5
of which: Non-Resident Foreign Currency Deposits	75,336	-18.6@	-11.0@	1.8	4.4
III. NM <sub>3</sub>	19,62,910	19.6	15.0	13.5	14.7
IV. a) L <sub>1</sub>	20,34,297	19.9	15.4	13.9	15.0
of which: Postal Deposits	71,387	29.1	28.6	25.8	25.6
b) L <sub>2</sub>	20,40,542	19.8	15.4	13.9	14.6
of which: FI Deposits	6,245	-0.8	7.5	22.5	-36.6
c) L <sub>3</sub>	20,60,264	19.6	15.6	13.8	14.3
of which: NBFC Deposits	19,722	-0.9	3.6	2.5	6.5
V. Major Sources of Broad Money					
a) Net Bank Credit to the Government (i+ii)	7,45,499	10.2	12.3	14.7	13.6
i) Net Reserve Bank Credit to Government	44,907	-62.8	-43.0	-20.7	-17.4
Of which: to the Centre	36,920	-67.3	-44.9	-20.1	-17.9
ii) Other Banks' Credit to Government	7,00,591	26.0	25.9	27.1	25.5
b) Bank Credit to Commercial Sector	10,17,902	13.2	11.8	12.5	12.0
of which: Scheduled Commercial Banks' Non-food Cre	dit 8,04,824	18.4	16.6	18.6	16.5
c) Net Foreign Assets of the Banking Sector	5,26,586	33.7	27.6	26.6	31.4

<sup>@:</sup> Reflects the redemption effect of Resurgent India Bonds (RIBs).

Note: 1. Data are provisional.

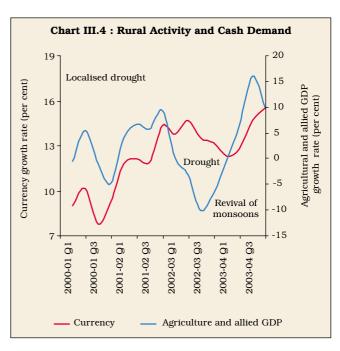
<sup>2.</sup> Variations in deposits, M<sub>3</sub>, NM<sub>3</sub>, L<sub>1</sub>, L<sub>2</sub>, and L<sub>3</sub> are adjusted for the full impact of mergers during May 2002 - April 2003, while that in credit are adjusted for the initial impact of mergers.



comparison with bank deposits. Deposits with financial institutions, however, stagnated with the gradual shrinkage of the sector. Some financial institutions were also barred from raising fresh borrowings because of their deteriorating financial situation. Public deposits with NBFCs declined partly because they preferred to rely more on cheaper bank loans (Chart III.3).

The strong recovery in agricultural activity during 2003-04 led to increased currency demand. especially because cash continues to dominate rural transactions (Chart III.4). Aggregate deposits picked up in the last quarter of the year. A sudden spurt in scheduled commercial banks' non-food credit during the latter half of the year was reflected in a sharp increase in demand deposits. Increased activity in the capital market, including disinvestment and increased FII funds, also contributed to the expansion in demand deposits. Time deposits grew at a marginally higher rate despite a continuing migration of household saving to postal deposits, a shift in household preferences towards mutual funds from banks' fixed deposits and a slowdown in non-resident deposit inflows emanating from the rationalisation of interest rates on NRE deposits (Chart III.5).

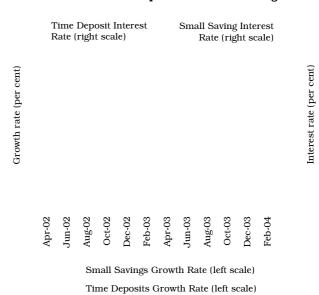
3.11 Commercial banks have increasingly turned to non-deposit sources of funds in recent years to take advantage of ample liquidity conditions in the system and easier access to low cost funds overseas. Borrowings by banks – mainly from non-bank entities from the term money market – increased from

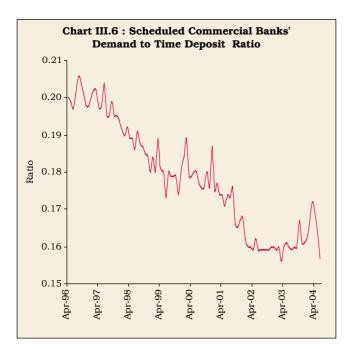


Rs.3,029 crore at end-March 2002 to Rs.12,638 crore at end-March 2003 and further to Rs.24,670 crore at end-March 2004. Borrowings from international markets by commercial banks rose from Rs.1,357 crore at end-March 2002 to Rs.7,208 crore at end-March 2003 and further to Rs.17,028 crore at end-March 2004.

3.12 The traditional distinction between demand and time deposits was blurred, to an extent, as fluctuations in stock market activity necessitated parking of temporarily idle funds in short-term fixed

Chart III.5: Time Deposits and Small Savings



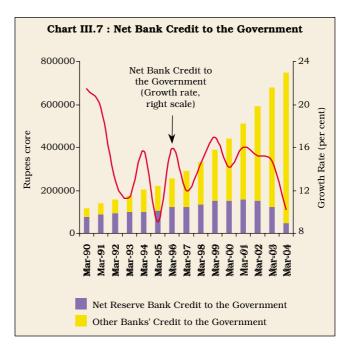


deposits. The gradual shortening of the minimum maturity of fixed deposits in the latter half of the 1990s drove down the ratio (deseasonalised) of scheduled commercial banks' demand deposits to time deposits (adjusted for RIBs/IMDs and merger effects) (Chart III.6).

#### **Sources of Money Supply**

3.13 Changes in asset portfolios of commercial banks reflected the impact of rallies in the Government securities market, the appreciation of the exchange rate *vis-á-vis* the US dollar and the dynamics of credit demand. Domestic credit (including banks' non-SLR investments) decelerated to 11.0 per cent during 2003-04 from 13.5 per cent (adjusted for mergers) during the previous year.

3.14 Net bank credit to the Government grew at 10.2 per cent during 2003-04 – the lowest order of growth since 1994-95 – due mainly to a build-up of large cash balances by the Central Government with the Reserve Bank. Large sterilisation operations led to the share of the Reserve Bank in net bank credit to the Government dipping to a low of 5.1 per cent by February 2004 from 65.6 per cent at end-March 1990. Commercial banks continued to park surplus liquidity in gilts in response to attractive risk-free yields. This buoyed up their holdings of statutory liquidity ratio (SLR) securities to as much as 41.3 per cent of their net demand and time liabilities by end-March 2004, far in excess of the statutory requirement of 25 per cent (Chart III.7).



3.15 The growth of bank credit to the commercial sector during 2003-04 was comparable to that of the previous year. Food credit declined due to lower food stocks and sustained higher offtake. Commercial banks' non-food credit decelerated marginally for the year as a whole, although there was a significant pick-up in the latter half. Besides conventional credit, commercial banks' non-SLR investments recorded a marginal increase as higher exposures to mutual funds were largely offset by divestment of private sector corporate bonds (Table 3.5).

Table 3.5: Commercial Banks' Non-SLR Investments
(Rupees crore)

			()
	Instrument	Outstanding as	at end-March
		2004	2003
	1	2	3
1.	Commercial Paper	3,770	4,007
2.	Units of UTI and other Mutual Fun	ds 11,808	6,317
3.	Shares issued by	9,696	10,206
	3.1 Public Sector Undertakings	1,272	1,430
	3.2 Private Corporate Sector	7,395	7,589
	3.3 Public Financial Institutions	1,029	1,187
4.	Bonds/debentures issued by	1,12,370	1,13,169
	4.1 Public Sector Undertakings	48,646	46,854
	4.2 Private Corporate Sector	27,903	32,973
	4.3 Public Financial Institutions	30,704	28,771
	4.4 Others	5,118	4,570
To	tal (1+2+3+4)	1,37,644	1,33,699
M	emo:		
Co	onventional Bank Credit	8,15,728	7,07,856
No	ote : Excluding Regional Rural Bank	KS.	

Table 3.6: Flow of Resources from Non-banks to Corporates

(Rupees	crore)
---------	--------

		(Itapees cioie)
Item	2003-04	2002-03
1	2	3
1. Capital Issues* (i+ii)	2,059	642
i) Non-Government Public Ltd.		
Companies (a+b)	1,959	642
a) Bonds/Debentures	0	218
b) Shares	1,959	424
ii) PSUs and Government Companies	100	0
2. Euro Issues +	3,098	3,426
3. External Commercial Borrowings		
(ECBs) ##	15,136	-11,415
4. Issue of CPs #	2,304	2,063
5. Financial assistance extended		
by FIs (net) @	-1,435	-5,672
6. Total (1 to 5)	21,162	-10,956

- Gross issuances excluding issues by banks and financial institutions. Figures are not adjusted for banks' investments in capital issues, which are not expected to be significant.
- + : Including Global Depository Receipts (GDRs)/American Depository Receipts (ADRs) and Foreign Currency Convertible Bonds (FCCBs) other than those issues floated by banks and financial institutions.
- ##: Excluding the impact of redemption of Resurgent India Bonds (RIBs).
- # : Excluding issuances by financial institutions and banks' investments in CPs.
- @ : Excluding ICICI Ltd. and comprising loans and advances, equity, other investments and bills of exchange and promissory notes discounted/rediscounted. Financial institutions include IDBI, IFCI, IDFC, EXIM Bank, IIBI, SIDBI and TFCI.

Note: Data are provisional.

- 3.16 The flow of resources from non-banks to corporates recorded a jump during 2003-04 in sharp contrast to a decline in the previous year (Table 3.6). This was mainly due to large external commercial borrowings (ECBs) by corporates taking advantage of a favourable interest rate differential between domestic and international markets and an appreciating domestic currency.
- 3.17 In the deployment pattern of commercial bank credit, the priority sector continued to be the largest recipient, as in earlier years (Table 3.7 and Appendix Table III.8). This was essentially on account of substantially higher offtake by the 'other priority' segment, representing primarily small housing loans up to Rs.10 lakh. This segment benefited from low interest rates, fiscal incentives and an upsurge in housing demand. Large housing loans (above Rs.10 lakh) continued to record strong growth. Credit to medium and large industries, NBFCs and real estate recorded lower growth. This reflected greater recourse by corporates to ECBs and to internal generation of

Table 3.7: Sectoral Deployment of Non-food Gross Bank Credit

			(Rupe	ees crore)
Sector	2003	-04*	2002	-03@
	Absolute	Per cent	Absolute	Per cent
1	2	3	4	5
1. Priority sector	52,225	24.7	28,540	16.3
2. Industry				
(Medium and Lar	ge) 12,042	5.1	28,011	16.3
3. Housing	15,394	42.1	12,308	55.1
4. Non-banking fina	ncial			
companies	2,675	18.9	4,399	45.6
5. Wholesale trade	2,289	10.1	1,939	9.5
6. Export Credit	8,485	17.2	6,424	14.9

- \* : Includes the impact of the mergers since May 3, 2002.
- @: Excludes the impact of the mergers since May 3, 2002.

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

funds following significant improvement in profitability throughout 2002-03 and 2003-04. Bank credit to industry, however, recorded a pick-up since September 2003 with the jump in February and March 2004 accounting for about 75 per cent of the fiscal year offtake.

- 3.18 An industry-wise distribution of credit shows that the lower expansion of credit was due to a decline in offtake by industries such as mining, iron and steel, other metal and metal products, chemicals, petroleum, fertilisers, cement, and rubber (Appendix Table III.9). This was reinforced by a deceleration in credit to cotton textiles, drugs and pharmaceuticals and computer software. On the other hand, credit to infrastructure industries, especially roads and ports, power and telecommunications, increased substantially. Some industries such as electricity, food processing, jute textiles, sugar, tea, tobacco, leather, gems and jewellery and construction also recorded higher bank credit offtake.
- 3.19 The pattern of credit behaviour in the Indian economy has been undergoing structural shifts as a result of newer avenues of resource mobilisation as well as new areas of deployment of assets. Demand for credit by corporates is becoming increasingly sensitive to cost considerations, availability of internal funds and international capital market developments (Box III.1). On the supply side, banks are beginning to optimise portfolios by arbitraging between the rates of return on advances in domestic currency and in foreign currency to residents as well as treasury operations in Government securities and in foreign assets. Thus, there is a growing substitution of domestic and foreign avenues of resource mobilisation and credit deployment.

#### Box III.1

## Corporate Profitability and Non-food Credit Offtake

Indian industry has historically relied largely on external sources of funds comprising mainly borrowings from banks and finance institutions (FIs). With the decline in the importance of FIs in recent years, corporates were expected to increase their recourse to banks. During 2003-04, however, bank credit to industry decelerated to 5.9 per cent from 13.4 per cent in 2002-03 even as industrial growth picked up to 6.9 per cent from 5.7 per cent.

An analysis of data reveals that the decline in credit offtake by industry during 2003-04 was mainly due to the increased recourse to international capital markets by way of external commercial borrowings (ECBs), depository receipts and convertible bonds. Furthermore, since 2001-02, internal generation of funds has increasingly substituted funds from external sources. During 2001-02, the share of internal sources of funds of corporates (select large public limited companies) turned out to be 68.8 per cent of their total financing requirement. This took the form of provision for taxation and other current provisions reserves and surplus. Provision for taxation declined

significantly in 2002-03, while reserves and surplus increased. Net corporate profits averaged at 53.7 per cent during 2003-04, reflecting the ongoing reduction in interest expenses. Industries which earned large profits such as petroleum, engineering, chemicals and iron and steel reduced their dependence on bank credit.

In India, the importance of bank finance to industry is significant at about 67.0 per cent of industrial GDP. As the industrial recovery gains momentum and project investment activity picks up, the potential demand for bank credit could rise along with an increasing resource mobilisation from international capital markets.

#### References

- Calza, A., Gartner, C. and Sousa, J. (2001), "Modelling the Demand for Loans to the Private Sector in the Euro Area", European Central Bank Working Paper, No.40.
- Reserve Bank of India (2004), "Finance of Large Public Limited Companies, 2002-03", Reserve Bank of India Bulletin, April.

## **Developments during 2004-05**

3.20 The expansion of money supply during 2004-05 (up to August 6, 2004) continued to be driven by a sustained increase in the monetary base (Table 3.8). Currency expansion remained strong, reflecting a pickup in activity across the economy. Demand deposits, in particular, recorded a strong growth, reflecting a

Table 3.8: Money Supply - As on August 6, 2004

(Rupees crore)

Item		Year-on-ye	ar Variation	
	As	on	As	on
	August	6, 2004	August	8, 2003
	Absolute	Per cent	Absolute	Per cent
1	2	3	4	5
Broad Money (M <sub>3</sub> )	2,84,440	15.7	1,89,622	11.7
Major Components				
Currency with the Public	38,273	13.3	32,378	12.7
Aggregate Deposits	2,45,085	16.1	1,57,200	11.5
Major Sources				
Net Bank Credit to				
the Government	42,277	5.9	72,172	11.1
of which:				
By the Reserve Bank	-79,394	-92.6	-68,421	-44.4
Bank Credit to				
Commercial Sector	1,69,234	18.7	85,816	10.5
of which:				
Scheduled Commercial				
Banks' Non-food Credit	1,63,272	23.8	91,807	15.4
Net Foreign				
Assets (NFA) of the				
Banking Sector	1,62,349	37.9	84,592	24.6

sustained pick-up in scheduled commercial banks' non-food credit. Food credit expanded by Rs. 6,481 crore during 2004-05 (up to August 6, 2004) in sharp contrast to the decline of Rs. 6,228 crore in the corresponding period of the previous year. Net bank credit to the Government decelerated sharply following the significant slowdown in the Centre's market borrowing programme.

# **Commercial Banking Survey**

Liquidity in the banking system surged in the first quarter of 2003-04, essentially because of the build-up of deposits by banks to meet year-end targets for 2002-03 (Table 3.9 and Appendix Tables III.6 and 7). Time deposit growth began to slow down as funds moved from fixed deposits of households to mutual funds as the capital market revived. This, in turn, led to a sharp increase in current accounts maintained by mutual funds. Credit to the Government picked up with the launching of the market borrowing programme of the Centre. On the other hand, food credit slumped due to subdued procurement operations and lower carrying costs associated with diminishing food stocks. Non-food credit slowed down with corporates switching away from bank finance, as alluded to earlier. Contemporaneously, banks increased lending to primary dealers who are turning out to be the main borrowers in the call money market. Banks drew down their nostro balances and borrowed overseas to fund foreign currency loans to residents. Net outflows were recorded under the FCNR(B) scheme as the alignment

**Table 3.9: Operations of Scheduled Commercial Banks** 

(Rupees crore)

Item	Outstanding as on		20	003-04			2	2002-03	
	March 19, 2004	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
1	2	3	4	5	6	7	8	9	10
Components									
Aggregate Deposits of Residents	14,29,080	82,398	60,154	32,455	65,724	23,773	37,518	32,201	52,675
Demand Deposits	2,25,022	30,822	18,496	-5,950	11,366	5,405	11,654	-4,535	4,717
Time Deposits	12,04,058	51,577	41,658	38,405	54,359	18,368	25,864	36,735	47,958
Call/Term Funding from Financial Institutions	24,670	2,431	4,822	2,253	2,526	2,142	227	792	6,448
Sources									
Credit to the Government	6,54,758	32,133	18,342	45,333	35,534	23,798	22,680	18,716	47,047
Credit to Commercial Sector	1,002,479	54,800	40,606	5,635	10,400	27,881	39,481	20,342	22,806
Food Credit	35,961	-391	-1,113	-12,601	586	-2,468	-1,415	-7,645	7,030
Non-food Credit	8,04,824	57,819	48,992	15,186	3,091	39,439	32,541	19,945	7,522
Credit to Primary Dealers	1,946	-2,276	-4,817	-610	5,557	-5,886	959	5,837	2,854
Investments in Other Approved Securities	22,830	-928	50	-407	-13	-306	-965	-459	-1,233
Other Investments (in non-SLR Securities)	1,36,918	577	-2,505	4,068	1,178	-2,898	8,361	2,664	6,633
Net Foreign Currency Assets of Commercial Ba	ınks -58,531	196	6,815	1,855	1,235	-9,120	-8,992	-15,136	2,748
Foreign Currency Assets	33,833	3,931	-4,066	3,264	-377	-5,345	-7,955	-14,412	4,718
Non-resident Foreign Currency Repatriable									
Fixed Deposits	75,336	122	-13,916	-1,273	-2,103	-403	-265	669	1,655
Overseas Foreign Currency Borrowings	17,028	3,613	3,035	2,682	491	4,178	1,302	55	315
Net Bank Reserves	76,895	-1,199	6,394	-14,272	20,149	-5,700	-1,619	11,055	-2,943
Capital Account	1,03,108	581	2,464	-1,826	15,349	1,625	-1,815	-742	15,152
Other Items (net)	1,18,743	520	4,718	5,669	-16,283	9,318	15,619	2,726	-4,617
Memo Items:									
Foreign Currency Loans to Residents	43,485	2,970	2,007	2,125	1,167	-4,354	5,807	11,069	-179
Release of Resources through change in CRR	_	0	0	0	3,500	0	3,363	0	6,000
Net Open Market Sales to Commercial Banks	_	445	9,334	8,250	4,266 *	7,339	12,803	13,228	3,131 *

<sup>\*:</sup> Variation over March 31.

Note: 1. Data relate to last reporting Friday for each quarter.

of interest rates with international rates took effect. With subdued credit demand from the commercial sector and greater access to relatively cheaper overseas funds, surplus liquidity led to an expansion of bank reserves in the first quarter of 2003-04, despite the cut in CRR in mid-June 2003.

Deposit growth recorded a seasonal slowdown in the second quarter, with outflows from demand deposits. Banks' gilt portfolios rose sharply as the borrowing programme gathered momentum and the Reserve Bank engaged in sizeable open market sales. Repayments of food credit and relatively weak demand from industry kept credit to the commercial sector at moderate levels. Subdued credit offtake led to banks' expanding their exposure to the commercial sector through non-SLR investments. Nostro balances were built up by some banks in the second quarter in anticipation of RIB redemption on October 1, 2003. Banks' overseas borrowings picked up strongly in consonance with the growth of foreign currency loans to residents. The FCNR(B) scheme continued to record outflows. Net bank reserves declined as the surplus liquidity was absorbed by LAF auctions.

3.23 Deposit growth picked up in the third quarter in consonance with the recovery in real economic activity. The spurt in demand deposits was seasonal and

associated with the parking of surplus liquidity by mutual funds resulting from divestment of non-SLR paper. Banks' investments in non-SLR securities also contracted in the third quarter, reflecting market uncertainty pertaining to non-SLR guidelines. Time deposits regained some momentum as the capital market underwent corrections. Credit to the Central Government ebbed due to scaling down of its borrowing programme. The upturn in non-food credit, which set in during August, firmed up in the third quarter. Primary dealers repaid bank credit leading to the accumulation of substantial cash balances with the Reserve Bank. Banks unwound nostro positions as most of the redemption proceeds of the RIBs were switched into domestic currency/non-resident deposit schemes. Overseas borrowings by banks rose in response to liberalisation in borrowing limits relating to Tier-I capital. Bank reserves rose significantly, driven by the surplus liquidity resulting from the slack in demand for funds by the Government.

3.24 There was a substantial rise in demand deposits during the fourth quarter due, *inter alia*, to higher growth in non-food credit due to year-end balance sheet considerations, inflows on account of disinvestment in ONGC, parking of funds by foreign institutional investors (FIIs) and substantial inflows

<sup>2.</sup> Deposits have been adjusted for the full impact of mergers, while credit has been adjusted for the initial impact of the same during May 2002 - April 2003.

under the exchange earners' foreign currency (EEFC) accounts which is also reflected in an accumulation of banks' foreign assets. The spurt in time deposits in the fourth quarter partly reflected a switch back of funds to bank deposits from mutual funds by households as well as a shift by mutual funds away from equity investments prompted by sell-offs in the stock market. The slowdown in call/term borrowing from financial institutions reflected a further scaling down of non-bank lendings in the call/notice money market. The rise in banks' investments in Government securities in the last quarter reflected repo operations conducted under the LAF. The growth of foreign currency loans to residents remained steady in all quarters. The large accretions in the capital account of banks reflected their building up of investment fluctuation reserves as well as adherence to prudential guidelines relating to the capital adequacy ratio.

Deposit mobilisation by commercial banks slowed down in the first quarter of 2004-05, reflecting the unwinding of demand deposits built up in the previous quarter following outflows on account of transfer of the proceeds of ONGC disinvestment to the Government account, drawdown of EEFC accounts and FII outflows. Food credit offtake rose sharply on account of higher procurement operations in contrast to the corresponding quarter of the previous year. Non-food credit, in particular, recorded a large increase. Although the net market borrowing programme of the Government was muted, banks invested heavily in auctions held under the MSS. In contrast to the corresponding quarter of the previous year, net foreign assets of the banking system recorded a decline mainly on account of a drawdown of nostro balances as well as an accretion to FCNR (B) deposits and higher overseas borrowings.

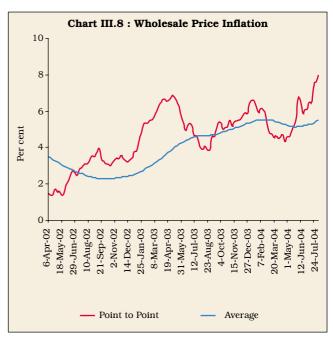
## **PRICE SITUATION**

3.26 Inflation in India generally remained stable during 2003-04, although rising commodity prices led to episodes of pressures. Agricultural commodity prices were subdued due to favourable supply conditions in the market following the normal monsoon. The pick-up in domestic economic activity and exports led to an imbalance between domestic demand and supply of key commodities such as metals, cotton and fuel. This contributed to the hardening of their prices in line with international price movements. Owing to competitive pressures, however, a part of the higher input costs resulting from the rise in commodity prices seems to have been absorbed by corporates in their margins. Consequently, the rising commodity prices were not reflected fully in overall inflation. Accordingly, consumer price inflation remained benign in 2003-04, facilitated in addition, by stable housing and services prices.

#### **Wholesale Price Inflation**

Headline inflation, measured by year-on-year (y-o-y) changes in the wholesale price index (WPI), peaked at 6.9 per cent in the first week of May 2003, as transport disruptions and upward revisions in electricity prices offset the effect of cuts in petroleum product prices. Inflation receded thereafter to a trough of 3.8 per cent by August 23, 2003 due to declines in the prices of minerals oil, fruits, oilseeds, oil cakes and chemicals. Incipient inflationary pressures began to emerge when prices of iron and steel, cotton and fuel started firming up in line with international price movements. Prices of vegetables and sugar also rose during this period due to supply-side pressures from persistent localised drought conditions as well as upward revisions in the statutory minimum prices of sugarcane. By January 10, 2004 inflation had reached 6.6 per cent. About a fifth of this rise in inflation was caused by successive hikes in domestic petrol and diesel prices between December 16, 2003 and January 1, 2004. With the delayed seasonal fall in fruits and vegetable prices, a decline in prices of eggs and poultry chicken on fears of avian influenza and base effects of oil price hikes in February and March 2003, inflation retreated to 4.6 per cent by the end of the year.

3.28 Annual WPI inflation, excluding the administered and partially decontrolled items (electricity, coal mining, mineral oils and urea-N-content) was, at 5.4 per cent, above the headline rate in 2003-04. Inflation, measured by annual average WPI, was 5.4 per cent in 2003-04 as compared with 3.4 per cent a year ago (Chart III.8).



# **Components of Inflation**

3.29 The key movers of headline inflation in 2003-04 were iron and steel, cotton textiles, fuel, sugar and milk. These items, which have a weight of 30 per cent in the overall WPI index, accounted for 65 per cent of the headline inflation.

3.30 Prices of manufactured products rose sharply during the second half of 2003-04 on account of iron and steel, cotton textiles and food products which responded to the spurt in global commodity prices. The contribution of the manufactured products group to inflation almost doubled over the year (Table 3.10 and Appendix Tables III.11 and 12).

Table 3.10: Annual WPI Inflation by Component

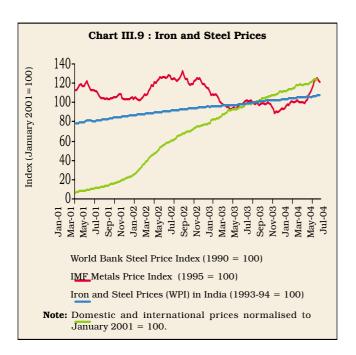
(Base: 1993-94=100)

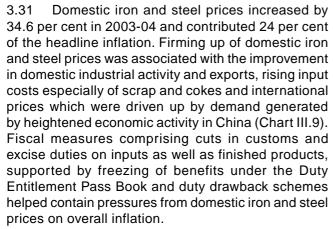
(Per cent)

	(Per ce						(Per cent)
Major group / Item	Weight	A	nnual Inflatio (Year-on-ye		•	ed Contribution	
		2003-04	2002-03	2001-02	2003-04	2002-03	2001-02
1	2	3	4	5	6	7	8
All Commodities	100.0	4.6	6.5	1.6	100.0	100.0	100.0
1. Primary Articles	22.0	1.6	6.1	3.9	8.0	21.6	53.4
Food Articles	15.4	0.2	0.8	5.2	0.6	2.2	51.5
i. Cereals	4.4	-0.3	4.0	0.8	-0.3	2.9	2.4
ii. Pulses	0.6	-2.6	0.3	-3.3	-0.3	0.0	-1.4
iii. Vegetables	1.5	2.8	-15.7	23.4	0.6	-3.0	14.8
iv. Fruits	1.5	-8.6	7.6	9.5	-3.9	2.4	11.2
v. Milk	4.4	8.4	0.6	4.7	7.9	0.5	12.9
vi. Eggs, Fish and Meat	2.2	-6.5	-4.0	9.3	-3.4	-1.7	14.3
Non-food Articles	6.1	4.1	22.1	0.6	5.8	19.3	2.1
i. Raw Cotton	1.4	12.3	34.3	-21.3	3.4	5.4	-17.3
ii. Oilseeds	2.7	-1.2	30.0	6.8	-0.7	10.6	9.0
ii. Sugarcane	1.3	6.5	11.5	6.2	2.3	2.8	5.7
2. Fuel, Power, Light and Lubricants	14.2	2.5	10.8	3.9	11.6	33.9	47.1
i. Mineral oils	7.0	0.0	18.4	1.2	-0.1	29.7	7.8
ii. Electricity	5.5	4.9	3.4	9.2	8.1	4.2	41.3
iii. Coal Mining	1.8	9.2	0.0	-1.9	3.7	0.0	-2.4
3. Manufactured Products	63.8	6.7	5.1	0.0	80.5	44.3	0.0
i. Food Products	11.5	9.7	8.7	0.3	22.2	14.0	1.8
of which: Sugar	3.6	16.9	-15.0	-3.8	8.7	-7.0	-7.4
Edible Oils	2.8	6.6	27.4	12.5	3.4	8.5	14.0
Oil Cakes	1.4	5.0	40.3	15.0	2.0	8.8	11.5
ii. Cotton Textiles	4.2	15.6	8.3	-6.7	12.8	4.8	-16.7
iii. Man-made Fibre	4.4	-0.4	17.4	-5.0	-0.2	5.8	-7.1
iv. Chemicals and Chemical Products	11.9	0.1	4.2	2.5	0.3	8.2	19.3
of which: Fertilisers	3.7	-0.1	2.1	3.6	-0.1	1.2	8.1
v. Basic Metals, Alloys and Metal products	8.3	22.1	6.6	-0.9	34.4	7.3	-4.2
of which: Iron and Steel	3.6	34.6	9.2	0.0	23.6	4.4	0.0
vi. Non-Metallic Mineral Products	2.5	3.0	3.3	-2.8	1.4	1.1	-4.0
of which: Cement	1.7	1.3	1.1	-4.7	0.4	0.3	-4.7
vii. Machinery and Machine Tools	8.4	3.1	0.5	2.0	4.3 1.1	0.5	8.0
viii. Transport Equipment and Parts	4.3	1.4	-0.9	1.3		-0.6	3.1
Food Items (composite)	26.9	4.0	3.9	3.3	22.8	16.2	53.3
WPI excluding Food	73.1	4.9	7.5	1.0	77.2	83.8	46.7
WPI excluding Fuel	85.8	5.2	5.4	1.1	88.4	66.1	52.9
Memo Items:							
GDP Deflator		3.7	3.5	3.9			
Average WPI Inflation		5.4	3.4	3.6			
Average CPI Inflation (IW)		3.9	4.0	4.3			
Services in CPI-IW@ (year-on-year)	16.4	3.2	5.3	4.9	15.4	21.5	15.6
Housing in CPI-IW (year-on-year)	8.7	3.9	5.4	12.9	11.2	13.2	23.4
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							

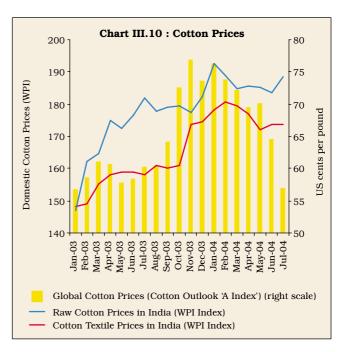
CPI-IW: Consumer Price Index for Industrial Workers (Base: 1982 = 100).

<sup>@ :</sup> Miscellaneous group in the Consumer Price Index for Industrial Workers.

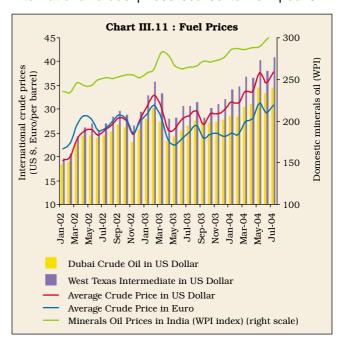




- 3.32 Cotton textile prices increased mainly on account of a rise in domestic raw cotton prices. Despite a satisfactory domestic cotton crop, raw cotton prices remained firm in consonance with international price movements (Chart III.10). Global cotton prices increased during 2003 mainly due to higher Chinese demand and low stocks. Global cotton stocks were projected at 33.5 per cent of global consumption, the lowest since 1993-94.
- 3.33 Domestic petroleum, oil and lubricants (POL) prices have, in general, become relatively more responsive to changes in international crude oil prices after dismantling of the administered pricing mechanism (APM) in April 2002 (Chart III.11). International crude oil prices increased by 5.6 per cent from US \$ 27.6 per barrel in 2002-03 to US \$ 29.1 per barrel in 2003-04, ruling well above the upper ceiling of the Organisation



of Petroleum Exporting Countries (OPEC) band. Domestic mineral oils prices largely mirrored movements in international crude prices in the first three quarters of 2003-04, with some cushion provided by the appreciation of the rupee against the US dollar. In the last quarter of 2003-04, domestic diesel and petrol prices were not adjusted even as international crude prices hardened due to depleting inventories in advanced economies, geo-political uncertainties and concerns about production cut decisions by the OPEC. International crude prices soared to new peaks in



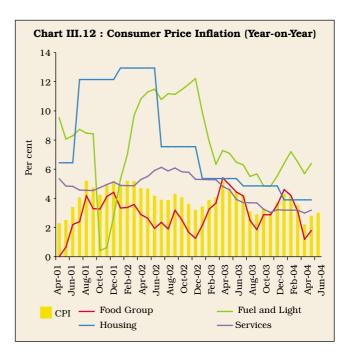
August 2004 due to robust growth in demand from the US and China, distribution bottlenecks in major consuming regions limiting gasoline supplies and heightened geo-political tensions in West Asia. This uptrend was temporarily arrested by the OPEC's decision on June 3, 2004 to raise its output target by 8.5 per cent, i.e., 2 million barrels a day (mbd) to 25.5 mbd effective July 1 and by another 5 lakh barrels to 26 mbd effective August 1, 2004. Domestic POL prices were revised upwards on June 15 and August 1, 2004.

## **Consumer Price Inflation**

3.34 Consumer price Inflation, measured by yearon-year variation in the consumer price index for industrial workers (CPI-IW), eased during the year to 3.5 per cent, reflecting the effects of the bumper agricultural production and negligible/lower weightage of the key movers of WPI inflation - iron and steel and fuel items - in the CPI basket (Appendix Table III.13). Disaggregated commodity price movements within the CPI-IW basket indicate that lower prices of oil and fats, housing and services (proxied by the broad miscellaneous group) led to the ebbing of inflation (Chart III.12). As against booming housing prices in developed countries, domestic housing prices remained moderate. Services prices remained flat. On an annual average basis, CPI inflation in 2003-04 remained below its level in the previous year.

### **Global Inflation Environment**

Persisting output gaps and weak consumer demand enabled most central banks to continue supporting recovery through accommodative monetary policies in 2003. Deflationary concerns receded on the back of continued policy support to



the sustenance of recovery, rebound in interregional trade and upturn in financial markets amidst easy liquidity. Inflationary expectations began to resurface with signs of global recovery gradually becoming stronger and widespread from the last quarter of 2003. In early 2004, many central banks began to sense risks to price stability emanating from rising commodity and fuel prices, booming asset prices especially housing, shrinking excess capacities and tightening labour market conditions as a result of strengthening of economic activity. Consequently, monetary authorities began sensitising the markets to exit strategies from the accommodative monetary policy stance as growth picks up (Table 3.11).

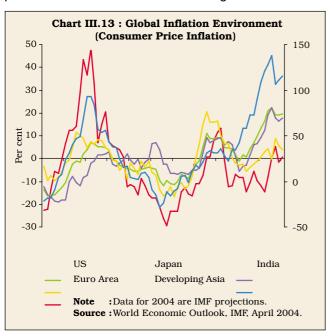
Table 3.11: Global Inflation Indicators

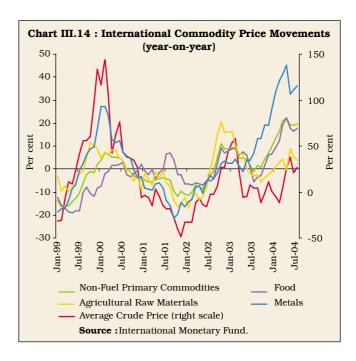
(Per cent)

Key Policy Rate/	Changes	200	3
Bank Reserves Target	_	GDP growth	Inflation
2	3	4	5
Target Federal Funds Rate	From 1.25 to 1.0 (June 2003) to 1.25 (June 2004) to 1.5 (August 2004)	3.1	2.3
Repo Rate	From 4.0 to 3.75 (February 2003) to 3.5 (July 2003) to 3.75 (November 2003) to 4.0 (February 2004) to 4.25 (May to 4.50 (June 2004) to 4.75 (August 2004)	2.3 (2004)	1.4
Interest Rates on Deposit Facility Main Refinancing Operations Marginal Lending Facility	From 1.75, 2.75, 3.75 to 1.50, 2.50, 3.50 (March 2003) to 1.0, 2.0, 3.0 (June 2003)	0.4	2.1
Target Balance of Current Account (trillion Yen)	From 15-20 to 22-27 (April 2003) to 27-30 (May 2003) to 27-32 (October 2003) to 30-35 (January 2004)	2.7	-0.2
	Bank Reserves Target  2  Target Federal Funds Rate  Repo Rate  Interest Rates on Deposit Facility Main Refinancing Operations Marginal Lending Facility Target Balance of Current	Bank Reserves Target       3         Target Federal Funds Rate       From 1.25 to 1.0 (June 2003) to 1.25 (June 2004) to 1.5 (August 2004)         Repo Rate       From 4.0 to 3.75 (February 2003) to 3.5 (July 2003) to 3.75 (November 2003) to 4.0 (February 2004) to 4.25 (May to 4.50 (June 2004) to 4.75 (August 2004)         Interest Rates on Deposit Facility       From 1.75, 2.75, 3.75         Main Refinancing Operations       to 1.50, 2.50, 3.50 (March 2003)         Marginal Lending Facility       to 1.0, 2.0, 3.0 (June 2003)         Target Balance of Current       From 15-20 to 22-27 (April 2003) to 27-30 (May 2003)	Charges   Char

**Source**: IMF and official websites of respective central banks.

Consumer price inflation remained subdued in many parts of the world in 2003 and in the first quarter of 2004. In developed countries, inflation stayed below two per cent for the second year in succession, while it remained close to six per cent in developing economies. The downside risks of deflation receded with the strengthening of the global recovery during the year. In the US, a decline in consumer inflation started in the second half of 2003 driven by productivity gains. The growing wedge between consumer prices and producer prices in the US due to hardening of commodity prices was, to an extent, due to absorption of the rise in input costs, given the significant slack available in capacity utilisation. Monetary policy retained its accommodative stance in support of the recovery with short-term interest rates ruling at 30 year lows. In the United Kingdom, inflation remained well below the Bank of England's target of 2.0 per cent, although the sharp increase in house prices provoked pre-emptive tightening of monetary policy. In the euro area, inflation stayed close to the European Central Bank's target of 2.0 per cent as pressures emanating from higher oil and food prices were offset by the appreciation of the euro. Deflation continued to haunt Japan during 2003 despite stronger growth in the second half of the year and persistence by the Bank of Japan with quantitative easing. In developing Asia, consumer prices remained stable amidst congenial conditions





created by a pick-up in domestic demand and export growth (Chart III.13). In China, consumer prices rose moderately on account of higher food and metal prices. Countries in Africa and the Western Hemisphere, on the other hand, continued to face relatively high inflation risks.

International commodity prices, especially of intermediate materials, surged in 2003 posing concerns about incipient inflationary pressures. International crude oil prices rose sharply due to slower than expected resumption of oil production in Iraq, increased demand associated with the rebound in economic activity, low levels of inventory in industrial countries especially in the US, production cuts by the OPEC and speculative pressures due to geo-political uncertainties. Global primary commodity prices increased by over 13 per cent in 2003. Non-fuel commodity prices surged, mainly reflecting increased Chinese demand for metals and cotton, crop failures in several parts as well as the depreciation of the US dollar - the currency in which commodity prices are generally invoiced (Chart III.14). The sharp increases in commodity prices were not transmitted into consumer prices in 2003-04 (Box III.2). The upward movement in consumer price inflation in 2004-05, however, appears to have been driven by commodity prices, especially fuel prices.

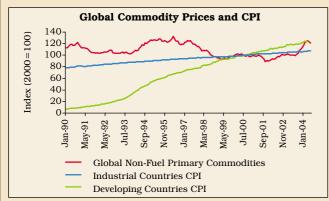
#### Box III.2

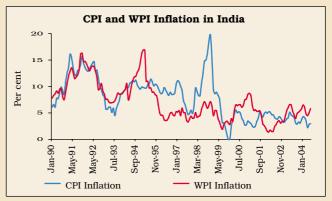
## Consumer Price Inflation and Commodity Prices: What's Going On?

Up to the early 1980s, commodity prices were regarded as leading indicators of inflation. Since commodity prices are set in competitive market conditions, they tend to be more responsive than the general price level to both demand and supply shocks. In recent years, however, a divergence has been observed between commodity prices and consumer prices. In 2003, the wedge increased raising concerns about 'pipeline price pressures' gradually building up (Chart).

management; (iii) administered pricing of certain commodities in the WPI basket; and (iv) non-inclusion of services and housing in the WPI basket. The divergence between the CPI and WPI in India during 2003-04 was mainly due to the sharp rise in iron and steel and fuel prices which were key movers of WPI inflation, but had lower weightage in the CPI basket. Also, food prices in 2003-04 did not increase at the retail level as much as at the wholesale level, reflecting prudent supply management.

## **Chart: Commodity and Consumer Prices**





The co-existence of high commodity prices and low inflation is attributed to a number of factors such as (a) the declining share of commodities in the overall cost of final goods and services; (b) the continuing slack in resource utilisation suggesting weakness in demand; and (c) producers' responses reflecting a preference for absorbing the costs on account of higher commodity prices under competitive pressures rather than passing on the burden to consumers. Producers benefited from productivity gains which resulted in lower unit labour costs. The wedge also reflects one-time shifts in product prices resulting from shocks to specific commodities since capacity utilisation in many industries remained slack indicating continuing output gaps. The growing role of prices of services and tradables in overall inflation is also at work.

In India, the wedge between CPI inflation and WPI inflation, in general, could be attributed to (i) the divergence in the composition of the two commodity baskets; (ii) supply

Incidentally, food prices in the CPI basket also have a higher weight of 57 per cent as against 27 per cent in the WPI basket. Besides, competitive pressures as well as the increasing role of imports have also been important factors in creating a divergence between wholesale and consumer price inflation in India. An examination of the structural relationship between WPI and CPI-IW shows that there are leads and lags during certain phases between inflation rates of CPI-IW and WPI, which get evened out over a long time span.

#### References

- 1. Furlong, Fred and Robert Ingenito (1996), "Commodity Prices and Inflation", *Federal Reserve Bank of San Francisco Economic Review*, No. 2.
- 2. International Monetary Fund (2004), *World Economic Outlook*, April.
- 3. Reserve Bank of India (1997), Annual Report, 1996-97.

#### **Asset Prices and Inflation**

3.38 Rising asset prices, especially in housing, prompted pre-emptive tightening of monetary policy in the UK, Australia and New Zealand since the latter half of 2003. With the balance of risks shifting to the upside, monetary authorities have begun sensitising

markets to the inevitability of some monetary tightening. In this context, the role of asset prices in the formulation of monetary policy has surfaced once again (Box III.3). During 2003-04, movements in equity and gold prices in India indicated a firming up of inflation expectations, partly offset by exchange rate appreciation and relatively stable housing prices.

# Box III.3

## **Inflation and Asset Prices Revisited**

The focus of central banks on asset market developments has increased in the aftermath of liberalisation of financial markets since the 1980s. Asset prices include the prices of financial assets, *viz.*, bonds, equities, derivatives and nonfinancial assets, including gold and real estate. The volatility associated with asset prices has led to concerns that large changes in asset prices might disrupt economic activity and endanger price stability as well as financial stability. Bursting of asset bubbles and consequent macro imbalances can turn a mild downturn into deflation, as was observed in Japan. It is argued that a correct measure of inflation should include asset prices because they reflect the current money prices of claims on future as well as current consumption.

The conventional wisdom is that central banks should ignore swings in asset prices. This is based on the belief that it is impossible to disentangle that portion of asset price movements which is related to fundamentals from that which is related to market idiosyncrasies. Asset prices would be of interest only to the extent that they provide useful information about the state of the economy. Adjustment of interest rates in response to asset price misalignments - even when inflation remains on track - enables central banks to reduce the long-term volatility of both inflation and output. A modest rise in interest rates above the level required to keep inflation on track would curb borrowing and over investment.

The empirical evidence indicates that the effects of asset price changes on monetary policy are transmitted through balance sheets of households, firms and financial intermediaries. Deteriorating balance sheets and reduced credit flows operate primarily on aggregate demand in the short-run, although in the long run they may also affect aggregate supply by inhibiting capital formation and reducing working capital. Asset prices could be used in monetary policy formulation in two ways, *viz.*, (i) they can be a part of the objectives of monetary policy (*i.e.*, built into the price index), and (ii) they can be treated as information variables (*i.e.*, form an element in the policy 'reaction function'). Adjusting monetary policy in the light

of information on asset prices can improve macroeconomic outcomes even in countries where the central bank is following an inflation targeting strategy. Adjusting interest rates or other monetary policy instruments to asset price movements will not be appropriate in all circumstances, at least not in the context of movement in asset prices that reflect changes in the underlying fundamentals. Monetary policy could, however, make effective use of information from asset markets and offset adverse effects on the general economy flowing from asset price changes.

Recent empirical work in the Indian context provides weak evidence of asset prices affecting inflation. Among the asset prices, only stock prices appear to have information content about inflation expectations in the economy, while other asset prices, such as gold and exchange rates do not appear to contain lead information content on commodity price inflation.

#### References

- Alchian, A. and Klein, L.R. (1973), "On Correct Measure of Inflation", American Economic Review.
- Bernanke, Ben and Mark Gertler (1999), "Monetary Policy and Asset Price Volatility", Economic Review, Federal Reserve Bank of New York.
- Cecchetti S., H. Genberg and S. Wadhwani (2002), "Asset Prices in a Flexible Inflation Targeting Framework", Federal Reserve Bank of Chicago.
- Ray, Partha and S. Chatterjee (2002), "The Role of Asset Prices in Indian Inflation in Recent Years- Some Conjectures", BIS Working Papers, No.8.
- 5. Sahoo, Satyananda and S.C.Dhal (2002), "Financial Asset Price and its Implications for Monetary Policy: An Empirical Evaluation of Stock Price Movements in India", *Udyog Pragati*, Vol.26, No.1.
- 6. Vickers, John (1999), "Monetary Policy and Asset Prices", *Bank of England Quarterly Bulletin*.

## **Monitoring Inflation in India**

3.39 The Reserve Bank continuously monitors the price situation by taking lead information from indicators for the conduct of monetary policy. Multiple indicators such as money, interest rates or rates of return in different markets (money, capital and government securities markets) along with such data as on currency, credit extended by banks and financial institutions, fiscal position, trade, capital flows, exchange rate, refinancing and transactions in foreign exchange available on high

frequency are juxtaposed with output trends for drawing policy perspectives. Evolving global inflation and monetary policy responses elsewhere form an integral part of monitoring inflation conditions by the Reserve Bank. With increasing globalisation of the Indian economy, the pass-through of international prices to domestic inflation is becoming increasingly evident. Accordingly, international commodity price movements as well as the demand-supply situation in key commodities are constantly monitored to gauge their impact on the domestic inflation process.

## **Developments during 2004-05**

Year-on-year WPI inflation firmed up to 8.0 per cent by August 7, 2004 reflecting lagged adjustment to changes in international metal prices, upward revision in the domestic prices of petroleum and coal as well as seasonal pressures from vegetables prices. Between end-March 2004 and August 7, 2004, prices of iron and steel increased by 20.1 per cent, coal by 15.8 per cent, mineral oils by 8.6 per cent and vegetables by 57.6 per cent. These commodities have a weight of 13.8 per cent in the WPI. Their weighted contribution to annual point-to-point inflation increased sharply from 27.8 per cent at end-March 2004 to 48.4 per cent by August 7, 2004. In order to contain inflationary pressures, customs and excise duties on certain petroleum products were revised downwards by five per cent and three per cent, respectively, with effect from August 18, 2004. Customs duty on non-alloy steel was also reduced from 10 per cent to five per cent with effect from August 20, 2004.

#### **Outlook**

3.41 Monetary conditions in 2004-05 are expected to remain stable. Non-food bank credit is likely to maintain its momentum, drawing from increased investment activity and improved business confidence. In this context, the Annual Policy Statement of May

2004 had projected money supply ( $M_3$ ) expansion at 14.0 per cent during 2004-05. This order of monetary expansion should facilitate the financing of productive activity without placing undue pressure on aggregate demand.

The outlook on inflation during 2004-05 will, inter alia, depend on the progress of the South-West monsoon. The distribution of rainfall in various parts of the country up to July 2004 has raised some concern about the possible impact on primary agricultural commodity prices. The revival and spread of the monsoon since the beginning of August, however, could dampen the adverse impact on agricultural commodity prices to an extent. Food stocks and foreign exchange reserves should provide a cushion against any pressures on food prices. Fuel prices hold the key to the overall inflation outlook. Non-fuel commodity prices in the international market would have a critical bearing on the domestic inflationary situation during the year. Under the assumption of no significant supply shocks, and appropriate management of liquidity, the Annual Policy Statement had placed the inflation rate for 2004-05, on a point-to-point basis, at around 5.0 per cent. While the international non-fuel commodity prices could ease by the year end, further information, especially on the monsoon, would be needed to reassess the inflation scenario.