III. Monetary and Liquidity Conditions

Monetary Trends

Broad money (M_3) grew at 13.6 per cent (13.9 per cent, net of the Resurgent India Bonds (RIBs)) during 1999-2000 as compared with the growth of 17.0 per cent (net of RIBs) in 1998-99 (Table 5). During 1999-2000, up to February 2000, the month-to-month annual growth in M_3 (net of RIBs) remained in the range of 15.8 per cent (in June 1999) and 16.9 per cent (in February 2000), with two points of sharp movements in August and December 1999 (Chart 17). A deceleration in M_3 growth was recorded in the last reporting fortnight of March 2000, as a result of a sharp drop in the aggregate deposit growth of scheduled commercial banks. The problem posed by such a point-to-point basis comparison could be somewhat addressed by averaging the monthly year-on-year growth rates of M_3. The monthly average year-on-year M_3 (net of RIBs) growth rate worked out to 16.4 per cent during 1999-2000 as compared with 18.2 per cent during 1998-99. It may be mentioned that monetary growth during 1998-99 had been fuelled by a significant increase in the deposit growth of the banking system, in the wake of depressed capital market activity and the tendency on the part of households to 'flight to safety' following increased uncertainty in the bond and equity markets.

Table 5 : Monetary Flows

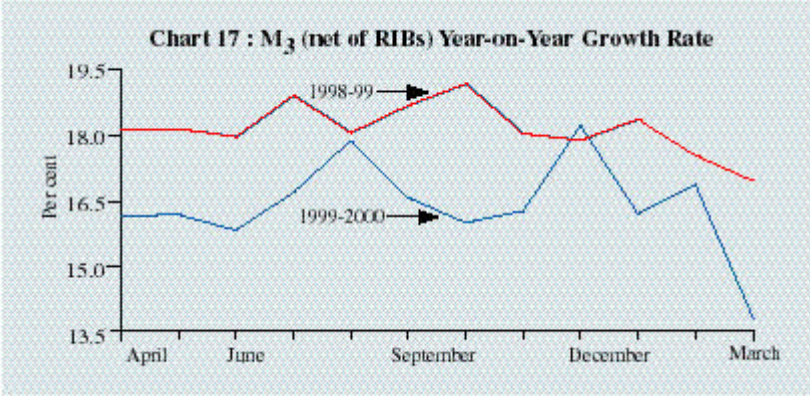
(Percent)

	Variable	Point-to-point basis		Monthly Average basis	
		1999-2000	1998-99	1999-2000	1998-99
	1	2	3	4	5
I.	Reserve Money	8.1	14.6	11.9	12.2
II.	Narrow Money (M1)	10.0	15.3	14.6	12.5
III.	Broad Money (M_3) *	13.6	19.2	16.9	19.7
III. 1	M_3 *, net of RIBs	13.9	17.0	16.4	18.2
IV.	Components of Broad Money				
	a) Currency with the Public	12.0	16.1	16.5	11.7
	b) Aggregate Deposits (i+ii) *	14.1	19.9	17.1	21.8
	i) Demand Deposits	8.3	14.6	12.6	14.6
	ii) Time Deposits *	15.2	21.0	18.0	23.3
V.	Sources of Broad Money				
	a) Net Bank Credit to the Government (i+ii)	14.3#	17.0	15.2	18.0
	i) Net Reserve Bank Credit to the Government	-2.3#	12.9	5.3	18.7
	of which: to Centre	-2.7#	8.8	4.4	18.2
	ii) Other Banks' Credit to the Government	25.1	19.9	21.7	17.8
	b) Bank Credit to Commercial Sector of which:	16.4	14.2	15.8	14.9
	Scheduled Commercial Banks' Non-food Credit	16.0	13.0	15.5	14.4
	c) Net Foreign Exchange Assets of the Banking Sector	10.0	28.0	16.7	31.2

Data are provisional.

* Excludes banks' pension and provident funds.

Before closure of Government accounts.



An important aspect that needs to be kept in view in interpreting the monetary growth during 1999-2000 is that the scheduled commercial banks' data for the last reporting Friday of the year pertain to March 24, 2000, which is one full week ahead of the last working day of the year, *viz.*, March 31, 2000, thereby dampening the impact of the usual year-end bulge in deposits on account of interest rate applications and window dressing. The Reserve Bank and cooperative banks' data, it may be noted, relate to March 31 in year-end money supply numbers.

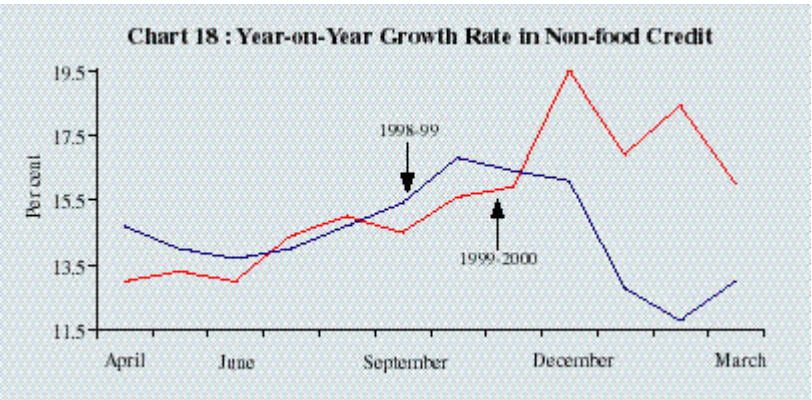
Currency with the public expanded by 12.0 per cent (Rs.20,349 crore) as against 16.1 per cent in 1998-99. On an average basis, however, the year-on-year currency growth rate was much higher at 16.5 per cent during 1999-2000 as compared with 11.7 per cent during 1998-99. The sustained increase in cash demand reflected mainly the high procurement and accretion to the Reserve Bank's foreign exchange assets. The fears about Year 2000 transition did not materialise. The rate of growth of scheduled commercial bank deposits worked out to 13.5 per cent (Rs.96,040 crore) during 1999-2000 as compared with 16.3 per cent (net of RIBs) during 1998-99. On monthly average basis, scheduled commercial banks' year-on-year aggregate deposit (net of RIBs) growth rate worked out to 16.0 per cent during 1999-2000 as compared with 19.1 per cent during 1998-99.

Credit Trends

On the sources side, domestic credit recorded an increase of 15.5 per cent (Rs.1,36,426 crore) during 1999-2000, close to that of 15.4 per cent (Rs.1,17,724 crore) during 1998-99. Net foreign assets of the banking sector increased by 10.0 per cent (Rs.17,655 crore) in 1999-2000 as compared with 28.0 per cent (Rs.38,683 crore) in 1998-99. Net bank credit to the Government increased by 14.3 per cent (Rs.55,301 crore) during 1999-2000 as compared with 17.0 per cent (Rs.56,238 crore) during the previous year. This was led by scheduled commercial banks' incremental investments in Government securities, which shot up by 24.5 per cent (Rs.54,612 crore) during 1999-2000 as compared with 19.4 per cent (Rs.36,261 crore) during the previous year. The share of incremental investments in Government paper in incremental aggregate deposits climbed to 56.9 per cent during 1999-2000 from 31.4 per cent during 1998-99. Yet the bank credit to the government sector increased at a much slower rate than 1998-99, essentially due to a deceleration in the Reserve Bank's net credit to Government during the year.

Much of the impetus to the monetary growth was evident in the increase in commercial credit. Bank credit to the commercial sector accelerated to 16.4 per cent (Rs.81,126 crore) during 1999-2000 from 14.2 per cent (Rs.61,486 crore) during 1998-99. Scheduled commercial banks' credit increased by 17.7 per cent (Rs.65,344 crore) in 1999-2000 as against 13.8 per cent (Rs.44,759 crore) in 1998-99. The investments in Government and other approved securities have gone up by 21.3 per cent (Rs.54,326 crore) as compared with 16.4 per cent (Rs.35,890 crore) in 1998-99. The growth in total credit and investments (including non-SLR investments) of scheduled commercial banks was mainly financed by the sum of the increase in their gross demand and time liabilities, borrowings from the Reserve Bank and release of balances with the Reserve Bank following the cuts in CRR.

The rate of increase of scheduled commercial banks' conventional non-food credit accelerated to 16.0 per cent (Rs.56,469 crore) during 1999-2000 from 13.0 per cent (Rs.40,428 crore) during 1998-99 (Chart 18). Scheduled commercial banks' incremental investments in commercial paper (CPs), public and private sector bonds/debentures/ preference shares and equity shares, however, was lower at Rs.12,649 crore during 1999-2000 than Rs.15,941 crore during the previous year. Scheduled commercial banks' total flow of non-food resources to the commercial sector worked out to 17.3 per cent in 1999-2000 as compared with 16.4 per cent during 1998-99. Non-food credit off-take has accelerated since September 1999 in response to increased credit demand as a result of industrial recovery and softening of the interest rate structure. The resource flow from the bank and non-bank sources - including capital issues, GDRs, CPs (other than those subscribed by banks) and borrowings from as well as bills discounted with financial institutions - to the corporate sector increased by about Rs.1,34,000 crore in 1999-2000 as against about Rs.1,13,500 crore in the previous year. The spurt in non-food credit alongside a pick-up in M1 transactions demand in 1999-2000 pointed to a revival of economic activity.

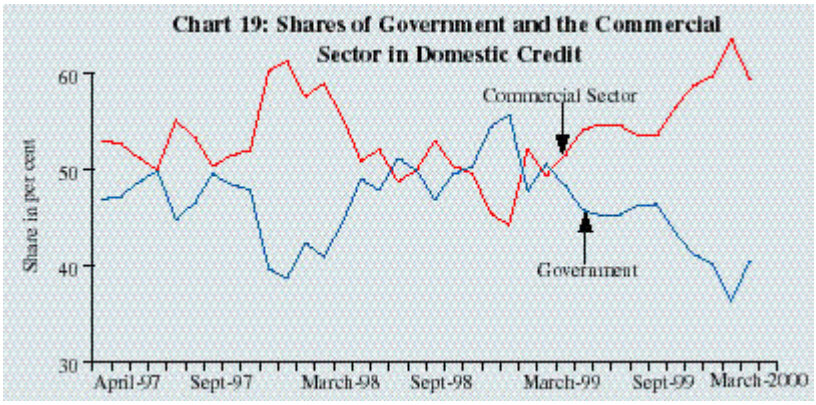


During 1999-2000, the growth in bank credit to Government and the commercial sector, revealed a clear switch between the two compared to the situation in the preceding year. While a large expansion in the bank credit to the government sector pre-empted commercial credit expansion in 1998-99, the position seems to have reversed in 1999-2000, with credit to commercial sector accelerating in tandem with a significant deceleration in the rate of growth of credit to the government sector (Chart 19).

Agricultural Credit

The flow of institutional credit to agriculture and allied activities recorded a sharp increase from Rs. 31,956 crore in 1997-98 to Rs. 36,897 crore in 1998-99. The total credit flow to agriculture from all agencies is projected to touch Rs. 44,675 crore in 1999-2000.

The system of micro-finance in terms of credit for self-employment and other financial and business services, instituted by the Reserve Bank in 1996, has been reckoned as part of priority sector lending and hence would boost this type of finance. The Task Force on Supportive Policy and Regulatory Framework for Micro Credit set up by the National Bank for Agriculture and Rural Development (NABARD) has sketched a road map of the levels of operations and support mechanism required to facilitate stronger linkages between self-help groups (SHG), banks and micro-finance institutions (MFIs). The flow of funds from MFIs has been estimated to touch Rs. 2,800 crore by 2003-04 covering about 75 lakh families. Recognising the significant role of MFIs, the Reserve Bank has recently (February 2000) issued guidelines to banks for mainstreaming micro credit and enhancing its outreach.

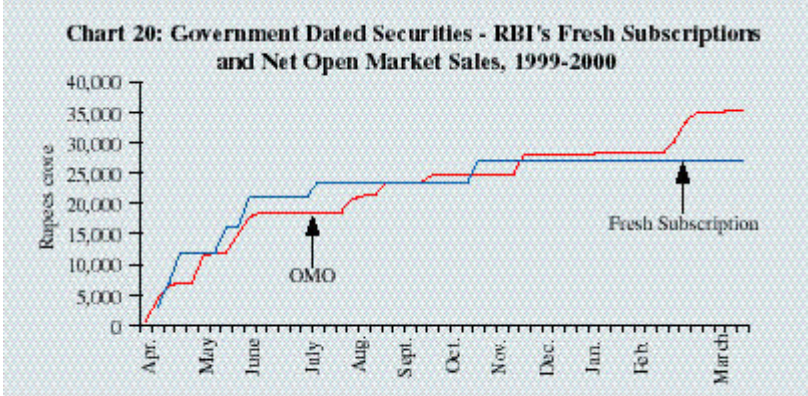


Reserve Money

Reserve money growth during 1999-2000 revealed a sharp deceleration primarily reflecting the reduction in the level of CRR and the impact of market oriented monetary policy operations on the balance sheet of the Reserve Bank. The growth of reserve money was 8.1 per cent (Rs.20,897 crore) during 1999-2000 as against 14.6 per cent (Rs.32,943 crore) during 1998-99. The lower order of increase in primary liquidity was essentially due to the cumulative 1.5 percentage points cut in the CRR in May 1999 and November 1999 releasing additional resources to the tune of about Rs.13,000 crore (inclusive of resources released with the phasing out of incremental CRR on FCNRB deposits) to the banking system. This increase in primary liquidity was partly mopped up by net open market sales of dated securities, which after taking into account net fresh subscriptions, amounted to Rs.9,688 crore. Adjusting bank reserves for the first round release of lendable resources, the increase in primary liquidity would work out to about 13.1 per cent in 1999-2000.

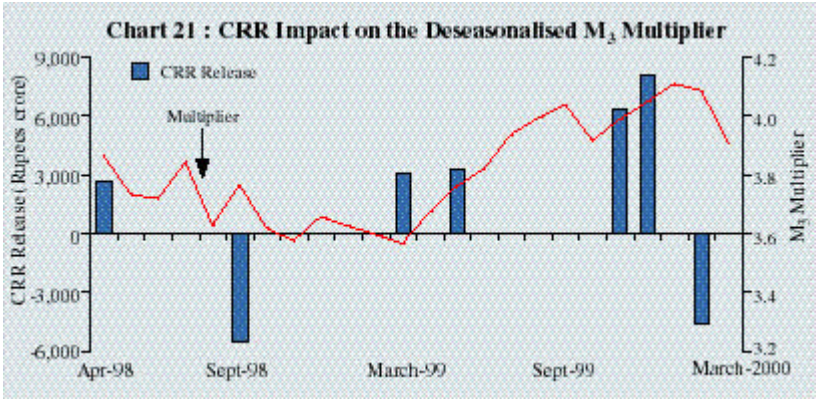
During 1999-2000, net open market sales of government dated securities closely followed

the net initial subscription by the Reserve Bank to the Centre's market borrowing programme. The RBI's net subscription to fresh dated securities (Rs.25,681 crore at face value) during 1999-2000 was more than off-set by net open market sales (Rs.35,369 crore, of which Rs.15,886 crore to commercial banks) (Chart 20). Consequently, the net RBI credit to the Centre declined by Rs.3,865 crore (before closure of Central Government accounts) during 1999-2000 in contrast to the increase of Rs.11,800 crore during the previous year. The Centre's monetised deficit thus recorded a surplus for the first time since 1977-78. With further improvement in Central Government cash balances, the Centre's monetised surplus increased to Rs. 5,534 crore as on April 19, 2000. The Reserve Bank's credit to commercial banks and primary dealers (PDs) increased by Rs.3,256 crore and Rs.3,206 crore, respectively. The Reserve Bank's foreign currency assets grew by Rs.27,382 crore (net of revaluation) during 1999-2000 as compared with Rs.16,025 crore during the previous year. The M_3 (net of RIBs) multiplier increased to 3.90 as at end-March 2000 from 3.70 as at end-March 1999 on account of CRR reductions. The intra-year movement of seasonally corrected M_3 multiplier revealed a sharp upward movement since May 1999 (Chart 21).

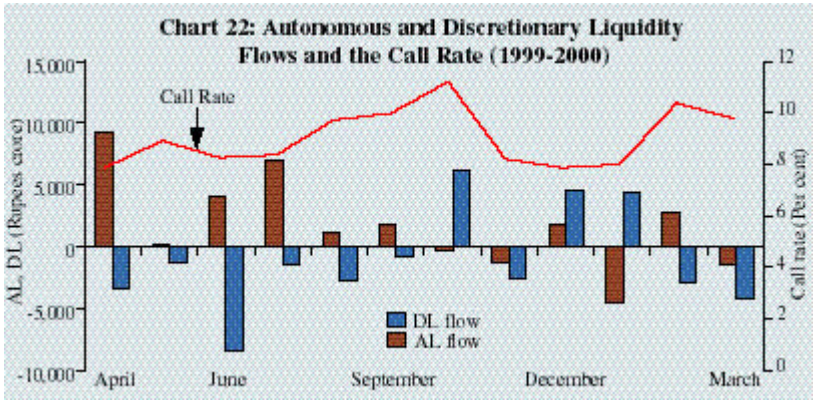


Liquidity Position

On account of the growing market operations by the Reserve Bank, a summary measure of primary liquidity such as the reserve money may no longer sufficiently indicate the various dimensions of the liquidity management operations and their impact on the short-term interest rates. This can be more meaningfully captured by classifying the Reserve Bank's balance sheet flows according to the autonomous and discretionary components. A standard way of analysing liquidity conditions is to classify the supply of primary liquidity in the economy into autonomous and discretionary components4. Allowing for differences in country practices, autonomous liquidity (AL), conceptually, would refer to the sum of changes in the central bank's lending to government, net foreign assets and other residual net assets *minus* the changes in currency in circulation. It indicates the liquidity position that would have prevailed in the economy in the absence of active monetary policy interventions. On the other hand, discretionary liquidity (DL) would refer to the net changes in liquidity due to the central bank's market operations through adjustment of monetary policy instruments. The net liquidity changes in the market, thus, are a result of changes in both autonomous and discretionary liquidity.



The AL, in the Indian context, may be taken to consist of the Reserve Bank's credit to Government (net of repos and open market operations), cooperative banks and other financial institutions enjoying a line of credit; the Reserve Bank's net foreign assets; and the Government's currency liabilities to the public *minus* the total of currency in circulation, 'other' deposits with the Reserve Bank and the Reserve Bank's net non-monetary liabilities. DL could be defined as the sum of the Reserve Bank's repo and open market operations, credit to commercial banks and primary dealers and changes in reserve requirements. Intuitively, if the surpluses and deficits in AL are compensated through changes in DL, then net liquidity conditions in the market and consequently, the interest rate would not change. Alternatively, if DL does not completely offset the AL surpluses or deficits, then net liquidity conditions would be affected and interest rates would have to move to clear the market. Chart 22 depicts the trends in the AL and DL during 1999-2000, along with the movements in the call rate. The inter-bank call rates ruled within a narrow range during 1999-2000, due mainly to the off-setting movements of DL to AL.



Liquidity management during 1999-2000 could be broadly viewed in terms of four distinct phases, *viz*., the first, April-May 1999, the second, June-October 1999, the third, November 1999-February 2000, and the fourth, March 2000.

The first phase saw easy liquidity conditions driven by a sharp increase in AL (Rs.9,560 crore) emanating mainly from capital inflows that resulted in an accretion of Rs.9,171 crore (adjusted for revaluation) to the Reserve Bank's foreign currency assets. Private placements/devolvements of Central Government securities with the Reserve Bank

(Rs.16,000 crore) were largely offset by seasonal currency demand (Rs.14,973 crore), which is a leakage from the banking system. The surplus market liquidity was mopped up by open market sales amounting to Rs.12,003 crore. Scheduled commercial banks' refinance utilisation amounted to Rs.2,066 crore. The Reserve Bank also injected liquidity to the extent of Rs. 3,250 crore with the reduction of 0.5 percentage point in CRR effective May 8, 1999. As a result, DL declined by Rs.4,549 crore. The average inter-bank call rates which declined below the Bank Rate to 7.9 per cent in April 1999 as a result of easy liquidity conditions began to climb up to 8.9 per cent in May 1999, as money market conditions tightened with the Reserve Bank's open market operations.

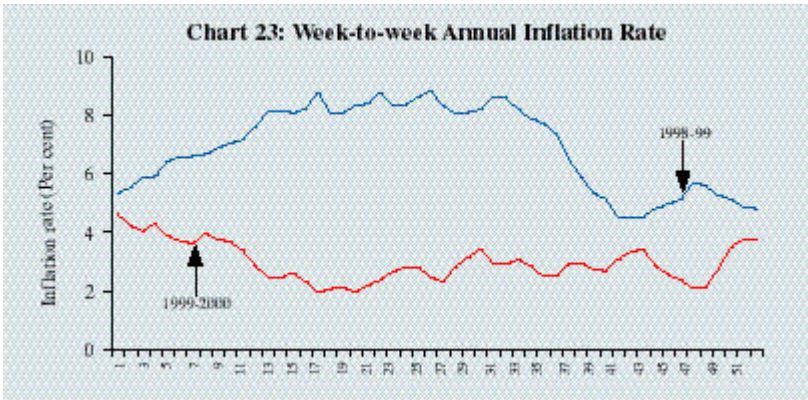
The second phase, *i.e.*, June-October 1999, saw AL increase by Rs.13,554 crore driven mainly by the Reserve Bank's incremental subscription to fresh Government securities (Rs.11,000 crore). The Reserve Bank's foreign currency assets, on the other hand, declined by Rs.2,242 crore (adjusted for revaluation) as capital flows dried up. DL was tightened to mop up Rs.7,396 crore through open market sales (Rs.11,683 crore) partly offset by increase in refinance availment by commercial banks (Rs.2,382 crore) and primary dealers (Rs.1,649 crore). The inter-bank call rates firmed up above the Bank Rate, particularly during August - October 1999, when the average call rate moved up to 10.3 per cent. This also created a positive gap between the inter-bank call rate and the swap premia rate, which facilitated exchange rate stability in view of excess demand conditions in the foreign exchange market in the wake of domestic uncertainties, border tensions and bulk crude oil imports.

The third phase, *i.e.*, November 1999 - February 2000, saw a marginal decline in AL of Rs.1,268 crore which was compensated by the injection of incremental DL of Rs.3,389 crore. The increase in AL was fuelled by the Reserve Bank's purchases from authorised dealers (Rs.8,365 crore), reflecting the turnaround in capital inflows. This was mopped up by subsequent sterilisation operations through open market sales (Rs.8,088 crore). Seasonal currency demand led to an outflow of Rs.8,442 crore from the banking system. This was mitigated by DL injection through the reduction in reserve requirements in November 1999, releasing about Rs.10,000 crore of lendable resources to banks. The Reserve Bank also announced that banks' till money would be eligible for compliance of CRR during December 1, 1999 - January 31, 2000 in order to help banks to tide over the Year 2000 contingencies. As a result, the inter-bank call rates softened to an average of 8.0 per cent during November 1999-January 2000. The average six-month forward premia declined to 2.86 per cent in February 2000.

The fourth phase, *viz.*, March 2000, saw a sharp accretion to the Reserve Bank's foreign currency assets by Rs.7,484 crore (net of revaluation) with the strengthening of capital inflows. This was offset by a reduction in the net accommodation to Government (net of repos and open market operations) (Rs.4,602 crore) and continuing seasonal currency drawals (Rs.2,411 crore) reducing AL by Rs.1,496 crore. The Reserve Bank's liquidity support to primary dealers declined by Rs. 3,521 crore driving down incremental DL by Rs.4,287 crore. This essentially reflected a temporary drop in primary dealers' recourse to the Reserve Bank on March 24, 2000. On a daily average basis, the decline in AL was met by liquidity support averaging about Rs.1,300 crore. Consequently, call rates ruled, by and large, above the Bank Rate, especially in the latter half of March 2000.

Price Situation

There has been a significant deceleration in the inflation rate, as measured by point-to-point annual variation in the Wholesale Price Index (WPI), during 1999-2000. As on March 25, 2000, the rate of inflation on a point-to-point basis stood at 3.74 per cent, lower than that of 4.81 per cent in the previous year. Since April 3, 1999, the annualised rates of inflation, on a point-to-point basis, remained consistently below those during the corresponding period of the previous year (Chart 23). The inflation rate touched its lowest level at 1.95 per cent in the last week of July 1999 and the highest rate never exceeded the 5 per cent mark. High order of declines in the inflation rate occurred during June to November 1999, partly reflecting the high base effect arising from a spurt in the inflation rate in the corresponding period of the previous year. On the average of weekly basis too, the inflation rate during 1999-2000 moved down to 2.98 per cent from 6.89 per cent in 1998-99.

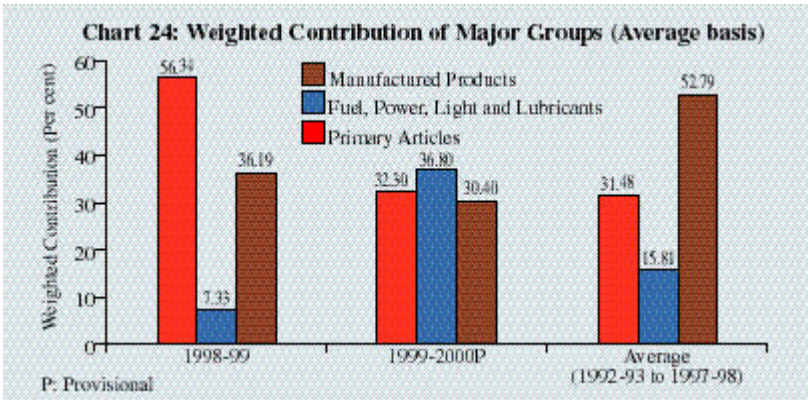


In pursuance of the Report of the Working Group for the Revision of Index Numbers of Wholesale Prices in India, the Government has released the new series of the WPI with base shifted to 1993-94. The new series, apart from advancing the base year to a more recent period, has introduced changes to the commodity composition as also the weighting pattern so as to reflect the impact of structural changes in the economy on the price index. The new index has been operationalised since April 1, 2000, replacing the old series. According to the new series, the year-on-year inflation rate on a point-to-point basis is placed at 4.64 per cent as of the week ended April 8, 2000. The year-end inflation rate for 1999-2000 works out to 4.16 per cent as per the new series as against 3.74 per cent as per the old series.

The declining trend in the annual inflation rate during 1999-2000 has been driven by significantly lower order of increases in prices of primary articles and manufactured commodities. Primary articles group showed a price rise of 2.8 per cent (on average basis) in 1999-2000 as compared with an increase of 11.7 per cent in 1998-99. Within the primary articles group, fruits and vegetables, fibres, coffee and oilseeds, recorded price declines. Price deceleration was prominent in cereals, where on a point-to-point basis the inflation rate came down to 2.8 per cent in 1999-2000 from 18.7 per cent in 1998-99. On an average basis, however, the cereal prices showed a rise of 12.9 per cent in 1999-2000

as compared with 8.3 per cent in 1998-99. Within the primary articles group, the sharp deceleration in prices of food and non-food articles shrouded the significant increase in prices of petroleum crude and natural gas by 9.0 per cent in 1999-2000 in contrast to a decline of 1.7 per cent in 1998-99. Prices of primary articles responded to improved supply conditions emerging from the record level of production of foodgrains and other non-food crops, and import of commodities such as sugar and edible oils, which kept down the price rise in sugarcane and oilseeds. The composite index of food items during 1999-2000 increased by 2.4 per cent (on an average basis) as compared with an increase of 11.6 per cent in 1998-99.

Manufactured products recorded the lowest order of price increase during 1999-2000. The deceleration in the manufacturing inflation seen during the past few years sharpened during 1999-2000. On an average of weekly basis, the inflation rate in the manufacturing sector declined to 1.7 per cent from 4.5 per cent in 1998-99. This was primarily driven by edible oils ((-)10.6 per cent), sugar, khandsari and gur ((-)1.3 per cent), cotton textiles ((-)0.1 per cent), 'chemicals and chemical products' (3.0 per cent) and cement (-2.8 per cent). A number of factors contributed to the current low rate of inflation in manufactured commodities. These were mainly competitive pressures on and better cost effectiveness of the manufacturing sector, lower prices of agricultural goods which are used as inputs in the manufacturing sector, and the subdued growth in private demand. The fuel group recorded an inflation rate of 9.5 per cent in 1999-2000 as against 4.3 per cent in 1989-99. The increase in prices of fuel group mainly reflected the upward revision of diesel prices effected in October 1999, and kerosene and LPG in March 2000 and the rise in prices in the electricity sector.



The average weighted contribution of major commodity groups to the overall rate of inflation indicates that fuel group contributed 36.8 per cent, followed by 32.3 per cent by primary articles and 30.4 per cent by manufactured group. The contributions of various groups to the overall inflation rate in 1999-2000 were thus more evenly placed, compared to that of the preceding two years and also the average contribution during 1992-93 to 1997-98 (Chart 24).

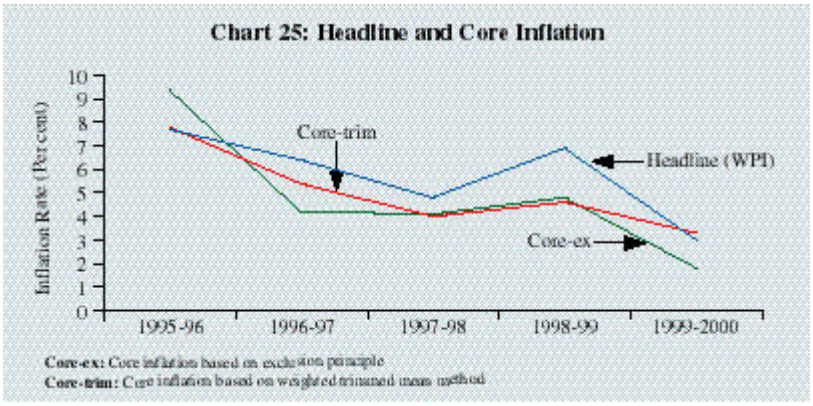
Core Inflation

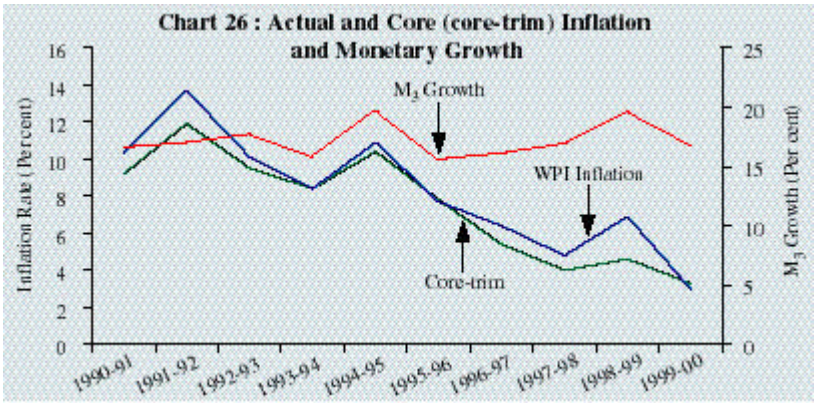
In recent years, there has been a trend among the central banks and in some academic

circles to focus on measures of the core rate of inflation by removing certain volatile components from the headline inflation rate which may be due to temporary shocks. The core rate of inflation provides an idea about how the inflation rate would move along the economy's long-term growth path, if there were no major shocks to the economy. It essentially captures the basic underlying cost and demand conditions that affect inflation, when output is at its normal level and is useful in monitoring the medium to long run direction of the inflation rate in the economy which has relevance for the conduct of monetary policy.

Empirical estimates of core inflation normally follow either the exclusion principle, through which relatively volatile commodity prices are excluded from the inflation rate, or the limited influence estimators, through which only a certain part of the skewness in actual commodity prices is removed. Currently a number of inflation targeting countries have been monitoring the core inflation rate by excluding certain commodities from the headline price index. However, the core inflation rates so compiled could also be compared with other measures such as the weighted trimmed mean method 5.

In India, given the role of supply side factors in the recent inflation episode, an estimate of the core rate of inflation could also be useful as an indicator of the movement of the underlying inflation. However, there have been very few empirical estimates concerning India. It needs to be recognised that estimates of core rate of inflation are sensitive to factors such as the commodity basket and the weight structure. Work in this area is in progress in the Reserve Bank. The broadest measure of the core inflation for the Indian economy could be given by an index constructed after excluding the commodities which are significantly influenced by supply shocks and administered prices from the Wholesale Price Index. The commodities that could be considered for exclusion from the Wholesale Price Index for deriving such a measure of core inflation are the administered price items, and the primary food and non-food articles. By this criteria the commodities excluded constitute about 47 per cent of the total weight of the WPI. The core inflation measured by the exclusion criteria is estimated to have declined to 1.7 per cent in 1999-2000 from 4.8 per cent in 1998-99. However, given the large number of commodities that were to be excluded from the WPI following the criteria of sensitivity to supply shocks and administered price controls, the core inflation measured on the basis of exclusion method may not reflect the true picture of the inflation situation and the standard of living in the economy. Such a measure of core inflation would, therefore, be of limited relevance in the conduct of monetary policy.





An alternative estimate is provided by the weighted trimmed mean method, which considered all commodities but removed only the fixed percentage of skewness of inflation from the WPI basket6. Chart 25 provides the annual trends in the actual inflation, as measured by the WPI, and the two alternative measures of core inflation for the Indian economy during 1995-96 to 1999-2000. The core inflation measured by the weighted trimmed mean method (20 per cent trimmed mean) also showed a substantial decline during the past two years. It declined to 3.3 per cent in 1999-2000 from 4.6 per cent in 1998-99. The core inflation measured by the weighted trimmed mean method remained steadier than that measured by the exclusion method.

Chart 26 gives the trends in annual average growth in M_3, actual inflation, and core inflation as measured by the weighted trimmed mean method. The core inflation seems to reveal a better co-movement with the M_3 growth than that compared to the actual inflation, particularly in the years of significant supply shocks. Both the core and actual inflation diverged significantly from the M_3 growth in the years immediately following the second half of 1990s. It must, however, be emphasised that these are very preliminary results and further work, therefore, is needed both on the methodology and on the utility of the concept for purposes of formulation of monetary policy.

[4] In the Bank's Annual Report for 1998-99, the discretionary component was referred to as 'policy liquidity'. However, the term 'discretionary' is more appropriate since it indicates the options available for actions, and is not rule-bound.

[5] The weighted trimmed mean method excludes a fixed percentage of data points from the top and bottom tails of the inflation distribution across commodities. By this principle, an equal percentage point of the

inflation rate on either side, ordered by the weight of the commodity basket, is removed from the actual inflation rate.

[6] This alternative estimate of core inflation is generated by using 20 per cent weighted trimmed mean method. By this criteria, 10 percentage points of inflation on either side ordered by the weight of the respective commodities are removed from the actual inflation.