Macroeconomic and Monetary Developments in 1999-2000

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I. Growth, Saving and Investment

According to the advance estimates of the Central Statistical Organisation, the real GDP growth, having recovered to 6.8 per cent in 1998-99, is expected to slow down to 5.9 per cent in 1999-2000. The deceleration in real GDP led entirely by GDP originating from agriculture and allied sector masks the improvement expected from the industry and services sectors (Table 1 and Chart 1). Real GDP from agriculture and allied activities is estimated to show a sharp deceleration to 0.8 per cent in 1999-2000 from 7.2 per cent in 1998-99. Industry, on the other hand, is projected to exhibit recovery with a growth of 6.4 per cent as against 3.7 per cent in 1998-99. The estimated growth rate of GDP from the services sector (including construction) at 8.3 per cent is marginally higher than that of 8.0 per cent in 1998-99.

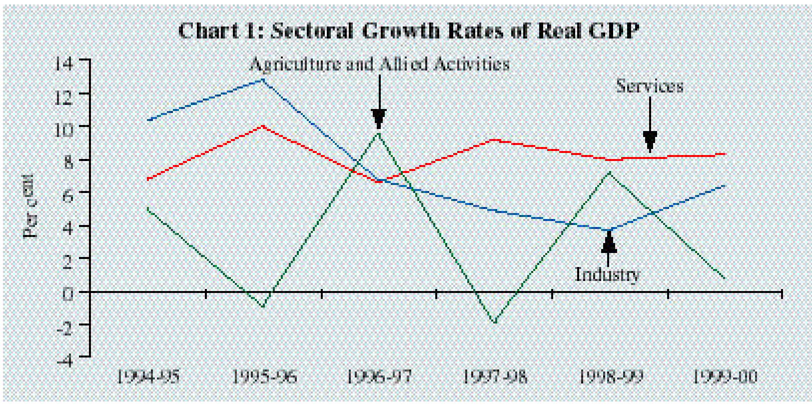
Table 1: Growth Rates and Sectoral Composition of GDP
(at 1993-94 prices)

(Per cent)

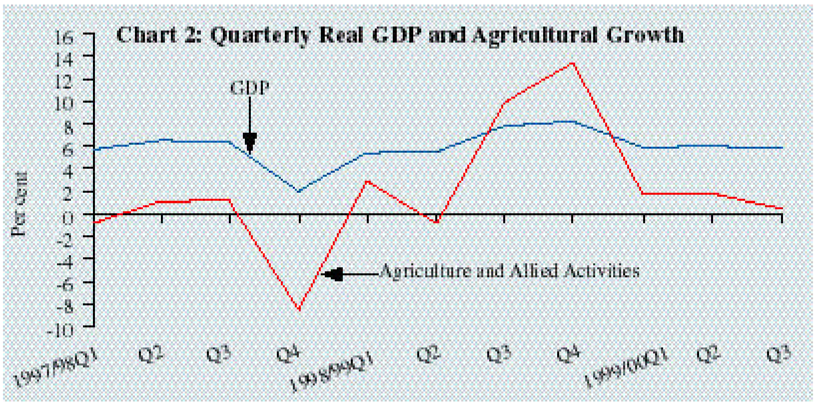
	1998-99	1999-2000

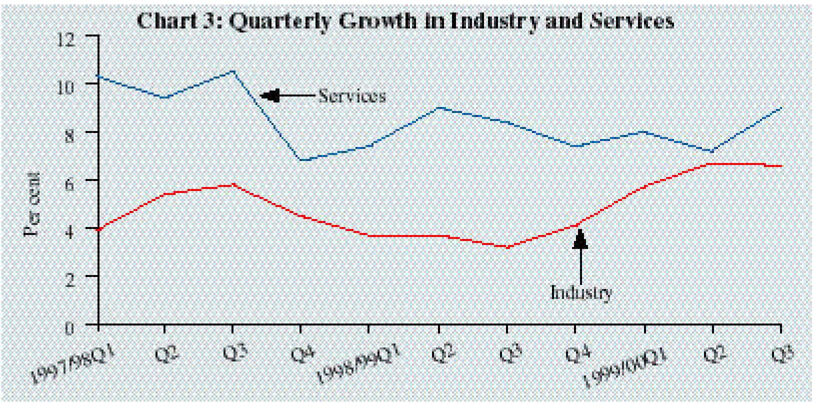
	(Quick Estimates)		(Advance Estimates)	
	Growth Rate	Share in GDP	Growth Rate	Share in GDP
1	2	3	4	5
Agriculture and Allied Activities	7.2	26.8	0.8	25.5
Industry (excluding construction)	3.7	22.0	6.4	22.1
Services (including construction)	8.0	51.2	8.3	52.3
Gross Domestic Product	6.8	100.0	5.9	100.0

The quarterly estimates of real GDP indicate that the 'highs' and 'troughs' in the GDP growth coincided with the fluctuations in the agricultural growth (Chart 2). The quarterly GDP growth rate reached the peak of 8.2 per cent in the fourth quarter of 1998-99, with the growth in agriculture and allied activities reaching its highest point at 13.4 per cent in the same quarter. In the first three quarters of 1999-2000 growth in agriculture and allied activities dipped to 1.7 per cent, 1.8 per cent and 0.5 per cent, respectively, pushing down the real GDP growth rate to 5.9 per cent, 6.0 per cent and 5.8 per cent in these quarters. Industry maintained a steady pace of expansion since the final quarter of 1998-99 (Chart 3). Services sector, which showed some deceleration in 1998-99, recovered by the third quarter of 1999-2000.



The recent trends in real GDP growth highlight three distinct though inter-related developments in the real economy. First, there has been a significant decline in the overall saving and investment rates in the economy since they peaked in 1995-96, largely on account of a sharp decline in public saving. While the gross domestic saving rate declined from 25.5 per cent of GDP in 1995-96 to 22.3 per cent in 1998-99, the gross domestic capital formation rate fell from 27.2 per cent to 23.4 per cent during this period (Table 2). The public saving rate declined from 2.0 per cent in 1995-96 to near zero in 1998-99. While household saving rate remained flat at 18.5 per cent, between 1995-96 and 1998-99, the private corporate saving rate moved down from 5.0 per cent to 3.8 per cent.





Available indicators imply a mixed prospect in the saving front for 1999-2000. The rates of expansion of both currency and aggregate deposits in 1999-2000 have been lower than those in the previous year. On the positive side, the household saving is expected to get a boost from the revival of equity market and a substantial increase in small savings (gross) and provident fund collections.

Table 2: Saving and Investment Rates

(as percentage of GDP at current market prices)

	1993-94	1994-95	1995-96	1996-97	1997-98 @	1998-99 *
1	2	3	4	5	6	7
Household Saving	18.4	19.8	18.5	17.1	19.0	18.5
Financial	11.0	12.0	8.9	10.4	10.4	10.9
Physical	7.4	7.8	9.6	6.7	8.6	7.6
Private Corporate Saving	3.5	3.5	5.0	4.5	4.3	3.8
Public Sector Saving	0.6	1.7	2.0	1.7	1.4	negligible
Gross Domestic Saving	22.5	25.0	25.5	23.3	24.7	22.3
Gross Domestic Capital Formation	23.1	26.1	27.2	24.6	26.2	23.4

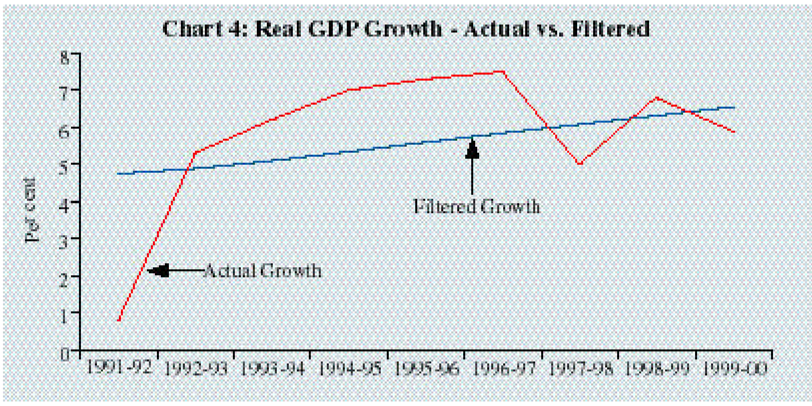
@ Provisional Estimates * Quick Estimates

The private corporate saving is expected to improve in 1999-2000 given the early trends in profit after tax. On the other hand, the saving performance of the public sector may exhibit a further deterioration as revealed by the large increase in the revenue deficit of the central government in the revised estimates of 1999-2000. The advance estimates of GDP growth for 1999-2000 has been placed at 5.9 per cent. Implicit in this estimate would be an investment rate of 22 to 24 per cent that would be consistent with the trend value of the incremental capital-output ratio (ICOR).

Secondly, growth impulses in recent years seem to have emerged from productivity growth in the economy. The underlying permanent component of ICOR[1] is estimated to move down from 4.1 in 1995-96 to 3.9 in 1998-99. There has also been evidence of significant improvement in total factor productivity in the economy during 1990s. Thirdly, cyclical factors, both in the demand and supply sides have played a relatively large role in the growth experience of recent years. While supply cycles reflected fluctuations in agricultural growth, demand cycles have largely followed the trends in consumption and investment of the private and public sectors. Private consumption demand witnessed a decline from 72.1 per cent of GDP in 1980-81 to 63.7 per cent of GDP in 1995-96 and further to 63.3 per cent of GDP in 1998-99. Public consumption, on the other hand, has remained steady at around 10 to 12 per cent of GDP in 1980s and 1990s. Investment demand has fallen sharply in the public sector from over 10 per cent of GDP in 1980s to around 6 to 7 per cent in the second half of 1990s which was only partly corrected by increase in the private investment demand (from around 10 to 14 per cent of GDP in 1980s to 15 to 18 per cent in the second half of 1990s).

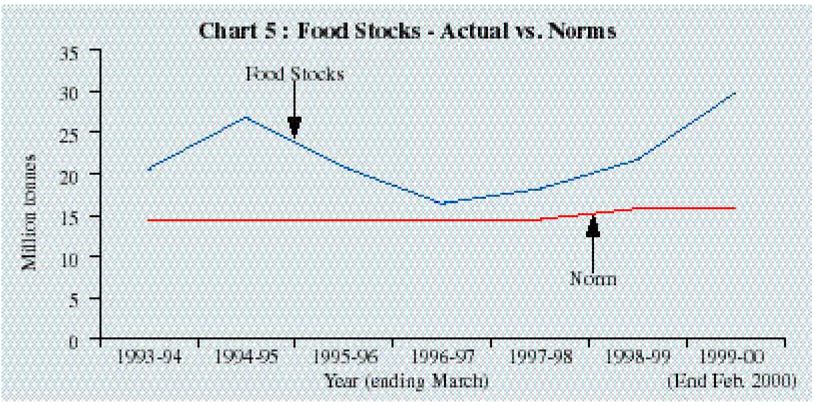
These structural and cyclical factors in the growth dynamics have implications for monetary policy in terms of their impact on the potential and actual output. While the developments in the potential output have a bearing on the medium to long-term stance of monetary policy, the monetary policy would itself matter to the growth outcomes in the short-run through credit, interest rate, exchange rate and other mechanisms.

In India, the estimates of potential output are not very firm, because of the lack of adequate information on employment, capacity utilisation, *etc.*, and the fact that the potential output itself changes from year-to-year depending on the investment and productivity situation. Given the data limitations, one of the ways to draw inference on the behaviour of output gap would be to look at the trend in the permanent component of growth, after filtering out the influences of temporary factors[2]. A comparison of the filtered estimates with the actual growth showed that the real GDP growth was in the neighbourhood of its potential in 1998-99. The actual growth has stayed above the potential in most of the post-reform period (Chart 4). Extrapolating this trend would show that the estimated growth stayed below the potential in 1999-2000.



Food Situation

An impressive agricultural growth performance in 1998-99 was followed by a sharp deceleration in 1999-2000. Foodgrain production has been estimated to decline by 0.7 per cent to 201.6 million tonnes in 1999-2000 from the record production of 203 million tonnes in 1998-99. This should not, however, pose a problem to the food availability condition given the current high level of food stocks as compared to the norms (Chart 5). Foodgrain stocks with public sector agencies as at end-February 2000 stood at 29.74 million tonnes, which is higher by 30.7 per cent than those at end-February 1999 (22.75 million tonnes). Stocks of both wheat and rice have registered considerable increases and presently the stock levels are at about twice the norm specified for end-March (15.8 million tonnes). The current high level of foodgrain stocks is due to the substantial rise in procurement of wheat and rice and the relatively low off-take.



Reflecting the record level of food stocks, food credit from scheduled commercial banks recorded an increase of Rs. 8,875 crore (52.8 per cent) to Rs.25,691 crore during 1999-2000 as compared with an increase of Rs.4,331 crore (34.7 per cent) in the previous year. The movements in food credit recorded the usual seasonal pattern of substantial increases during the first and third quarters on account of *rabi* and *kharif* procurements, respectively, followed by declines during the second and the fourth quarters. During the first quarter, food credit recorded an increase of Rs.5,405 crore on account of a substantial increase in wheat procurement. After declining by Rs.1,689 crore during the second quarter, food credit again recorded an increase of Rs.5,066 crore during the third quarter, owing to the increased procurement of rice. The outstanding amount of food credit reached the peak at Rs.26,056 crore on January 28, 2000.

Minimum Support Price

Apart from the food availability conditions, developments in the minimum support price (MSP) have a bearing on the food price situation as well as the overall rate of inflation in the economy. During 1999-2000, the MSP for paddy was raised by 11.4 per cent which is the highest rate of increase recorded in the past five years. While a large increase in MSP has a favourable impact on the terms of trade for agriculture, it also affects the food price inflation and the inflationary expectations in the economy. Table 3 provides data on annual increases in MSP and the overall inflation rate in the economy since 1995-96. The rate of increase in MSP has been generally higher than the annual rate of inflation. The impact of the increase in MSP on the overall inflation rate in 1999-2000 has, however, remained subdued so far. As of March 25, 2000 prices of rice and wheat increased by 1.0 per cent and 4.5 per cent, respectively, as against 15.7 per cent and 23.0 per cent during the corresponding period of 1998-99.

Table 3 : Minimum Support Price

	M S P Wheat (Common) (Rs./Quintal)	Per cent Increase	MS P Paddy (Rs./Quintal)	Per cent Increase	Annual Inflation (point-to-point) (%)
1	2	3	4	5	6
1995-96	360	2.9	360	5.9	5.0
1996-97	380	5.6	380	5.6	6.9
1997-98	475	25.0	415	9.2	5.3
1998-99	510	7.4	440	6.0	4.8
1999-2000	550	7.8	490	11.4	3.7
2000-2001	580	5.5	N.A.	_	_

Industrial Recovery

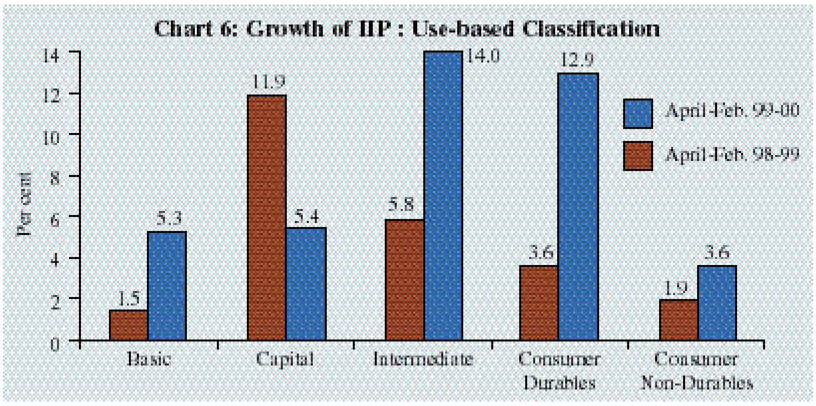
Industrial production after recording a relatively low growth of 4.0 per cent in 1998-99, showed a definite turnaround during 1999-2000. The Index of Industrial Production (IIP) (Base: 1993-94=100) grew at a higher rate of 7.9 per cent during April-February 1999-2000 than 3.8 per cent during the corresponding period of 1998-99. The acceleration in the industrial growth rate has been shared by manufacturing and electricity sectors, which recorded growth rates of 8.8 per cent and 7.4 per cent, respectively, during April-February 1999-2000, as against 4.2 per cent and 6.5 per cent during April-February 1998-99. On the other hand, output from mining and quarrying recorded a marginal growth of 0.5 per cent during this period. The relative contribution of various sectors to the overall growth in the IIP reveals that manufacturing sector contributed 90.3 per cent, thereby leading the process of recovery in industry (Table 4).

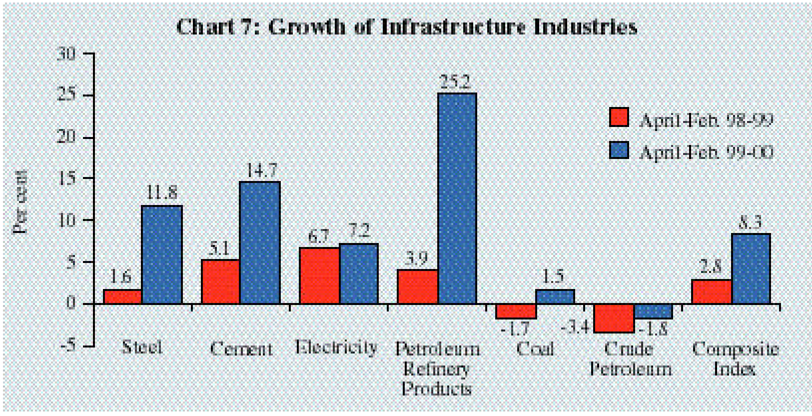
Table 4: Growth of Industrial Production and Relative Contribution of the Sectors

(Per cent)

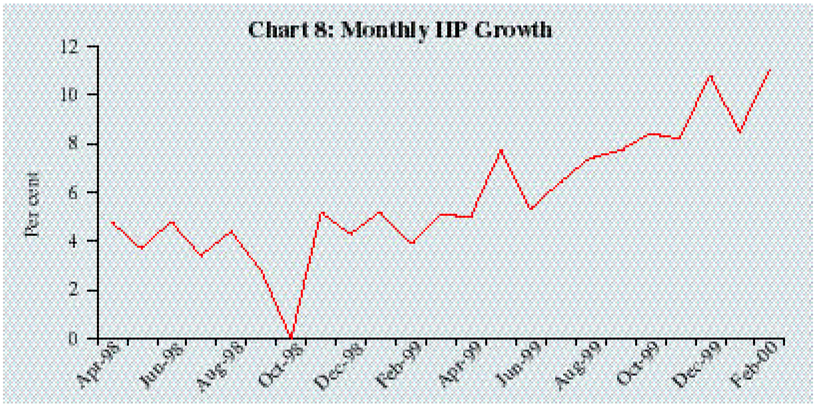
Sectors	Weight	Growth April-Feb. 98-99	Growth April-Feb. 99-00	Relative Contribution April-Feb. 98-99	Relative Contribution April-Feb. 99-00
1	2	3	4	5	6
General Index	100.0	3.8	7.9	100.0	100.0
Manufacturing	79.3	4.2	8.8	87.3	90.3
Mining & Quarrying	10.5	-1.5	0.5	-3.5	0.5
Electricity	10.2	6.5	7.4	16.2	9.2

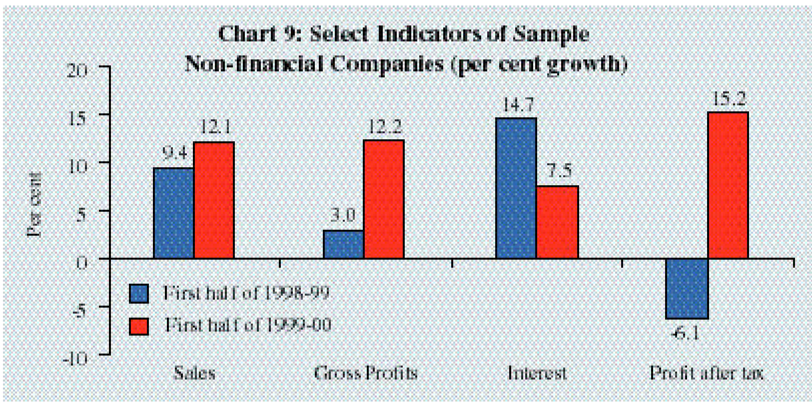
The use-based classification of industrial output data reveals a somewhat unbalanced pattern of growth. Intermediate goods sector has led the recovery by posting a growth of 14.0 per cent during April-February 1999-2000 as against 5.8 per cent during April-February 1998-99, hence increasing its contribution to the overall industrial growth to 51.0 per cent. The basic goods and consumer durables showed increases of 5.3 per cent (against 1.5 per cent during the corresponding period of 1998-99) and 12.9 per cent (against 3.6 per cent), respectively, during April-February 1999-2000 (Chart 6). However, the growth in capital goods sector has slowed down to 5.4 per cent during April-February 1999-2000 from 11.9 per cent during the corresponding period of the previous year.





Of interest in this context is a clear improvement in the performance of infrastructure industries during 1999-2000. The composite index (Base: 1993-94=100) of six infrastructure industries *viz.*, electricity, coal, steel, crude oil, petroleum refinery products and cement recorded a higher growth of 8.3 per cent during April-February 1999-2000 than 2.8 per cent in the corresponding period of the previous year. Strong growth trends were evident in cement (14.7 per cent), steel (11.8 per cent) and petroleum refinery products (25.2 per cent).





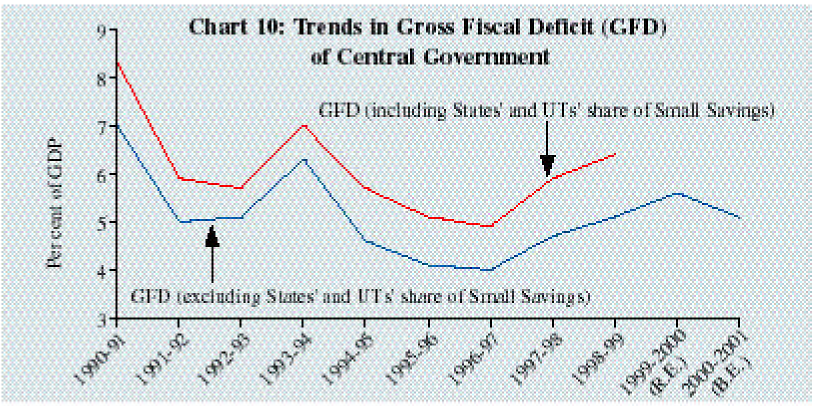
While electricity recorded a marginally higher growth (7.2 per cent), coal and crude petroleum showed low and negative growth, respectively (Chart 7).

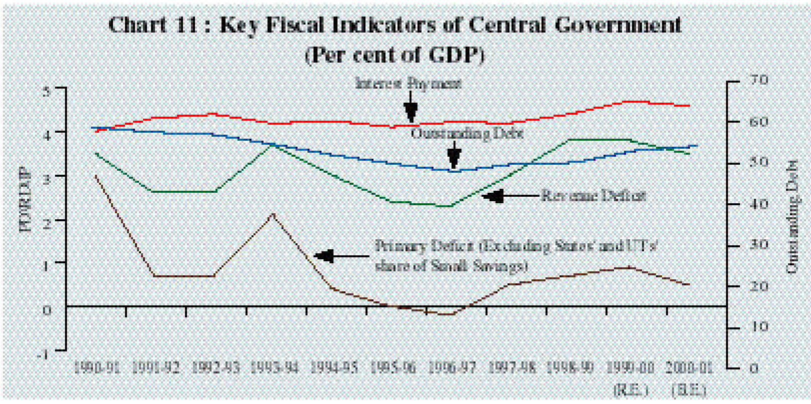
Chart 8 reveals that deceleration in the industrial growth bottomed out in October 1998. Since then, there has been a general acceleration especially after April 1999. Among the factors that have facilitated pick up in industrial performance, the major ones are: the strong growth of agricultural sector in 1998-99 boosting rural demand; resurgence in export growth and resultant stimulus from the external demand; enabling interest rate and credit availability conditions; and strong revival of capital market. As indicated by the half-yearly performance of the select non-financial private sector companies, the financial health of industries has recorded an improvement during 1999-2000 (Chart 9). The profits after tax of 921 non-financial companies have turned around and shown a growth of 15.2 per cent during the first half of 1999-2000 in contrast to a decline of 6.1 per cent in respect of 953 such companies in the first half of 1998-99. Sales have risen by 12.1 per cent during the first half of 1999-2000 against 9.4 per cent in the comparable period of the previous year. Further, there has been a noticeable decline in the growth of interest payments by these companies in 1999-2000, bringing down the interest burden on gross profit to 40.4 per cent in the first half of 1999-2000 from 42.2 per cent in the corresponding period of 1998-99.

II. Fiscal Situation

Centre's Fiscal Deficit

The fiscal situation in 1999-2000 proved to be difficult partly because of cyclical, unforeseen and security related factors. Net revenue collection of the Central government fell short of the budgeted target by Rs.3,336 crore while proceeds from disinvestment declined from the budgeted level of Rs.10,000 crore to Rs.2,600 crore in the revised estimates. The revenue shortfall was exacerbated by pressures from the unanticipated increase in defence expenditure, additional relief expenditure due to a super cyclone in Orissa, elections, the residual impact of the Fifth Pay Commission and higher level of fiscal assistance to States. Added to this were the higher level of support to plan expenditure and increases on account of interest payments. Total expenditure of the Central government, as a result, overshot the budgeted target by Rs.19,856 crore as per the revised estimates. The pressure was felt on the gross fiscal deficit[3] (excluding the States' and Union Territories' (UTs') share of small savings), which increased from the budgeted Rs.79,955 crore to Rs.1,08,898 crore in the revised estimates. As proportion to GDP, the Centre's gross fiscal deficit (excluding the States' and UTs' share of small savings) increased from 4.0 per cent in the budget estimates to 5.6 per cent in the revised estimates. the Compared to the actual of 1998-99, Centre's gross fiscal deficit (excluding States' and UTs' share of small savings) increased by 0.5 percentage point in 1999-2000 (Chart 10). Almost all key fiscal indicators such as the primary deficit, revenue deficit, debt to GDP ratio and interest payments to GDP ratio witnessed a deterioration in 1999-2000 (Chart 11).

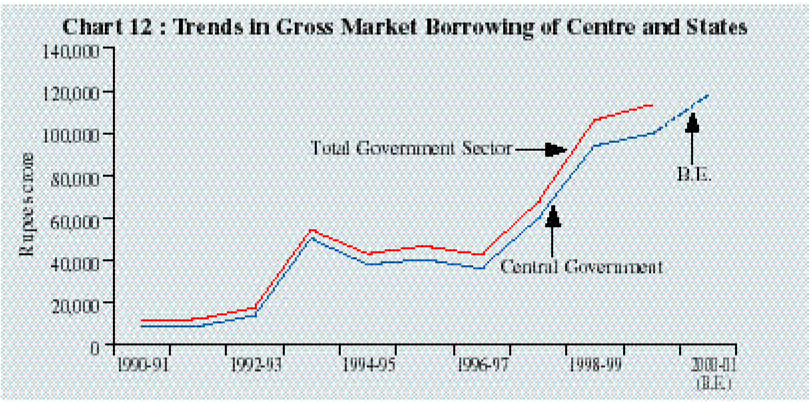




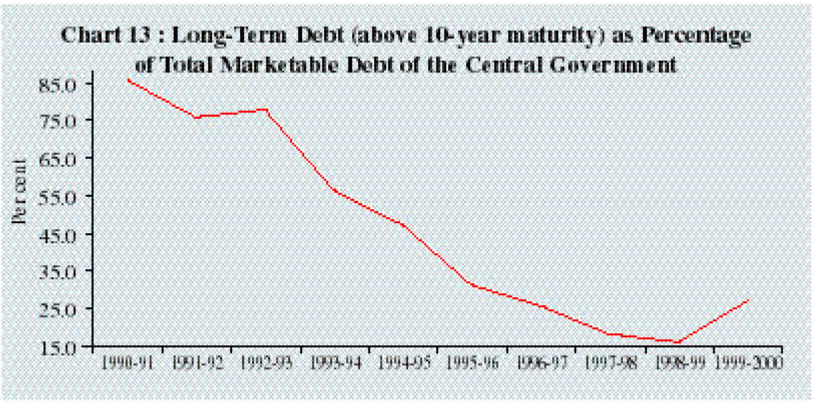
Market Borrowing

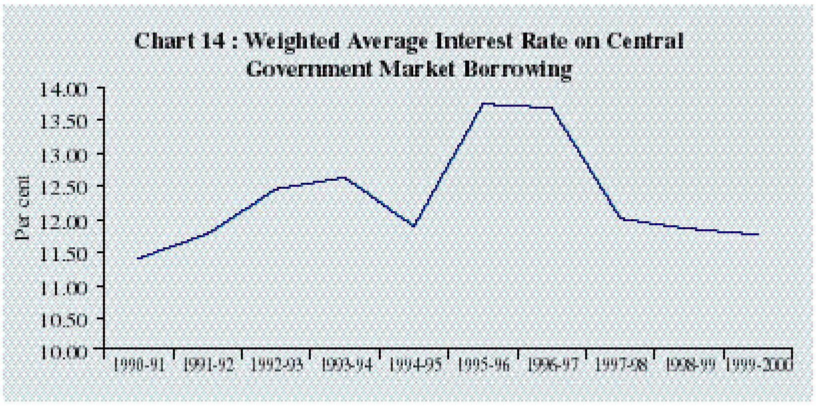
The Central government's borrowing requirement showed a substantial rise in 1999-2000. The net market borrowing of the Central government increased from Rs.57,461 crore in the budget estimates to Rs.73,077 crore (including 364-day Treasury Bills) according to the Reserve Bank's records. At this level, the gross market borrowing through dated securities amounted to Rs.86,630 crore in 1999-2000, as against Rs.83,753 crore in 1998-99. Including the fresh issue of 364-day Treasury Bills, the gross market borrowing of the Central government rose to Rs.99,630 crore from Rs.93,953 crore in 1998-99. During the past three years, market borrowings of both the Central and State governments have gone up sharply, with the steepness being prominent in 1998-99 (Chart 12).

During 1999-2000, the Reserve Bank's initial subscription to the Central government's borrowing programme by way of private placement of dated securities (Rs.27,000 crore) and devolvement of 364-day Treasury Bills amounted to Rs.29,267 crore as against Rs.39,777 crore in 1998-99, which included Rs.30,000 crore of private placement. In 1999-2000, the need for initial subscription from the Reserve Bank through private placement and devolvement was relatively low due to a strong increase in the demand for government securities by banks, financial institutions and mutual funds. The market sentiment during 1999-2000 remained positive in absence of major domestic and international uncertainties. Scheduled commercial banks' investment in government securities increased by Rs.54,612 crore in 1999-2000 as against Rs.36,261 crore during the previous year. Currently, scheduled commercial banks are holding above Rs.80,000 crore of government and other approved securities in excess of the minimum statutory liquidity requirement.

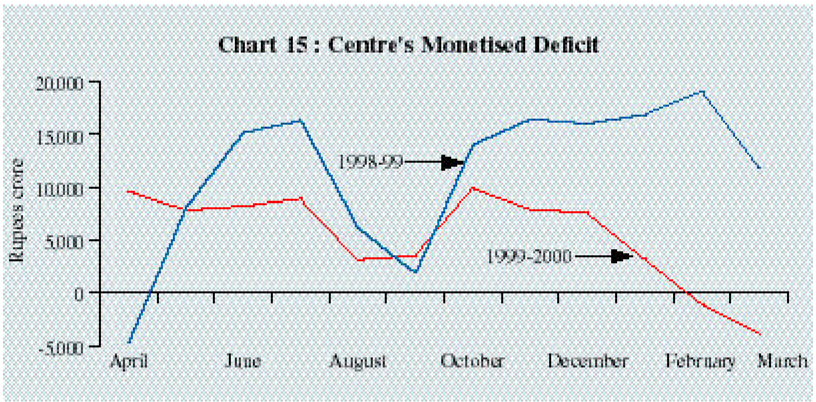


While the debt management strategy through the private placement mechanism helped to stabilise the cost of borrowing to the government, the Reserve Bank used the open market window to release the securities from its portfolio to mop up the excess liquidity from the system. During 1999-2000, net open market sale of securities (net) amounted to Rs.30,861 crore as against Rs.29,669 crore in 1998-99. The cut-off yield on medium and long-term securities showed a substantial decline during 1999-2000. The cut-off yield on Central government 10-year bond declined steadily from 12.25 per cent in December 1998 to 11.99 per cent in April 1999 and to 11.59 per cent in August 1999. The yield on the longest maturity bond of 20 years declined from 12.60 per cent in January 1999 to 12.42 per cent in May 1999 (19 years and 5 months) and to 12.05 per cent in October 1999 (19 years and one month).





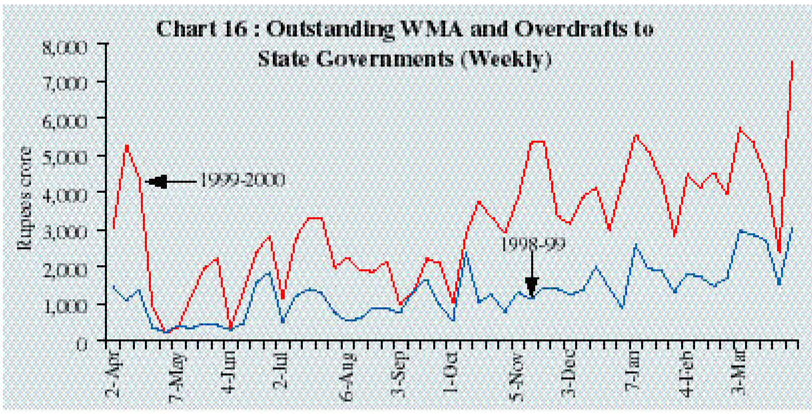
As a part of the debt management strategy to elongate the maturity profile of marketable debt, a substantial part of the government borrowing (65.0 per cent) was raised through bonds with maturity over 10 years. In fact, all borrowings in 1999-2000 were above 5-year maturity, ranging between 6 to 20 years. As could be seen from Chart 13, there has been a turn around in the falling trend of the share of long-term bonds in the total marketable debt of the Central government in 1999-2000. Thus, the weighted average maturity of Central government market borrowing increased from 7.7 years in 1998-99 to 12.64 years in 1999-2000. Notwithstanding that there was concentration of borrowing at the longer-end of maturity, the overall borrowing cost to the government declined during 1999-2000. The weighted average cut-off yield on the Central government market borrowing declined to 11.77 per cent in 1999-2000 from 11.86 per cent in 1998-99. The weighted average cut-off yield has shown a substantial decline in recent years as revealed by Chart 14, and was only slightly above the level of coupon rates in 1990-91, *i.e.*, before the introduction of the system of auctioning of Government securities. In the first auction of dated securities during 2000-01, held on April 13, 2000, the cut-off yield of 10 year security declined to 10.26 per cent from 11.59 per cent in August 1999.



The liquidity management operation put in place during the year (see Section 3 for details) also ensured a lower order of monetised deficit of the Central government, despite a higher level of fiscal deficit. In fact, before the closure of government accounts, the net Reserve Bank credit to the Central government during 1999-2000 declined by Rs.3,865 crore, recording a monetised surplus for the first time since 1977-78. The net

Reserve Bank credit to the Central government had increased by Rs.11,800 crore during 1998-99. Throughout 1999-2000, the Centre's monetised deficit remained below that of 1998-99, except in April and September 1999 (Chart 15).

Several States faced financial difficulties and frequently resorted to the Ways and Means Advances (WMA) and overdrafts from the Reserve Bank despite the recent enhancement of the WMA limits of State governments to Rs.3,685 crore from Rs.2,234.4 crore. The outstanding level of WMA and overdrafts of States from the Reserve Bank increased from Rs. 4,818 crore as on March 31, 1999 to Rs. 7,519 crore as on March 31,2000, which included an overdraft of Rs. 4,092 crore (Chart 16).



The gross fiscal deficit of the Central government for 2000-2001 has been budgeted lower at 5.1 per cent of GDP than 5.6 per cent in 1999-2000. The Union budget has placed the net market borrowing programme at

Rs.76,383 crore in 2000-2001 as against Rs.73,077 crore in 1999-2000. Together with repayment of maturing loans and 364-day Treasury Bills, the gross borrowing requirement works out to Rs.1,17,704 crore as against Rs.99,630 crore in 1999-2000. Raising this order of gross market borrowing would pose a challenge. It is, however, necessary to ensure that the interest rate conditions remain favourable to industrial recovery and that liquidity conditions do not give rise to adverse inflationary expectations. Monetary policy has to play a balancing role in this context.

III. Monetary and Liquidity Conditions

Monetary Trends

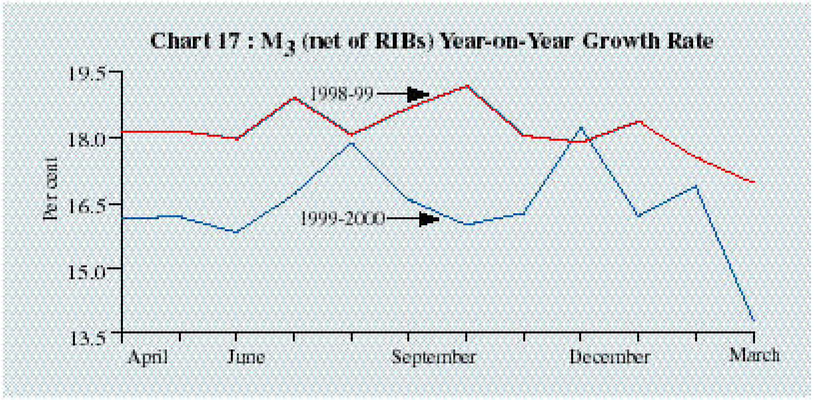
Broad money (M_3) grew at 13.6 per cent (13.9 per cent, net of the Resurgent India Bonds (RIBs)) during 1999-2000 as compared with the growth of 17.0 per cent (net of RIBs) in 1998-99 (Table 5). During 1999-2000, up to February 2000, the month-to-month annual growth in M_3 (net of RIBs) remained in the 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 1999-2000	Point-to-point basis 1998-99	Monthly Average basis 1999-2000	Monthly Average basis 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. 1M_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	16.4	14.2	15.8	14.9
of which:				
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.

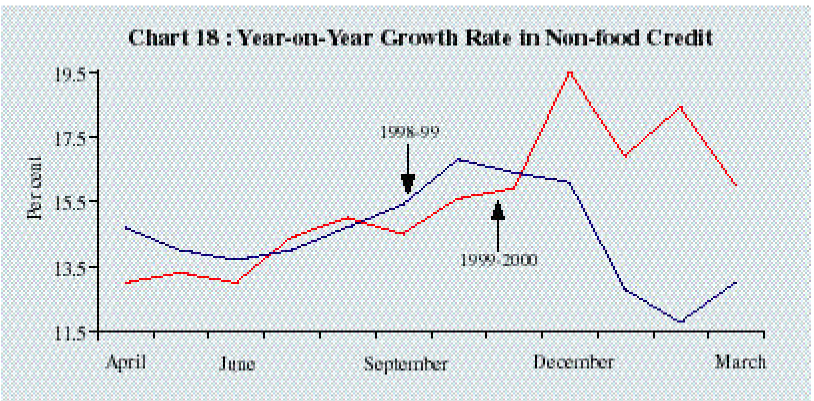
Currency with the public expanded by 12.0 per cent (Rs.20,349 crore) as against 16.1 per cent in 1998-99. On an average basis, however, the year-on-year currency growth rate was much higher at 16.5 per cent during 1999-2000 as compared with 11.7 per cent during 1998-99. The sustained increase in cash 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.

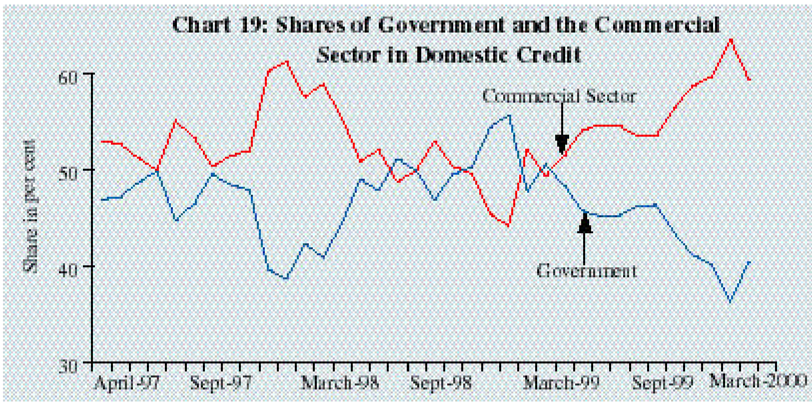


During 1999-2000, the growth in bank credit to Government and the commercial sector, revealed a clear switch between the two compared to the situation in the preceding year. While a large expansion in the bank credit to the government sector pre-empted commercial credit expansion in 1998-99, the position 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.

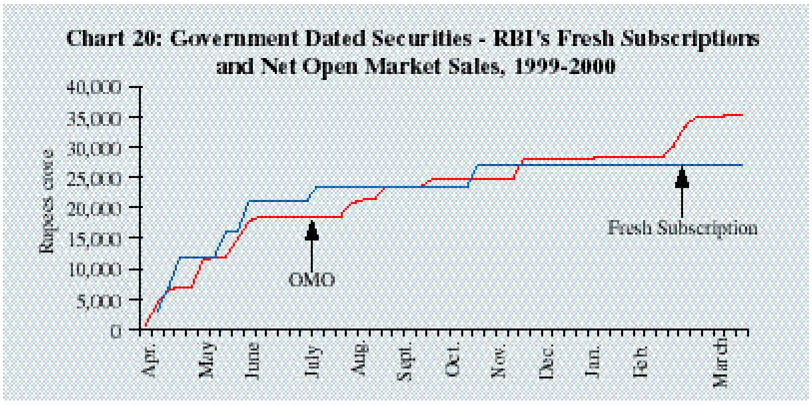
The system of micro-finance in terms of credit for self-employment and other financial and business services, instituted by the Reserve Bank in 1996, has been reckoned as part of priority sector lending and hence would boost this type of finance. The Task Force on Supportive Policy and Regulatory Framework 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

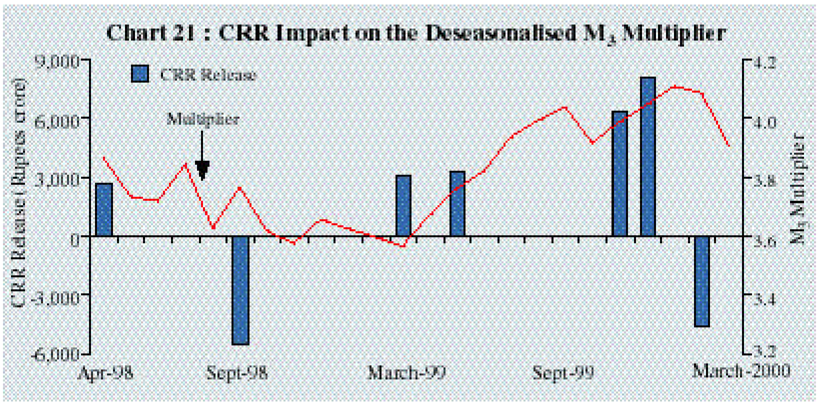
Reserve money growth during 1999-2000 revealed a sharp deceleration primarily reflecting the reduction in the level of CRR and the impact of market oriented monetary policy operations on the balance sheet of the Reserve Bank. The growth of reserve money was 8.1 per cent (Rs.20,897 crore) during 1999-2000 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).

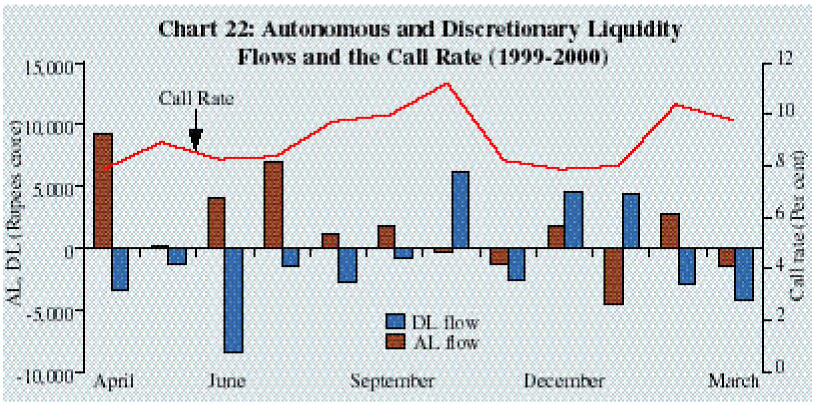


Liquidity Position

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.

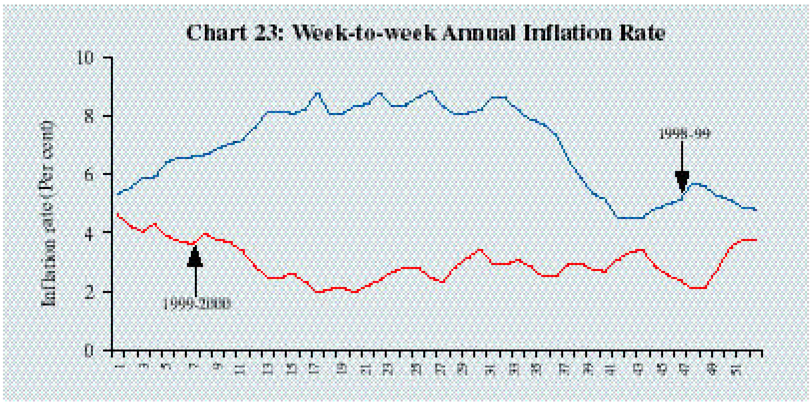


Chart 23: Week-to-week Annual Inflation Rate

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.

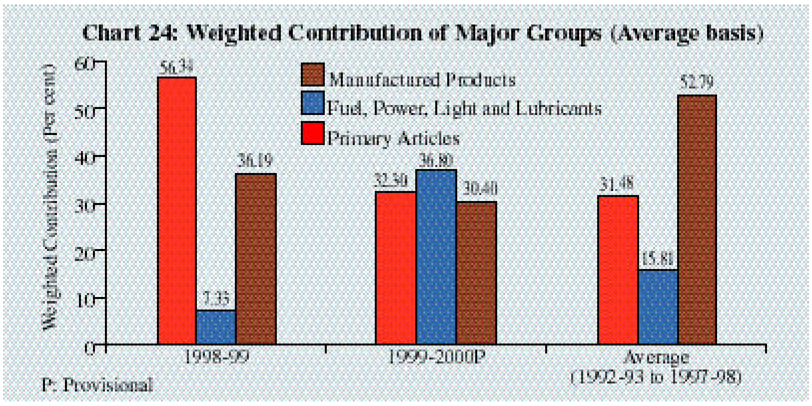


Chart 24: Weighted Contribution of Major Groups (Average basis)

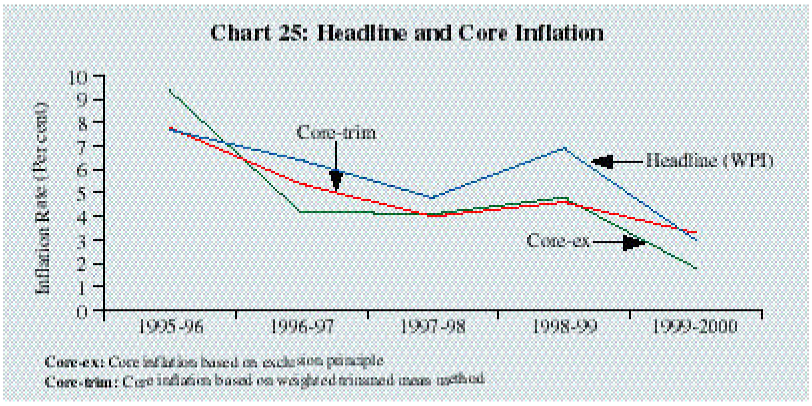
The average weighted contribution of major commodity groups to the overall rate of inflation indicates that fuel group contributed 36.8 per cent, followed by 32.3 per cent by primary articles and 30.4 per cent by manufactured group. The contributions of various groups to the overall inflation rate in 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).

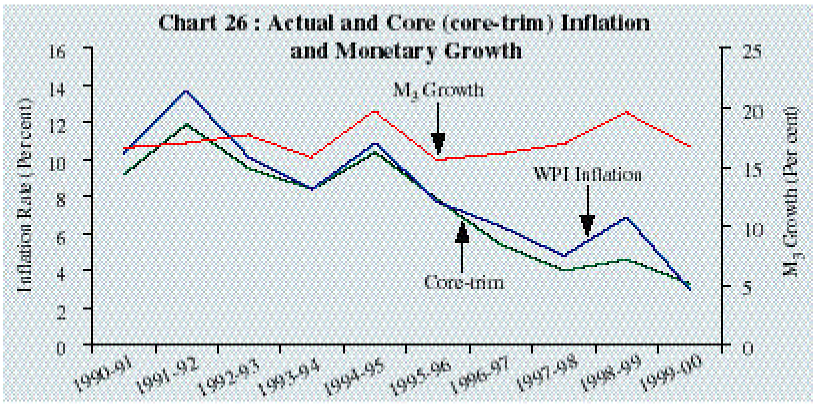
Core Inflation

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.

IV. Domestic Financial Markets

Short-term Interest Rates

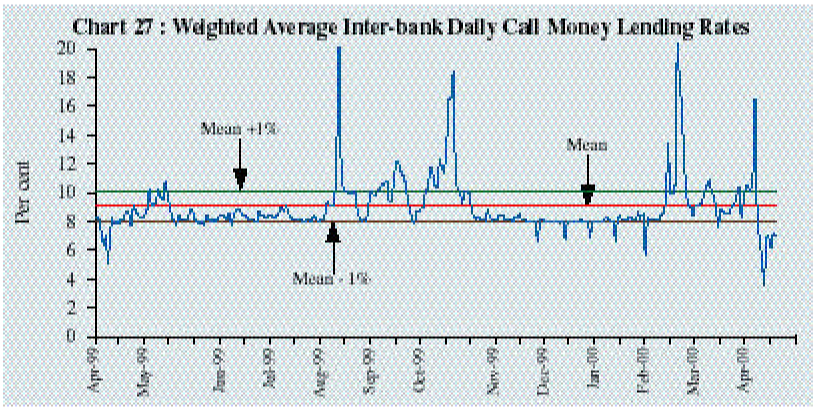
While generally manageable liquidity conditions characterised a majority of the financial market segments, the position at the shorter end of the market, *viz.*, the call money market and primary auctions of Treasury Bills seemed to be somewhat tight. The marked appetite for government securities and increased credit off-take of the commercial sector impacted on call money rates during 1999-2000; this was in sharp contrast to that in 1998-99, particularly in the first half, when money market conditions were strongly influenced by short-term developments in the forex market.

Call Money Market

The inter-bank call rates ruled steady within a narrow range during 1999-2000 except for a few bouts of volatility during mid-August 1999, mid-October 1999 and mid-February 2000, which were primarily attributable to the miscalculation of the demand for reserves by commercial banks (Chart 27). During 1999-2000, the daily peak call rates averaged 9.50 per cent, whereas the daily low rates averaged 8.38 per cent, a difference of 112 basis points. The average daily call rates was higher at 9.04 per cent than 8.15 per cent in the previous year (Table 6).

Table 6 : Inter-bank Daily Call Money Lending Rates (Summary Statistics) (April 1999 – March 2000)

	Low	High	Average
1	2	3	4
Intra-day Minimum (%)	2.50	6.75	5.01
Intra-day Maximum (%)	13.00	35.00	20.35
Average (%)	8.38	9.50	9.04
Standard Deviation (%)	1.16	2.73	1.90
Coefficient of Variation	0.14	0.29	0.21



The intra-year developments in the money market revealed that the average call rates moved up from 7.9 per cent in April to about 9 per cent in May 1999. Call rates were though within 8 to 9 per cent up to July 1999. From then on up to October, they moved up, the average ranging from 9.72 per cent to 11.20 per cent. Volatility in call rates declined significantly during the year, except for a brief spell during August to October 1999 and in February 2000 (Table 7). With the easing of liquidity conditions, following the reduction in CRR in November 1999, the monthly average call rates dropped below the Bank Rate level during December 1999 - for the first time after April 1999 - and remained close to 8.0 per cent in January 2000. It may be noted that as there were no adverse Y2k related problems, and as the Reserve Bank had announced special liquidity enhancing measures for the period December 1, 1999 to January 31, 2000 to enable the market to tide over the Y2k related problems, if any, the markets exhibited marked stability. However, call rates again shot up during mid-February 2000, primarily due to liquidity miscalculation by banks as they vigorously participated in the Reserve Bank's open market sales.

The liquidity situation eased since February 21, 2000 following the open market purchases of 364-day Treasury Bills by the Reserve Bank. Call rates ruled around 10 per cent during March 2000 (except March 31, 2000). Following the package of monetary policy measures announced by the Reserve Bank on April 1, 2000, which implied liquidity injection of about Rs.7,200 crore through a CRR cut of one percentage point in two slabs and signalled lower interest rates through a one percentage point reduction in both the Bank Rate and the repo rate and a 0.5 percentage point reduction in the savings deposit rate, call rates declined sharply to around 5.0 to 7.0 per cent during April 4 to 17, 2000. Consequently, after a long gap (81 days), the Reserve Bank's fixed rate repo received bids amounting to Rs.3,795 crore on April 4, 2000 though a small amount of Rs.400 crore was received on April 1, 2000. Call rates declined sharply to the intra-day average of 3.5 per cent on April 7, 2000 (reporting Friday), with the fixed rate repo (at 5 per cent) proving to be a profitable avenue for market participants to park their surplus funds. The Reserve Bank received repo bids amounting to Rs.12,085 crore on that day, which declined to Rs.4,500 crore on April 11, 2000.

Table 7 : Inter-bank Monthly Call Money Lending Rates

	Average (%)	SD (%)	CV
1	2	3	4
1999			
April	7.87	0.93	0.12
May	8.91	0.80	0.09
June	8.25	0.30	0.04
July	8.36	0.31	0.04

August	9.72	2.48	0.26
September	9.97	1.19	0.12
October	11.20	2.62	0.23
November	8.20	0.19	0.02
December	7.86	0.43	0.05
2000			
January	7.99	0.61	0.08
February	10.37	3.31	0.32
March	9.77	1.69	0.17
April (up to 17th)	6.44	1.31	0.20

Call rates were generally above the Bank Rate in most months of the year. The informal corridor consisting of the Bank Rate (at 8 per cent during March 1999 to March 2000) and the fixed repo rate (6 per cent during March 1999 to March 2000) which was in evidence during 1998-99 was not seen in 1999-2000 (Chart 28). However, another informal corridor given by the Bank Rate and the rate of interest on Additional Collateralised Lending Facility (ACLF) at 10 per cent (during March 1999 to March 2000) seemed to have been formed and call rates, for the greater part of 1999-2000, moved within it except for October 1999 and February 2000 when rates exceeded 10 per cent. Following the April 1, 2000 policy announcements, the lower informal corridor moved down to 5 to 7 per cent while the upper one to 7 to 9 per cent. Call rates since April 4, 2000 stayed within the lower corridor (excluding April 7, a reporting Friday), with the 5 per cent repo rate providing the floor.

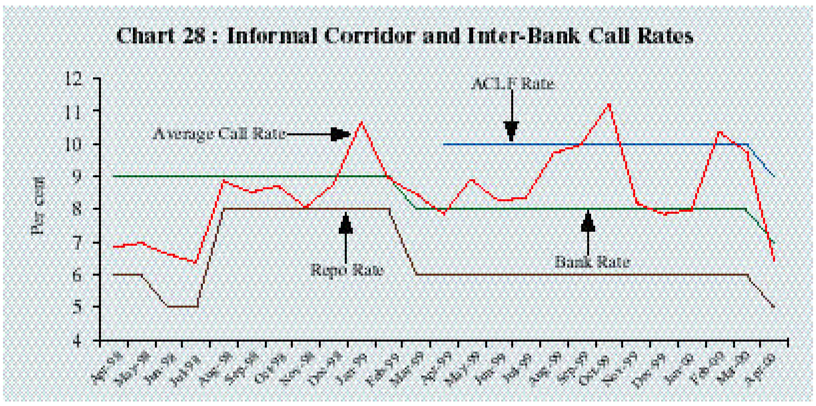
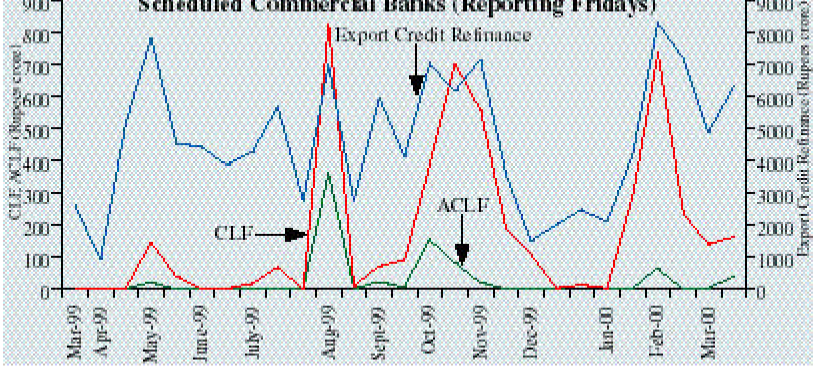


Chart 28 : Informal Corridor and Inter-Bank Call Rates

Chart 29 shows the refinance drawals by scheduled commercial banks from the Reserve Bank (on reporting Fridays) through i) export credit refinance facility (ECRF), ii) collateralised lending facility (CLF) and iii) additional collateralised lending facility (ACLF). While refinance at the first two facilities are available at the Bank Rate, that by way of ACLF is available at the ‘Bank Rate plus 2 percentage points’, i.e. at 10 per cent during 1999-2000 and 9 per cent during 2000-01 so far. The ECRF limit varied from Rs.7,100 crore to Rs.10,579 crore during 1999-2000. The amounts of CLF and ACLF are each fixed at 0.25 per cent of the fortnightly average outstanding aggregate deposits of scheduled commercial banks in 1997-98, which work out to Rs.1,314 crore for each of the two facilities (since their introduction on April 24, 1999). In addition, PDs were provided liquidity support through collateralised lending facility and reverse repos with the Reserve Bank. The weekly average outstanding credit drawals by PDs from the Reserve Bank amounted to Rs.3,475 crore during 1999-2000 (average of Friday data), while the peak level stood at Rs.8,072 crore as on October 15, 1999. Generally, in a surplus liquidity condition, banks resort to fixed rate repos with the Reserve Bank, that sets the floor for the call rate, while the Bank Rate at which ECRF and CLF and lending facilities to PDs are available, sets the ceiling. Under a tight liquidity condition, banks would generally draw upon their CLF and may resort to additional borrowing from the Reserve Bank through ACLF, if call rates tend to move above the 10 per cent mark (9.0 per cent since April 3, 2000). As Chart 29 shows, drawals from the ACLF were moderate to heavy during August to October 1999 when the call rate was ruling high. Since November 1999, banks used the ACLF window very sparingly.

While domestic money market rates ruled higher during 1999-2000 than those during the previous year, the average 3-month forward premia ruled sharply lower at around 4.5 per cent during 1999-2000 than 7.2 per cent during 1998-99. With the forex market characterised by excess supply conditions on account of turnaround in export growth coupled with portfolio investment inflows, the forward premia exhibited a decline during the second half of 1999-2000. The 3-month forward premia ruled low at 3.1 per cent on March 31, 2000 and declined further to 2.5 per cent on April 13, 2000. The gap between the domestic money market rates and the forward premia in the foreign exchange market has continuously increased since September 1998 (Chart 30). While call rates oscillated around its mean of 8.7 per cent during June 1998 to March 2000, the forward premia exhibited a downward drift from 10.2 per cent in June 1998 to 7.0 per cent in March 1999 and further to 3.8 per cent in March 2000.

Chart 29 : Refinance Drawals from the Reserve Bank by Scheduled Commercial Banks (Reporting Fridays)

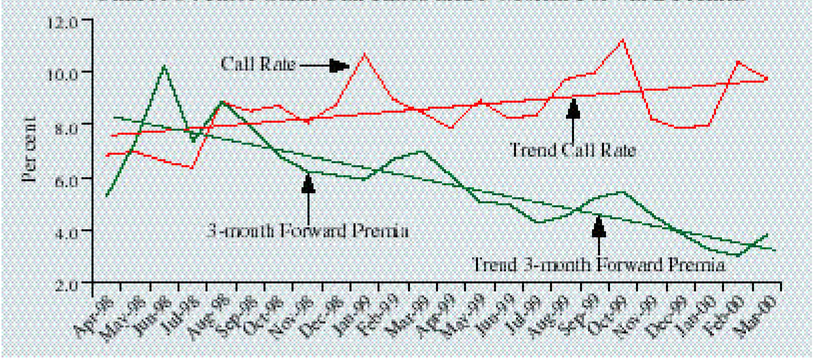


Reflecting the relatively stable call rate, as well as the acceleration in credit demand and growth of banks' investment portfolio, the average daily turnover in the money market increased to Rs.38,902 crore during the fortnight ended March 10, 2000 from Rs.33,009 crore during the fortnight ended March 26, 1999. On an average basis, the daily turnover increased by 30.5 per cent to Rs.33,882 crore during 1999-2000 (up to March 10, 2000) from Rs.25,956 crore in the corresponding period of the previous year (Chart 31). The participation of banks and PDs (as both lenders and borrowers) and non-bank institutions (as lenders only) increased substantially during 1999-2000.

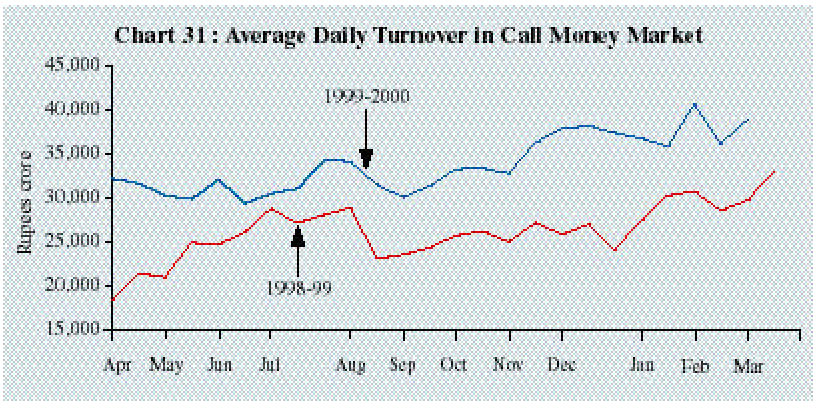
Treasury Bills

At the shortest end, the average cut-off yield of 14-day Treasury Bills rose to 8.38 per cent in 1999-2000 from 7.79 per cent in 1998-99, representing an increase of 59 basis points over the previous year. Similar trends were also observed in respect of the 91-day and 364-day Treasury Bills as their average cut-off yields rose by 41 basis points to 8.97 per cent and by 58 basis points to 10.09 per cent, respectively, in 1999-2000. At times of temporary tight money market conditions, the Reserve Bank by accepting devolvement in primary auctions ensured that the cut-off yields did not become too volatile. During October 1999, the Reserve Bank devolved on itself the entire notified amount of Rs.100 crore on each of the 3 out of 5 auctions of 91-day Treasury Bills. Similarly, the Reserve Bank accepted devolvement of 91-day Treasury Bills in May, August and September 1999 and February and March 2000. In these months, the average cut-off yields of 91-day Treasury Bills were lower than the average inter-bank call rates. On an average, the cut-off yields of 91-day Treasury Bills were 7 basis points lower than the average call rates during 1999-2000 (as against higher by 41 basis points in 1998-99). Consequent to the monetary policy measures announced on April 1, 2000, the cut-off yield of 91-day Treasury Bills declined sharply by 117 basis points to 8.00 per cent in the auction held on April 7, 2000 from 9.17 per cent in the auction held on March 31, 2000. The yield, however, increased to 8.12 per cent in the auction held on April 13, 2000.

Chart 30 : Inter-bank Call Rates and 3-Month Forward Premia



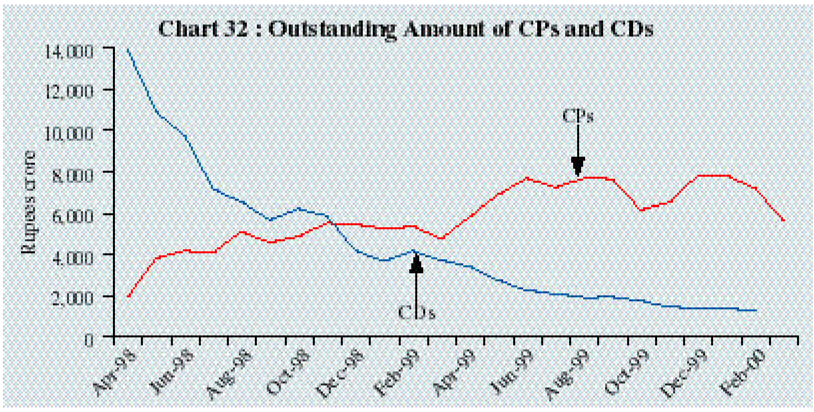
The cut-off yield of 182-day Treasury Bills was largely driven by demand conditions. Between May 1999 (since its re-introduction) and August 1999, the cut-off yield of 182-day Treasury Bills varied within the range of 9.31 to 9.97 per cent. With the relative hardening of the cut-off yields, the Reserve Bank accepted substantial devolvement of 182-day Treasury Bills during September and October 1999 which stabilised the rate at around 9.89 per cent. The cut-off yield declined to lower levels since November 1999. In the last auction of February 2000, the Reserve Bank absorbed a substantial part of the notified amount under its portfolio in the wake of some tightening of money market conditions. Between end-May 1999 and end-March 2000, the cut-off yield of 182-day Treasury Bills declined by 24 basis points. In the first auction of 2000-01, held on April 11, 2000, the cutoff yield declined to 8.53 per cent from 9.47 per cent in the previous auction (on March 29, 2000).



The 364-day Treasury Bill market, more or less, reflected the trends seen in the dated securities market, particularly during the second half of 1999-2000. The cut-off yield which opened at 9.97 per cent in the first auction of April 1999 exceeded the 10 per cent mark in May 1999, with the hardening of money market conditions. The Reserve Bank’s substantial subscription during June to October 1999 (excluding August) stemmed the pressure on the 364-day Treasury Bill rates. The cut-off yield ruled around 10.33 per cent during these months. With the easing of money market conditions and improving demand, the cut-off yield showed a gradual decline to 9.31 per cent in the first auction of February 2000, although it steadily rose to 9.93 per cent in the last auction of 1999-2000. Reacting to the liquidity enhancing measures announced on April 1, 2000, the cut-off yield declined sharply by 64 basis points to 9.29 per cent in the first auction of fiscal 2000-01.

Deposit Rates

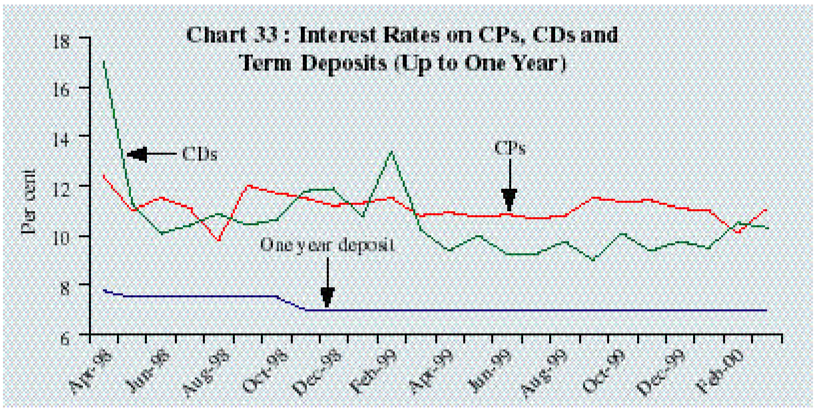
Deposit rates across all bank groups and across all maturities exhibited a declining trend during 1999-2000. While public sector banks reduced interest rates only on deposits above three year maturities - in June 1999 by 50 basis points and in November 1999 by 25 basis points to a range of 9.75 to 11.0 per cent – private sector banks reduced deposit rates on maturities up to 3 years, keeping deposit rates above 3 years unchanged. Foreign banks also reduced deposit rates on maturities up to 3 years. Following the reduction in the interest rates on public provident fund and National Savings Certificate and general provident funds from 12 to 11 per cent in January 2000 and the cut in the savings deposit rate by 0.5 percentage point as also the decline in the Bank Rate and the CRR, in April 2000, there has been a general reduction in the deposit rates of most public sector banks across all maturities by 50 to 200 basis points.



Other Money Market Instruments

The underlying comfortable liquidity condition was manifested in the form of a substantial pick-up in the commercial paper market and the declining importance of the certificates of deposits (CDs) as an instrument of resource mobilisation during 1999-2000 (Chart 32).

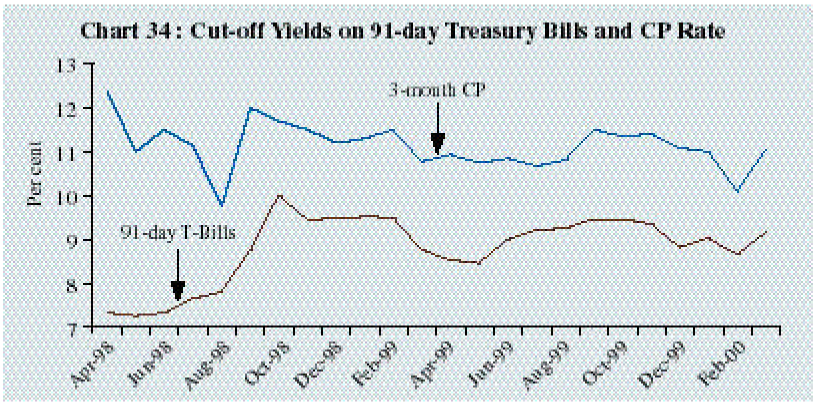
The outstanding amount of CDs continued to exhibit a declining trend since April 1998 (Rs.14,584 crore as on April 10, 1998) reaching the historical low of Rs.1,243 crore on March 10, 2000. The declining importance of this relatively high-cost instrument of resource mobilisation not only reflected the improved liquidity conditions but also the shortening of maturity and interest rate deregulation on term deposits (other than CDs) facilitating banks' short-term liability management at a lower cost. Interest rates on CDs (up to one year maturity) increased to 7.85-12.78 per cent during the fortnight ended March 10, 2000 from 7.75-12.55 per cent during the corresponding fortnight of the previous year.



Continuing the trend since 1998-99, the primary commercial paper market remained active during 1999-2000. Easy liquidity conditions facilitated top rated corporates to raise funds at rates lower than the prime lending rates (PLRs) of banks. The outstanding amount of CPs which stood at Rs.4,770 crore as on March 31, 1999 increased to Rs.5,663 crore as on March 31, 2000, with the peak at Rs.7,814 crore as on January 31, 2000. The outstanding amount of CPs averaged Rs.6,936 crore during 1999-2000 as compared with

Rs.4,169 crore during 1998-99. The discount rate on CPs (up to one year maturity) stayed within the range of 10.0-12.0 per cent during the fortnight ended March 31, 2000 as compared with 9.1-13.3 per cent in the corresponding fortnight of the previous year. Most of the CP issues were at rates lower than the PLRs of 12.0-13.5 per cent of public sector banks. The movement of interest rates on CDs, CPs and one year deposit rate of banks indicated that while deposit rates remained relatively inflexible, the interest rates for wholesale deposits by way of CDs generally moved in line with the market condition (Chart 33).

The interest rate differential between the risk-free yields on 91-day Treasury Bills and average effective rate of discount on 3-month CPs provides an indicator of risk premia. Chart 34 shows that the risk premia declined substantially from an average of 2.6 percentage points during 1998-99 to 1.3 percentage points during 1999-2000.



Long-term Interest Rates

Government Bond Yields

The long-term interest rates in the economy moved downward during 1999-2000. This trend was evident in all segments of the financial market *viz.,* the government securities market, credit market and private bond market. In the government securities market investors' preference strengthened for medium and longer maturity papers, as clearly evident from the sharp increase in liquidity and demand led price rally in the market. Thus, out of Rs.86,630 crore of new issues of Central Government's dated securities, as much as 75.2 per cent (Rs.65,130 crore) were raised through securities of 10-year maturity and above while only 24.8 per cent (Rs.21,500 crore) were raised through issues of less than 10-year maturity. In the primary market, the bids received substantially exceeded the notified amount in each of the 21 auctions held, excluding 8 private placements and one tap issue. In some of the auctions, particularly in the second half of 1999-2000, bids received were above 200 per cent of the notified amount. Consequently, the need for direct devolvement on the Reserve Bank did not arise. However, the practice of placing government debt with the Reserve Bank on private placement basis continued as a strategy of debt and liquidity management. During 1999-2000, the number of new issues were limited as the existing stocks were reissued on a number of occasions at progressively lower yield, in line with the trends in the secondary market yield.

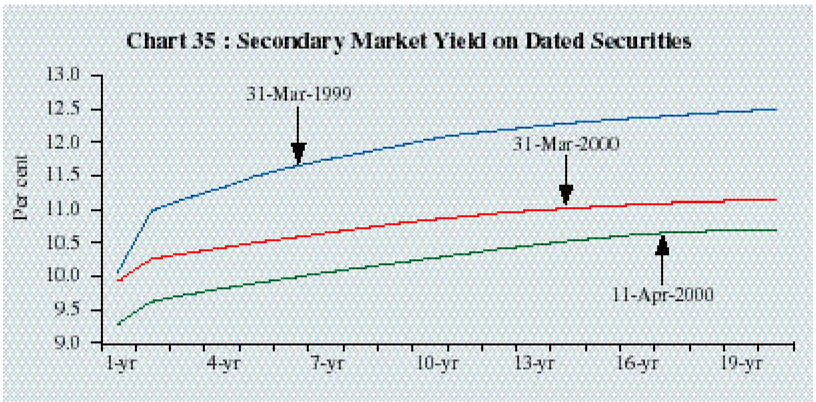
The typical yield in the secondary market for 10 year paper declined through the year to 10.42 per cent by end-February 2000 from 12.05 per cent on March 31, 1999.

Table 8 : Yield Spread of Central Government Dated Securities

(in percentage point)

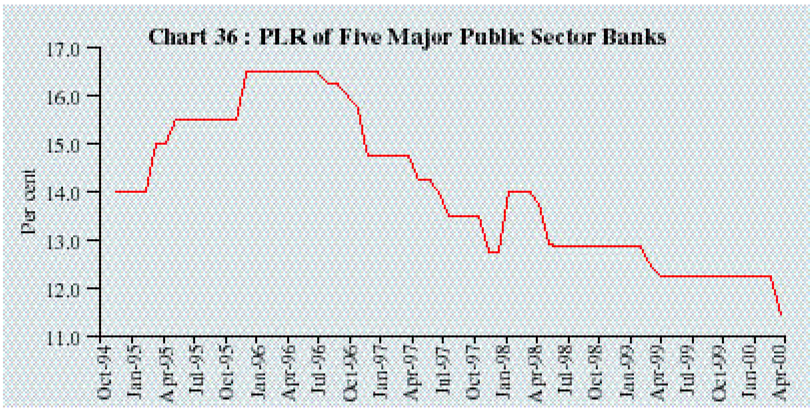
As on	Spread of 10 year Over 1 year	Spread of 10 year over 5 year
1	2	3
End-March 1999	1.98	0.55
End-March 2000	0.92	0.34

The yield hardened somewhat in March 2000, while settling at 10.85 per cent on March 31, 2000. On a point-to-point basis, the yield on 10-year security declined by 120 basis points between end-March 1999 and end-March 2000. Similarly, the yield on 18-year security (residual maturity) declined to 10.72 per cent at end-February 2000 from 12.44 per cent at end-March 1999 before increasing to 11.12 per cent at end-March 2000. At the short to medium end, the 1-year, 3-year and 5-year security rates declined from 10.07 per cent, 11.17 per cent and 11.50 per cent, respectively, at end-March 1999 to 9.93 per cent, 10.35 per cent and 10.51 per cent at end-March 2000. The yield spread between the 10-year and 1-year security which was 198 basis points at end-March 1999 declined to 92 basis points at end-March 2000. Similarly, the yield spread between the 5-year and 10-year security rate came down from 55 basis points at end-March 1999 to 34 basis points at end-March 2000 (Table 8).



The yield curve moved successively downward during the year with the slope becoming flatter along the higher maturity axis (Chart 35). The yield curve once again moved down following the monetary policy changes announced effective April 1, 2000. The typical yield in the secondary market for 10-year paper declined from 10.85 per cent as at end - March 2000 to 10.47 per cent as on April 4, 2000 and further to 10.27 per cent as on April 11, 2000. Similarly, the yield on 18-year maturity declined from 11.12 per cent as at end-March 2000 to 10.68 per cent as on April 11, 2000. At the short to medium end, 1-

year and 5-year security rates declined from 9.93 per cent and 10.51 per cent as at end-March 2000 to 9.29 and 9.90 per cent, respectively, as on April 11, 2000.



Bank Lending Rates

The prime lending rates of major bank groups exhibited a declining trend during 1999-2000. The PLR of public sector banks declined in the range of 12.0 to 13.5 per cent in February 2000, from 12.0 to 14.0 per cent in April 1999 (Chart 36). The PLR of foreign banks which ranged between 12.5-18.5 per cent in April 1999 declined to the range of 10.5-17.5 per cent in September 1999. Similarly, the PLR of private sector banks which was in the range of 13.5-16.5 per cent in April 1999 declined to 10.25-16.0 per cent by December 1999. The lending rate spread (i.e. the difference between the maximum interest rate charged by a bank and its PLR) varied between 3.5 percentage points and 7.5 percentage points among foreign banks and 3.5-4.5 percentage points among public sector banks. While all bank groups have redefined their interest rate structure through changes in their respective PLRs, the lending rate spread remained unaltered. With the announcement of a package of monetary policy measures on April 1, 2000, the PLR of major public sector banks declined by further 50-75 basis points to 11.25-11.75 per cent during the second week of April 2000.

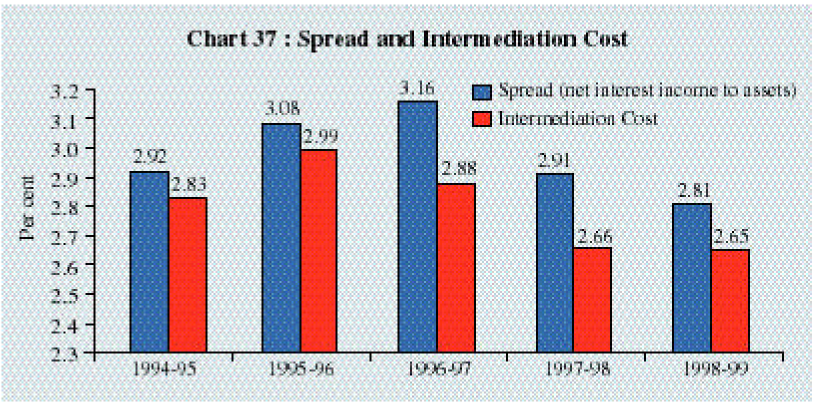
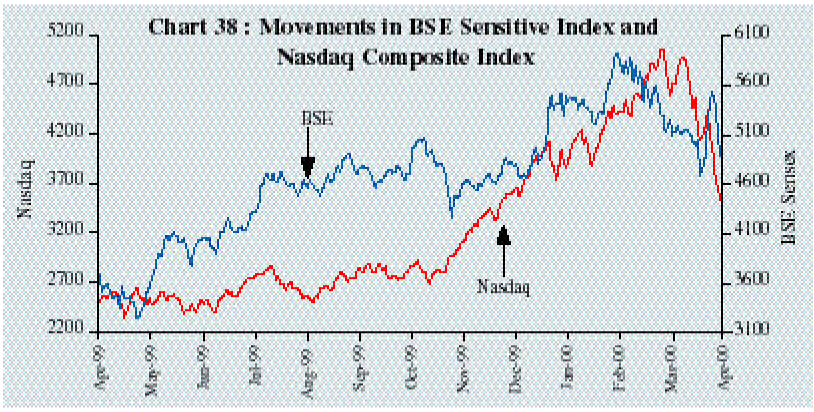


Chart 37 shows trends in the intermediation cost (operating expenses to total assets) and spread (net interest income as a percentage of total assets) of public sector banks since 1994-95. Intermediation cost declined by 1 basis point during 1998-99 as against a decline of 22 basis points during 1997-98 and 11 basis points during 1996-97. The spread, on the other hand, declined substantially by 10 basis points in 1998-99. The spread has come under pressure on account of a fall in interest income and rise in interest expenses with successive declines in lending rates and a relatively sticky deposit rate. The spread is estimated to have declined further in September 1999. The prospect of a further substantial decline in the lending rates would depend on the extent of reduction in the transaction cost and improvement in the flexibility of the deposit rate.

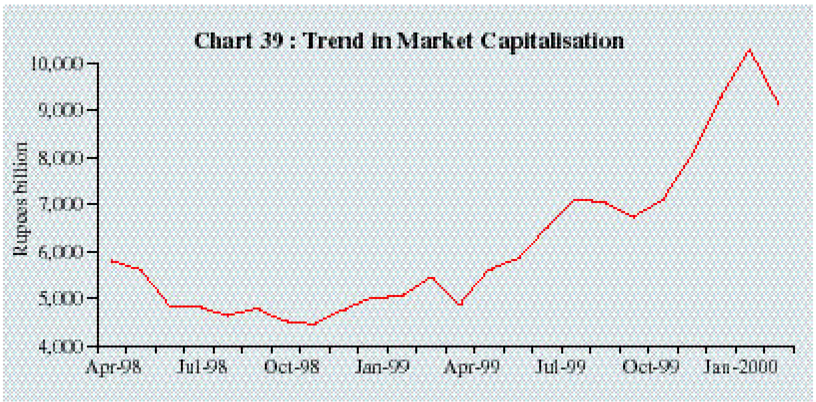
Equity Market

Signs of industrial recovery, improved corporate sector performance and strengthened macro economic fundamentals, such as, low inflation and upgrading of outlook on India from ‘stable’ to ‘positive’ by Moody’s helped the market sentiment. There was a reasonably broad-based rally in share prices along with sharp rise in the prices of infotech stocks (Chart 38). Banking sector scrips, especially new private sector banks, also performed well during the period from end-September 1999 to end-March 2000.



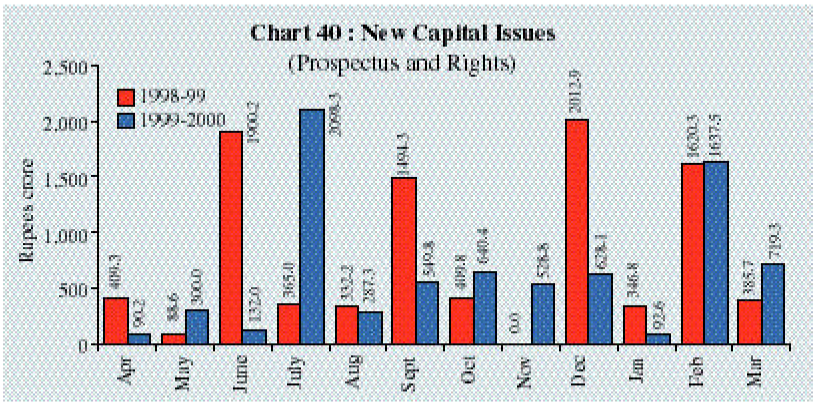
The BSE Sensitive Index (Base: 1978-79 = 100), which was at 3739.96 as on March 31, 1999 breached the 5000-mark on October 8, 1999 and the 6000-mark during intra-day trading on February 11, 2000 contributed, inter alia, by smooth rollover to the year 2000, increased buying by FIIs and passage of important economic bills like Insurance Regulatory Authority Bill, FEMA and Securities Laws (Amendment) Bills 1999. The 30-scrip BSE Sensex closed the year 1999-2000 at 5001.28, registering a net gain of 1261 points (33.7 per cent) over end-March 1999. On an average basis, the BSE Sensex increased by nearly 41.4 per cent during 1999-2000 as against the decline of 13.6 per cent during the previous year. In recent times, stock markets in India have been closely following the developments in the international stock markets, especially the NASDAQ. Reflecting the recent volatility in international stock markets, the BSE Sensex in the first fortnight of April 2000 moved in the range of 4691.46 and 5541.54. The BSE Sensex closed at 4880.71 as on April 17, 2000.

The market capitalisation at BSE went up substantially by 67.4 per cent from Rs.5,45,361 crore as at end-March 1999 to Rs.9,12,842 crore as at end-March 2000 (Chart 39). The P/E ratio of BSE Sensex based scrips increased from 20.6 as at end-September 1999 to 21.6 as at end-March 2000. The average daily turnover at BSE increased sharply from Rs.2,071 crore in March 1999 to Rs.4,051 crore in March 2000. The volatility in share prices as measured by the coefficient of variation in respect of BSE Sensex, also increased to 13.18 per cent during 1999-2000 from 11.78 per cent during the previous year. To contain volatility for ensuring safety and stability of the market, SEBI advised stock exchanges to consider imposing higher special/ad hoc margins, reducing capital adequacy linked gross exposure limit, and increasing the daily carry forward margin and additional volatility margin. Deliveries as percentage of turnover during 1999-2000 were generally higher, indicating a lower extent of speculation than in 1998-99.



Reflecting the trend in secondary market, the primary capital market showed some signs of revival during 1999-2000, with more number of issues coming into the market. During April-December 1999-2000, private placement at Rs.41,477 crore continued to dominate resources mobilisation as against Rs.33,769 crore mobilised during the corresponding period of the previous year. Six Euro issues aggregated Rs.3,487 crore (US $ 800 million) during 1999-2000 as against three issues of Rs.1,148 crore during the previous year. The amount mobilised through new capital issues by way of both prospectus and rights issues (by the non-Government Public Limited Cos., FIs and the public sector), however, declined to Rs.7,704 crore during 1999-2000 from Rs.9,365 crore during 1998-99, mainly due to decline in 'mega' issues (Rs.100 crore and above) (Chart 40).

Resource mobilisation by mutual funds (MFs), led by the private sector mutual funds, witnessed a turnaround during April-February 1999-2000. Gross resources mobilised by MFs at Rs.50,447 crore registered a growth of 158.3 per cent over the corresponding period of the previous year. Net resources mobilised by MFs increased to Rs.17,966 crore in contrast to a net outflow of Rs.1,204 crore during the corresponding period of the previous year. FIIs made net purchases to the tune of Rs.9,939 crore on the Indian bourses during 1999-2000 as compared with a net disinvestment of Rs.807 crore during the previous year. During April-February 1999-2000, financial assistance sanctioned and disbursed by all India financial institutions (AIFIs) at Rs.87,270 crore and Rs.50,768 crore, respectively, increased by 16.0 per cent and 15.5 per cent, over those of the corresponding period in the previous year.



The recent strong increase in equity prices and the resulting high growth in market capitalisation the world over have raised issues regarding their implications for monetary policy. Asset prices can affect the aggregate demand level in the economy by creating a wealth effect. They can also render the measurement of inflation difficult, as conventionally measured price index would not capture the impact of asset price inflation. Rising asset prices, nevertheless, have implications for the industry to the extent that they reduce the capital cost and increase the level of investment in the economy.

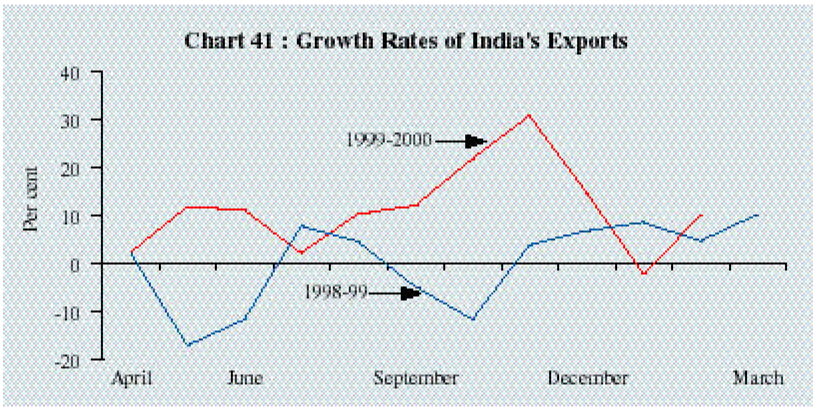
In India, households' investment in equities and debentures form a very small component of their total financial assets. The share of equities in households' gross financial saving, which peaked at 13.5 per cent in 1993-94 declined to 2.6 per cent in 1998-99. There is, therefore, not much of evidence that inflationary expectations are influenced by stock price changes. From the viewpoint of soundness of financial institutions as well as systemic stability, it is, however, important to ensure that the banking system's exposure to stock market is within limits and banks follow stringent prudential norms while lending against shares.

V. The External Economy

The world economic outlook strengthened further with the projected output growth rate for 1999 and 2000 being revised upwards to 3.3 per cent and 4.0 per cent from 2.9 per cent and 3.4 per cent, respectively. Advanced economies are projected to record stronger growth, driven by continued expansion in the US economy and a more robust recovery in the Euro area. There seems to be an upside risk that growth in advanced countries may exceed the projections. Developing countries are projected to grow at 5.1 per cent in 2000 as against 3.7 per cent in 1999. The crisis affected emerging Asian markets seem to have recovered faster than expected, with the ASEAN-4 growth forecasts for 2000 placed at 4.2 per cent in contrast to a negative 9.5 per cent growth in 1998. Successful policies of macroeconomic adjustment together with evolving prudential standards have contributed to substantial improvement in financial and macroeconomic conditions in emerging market economies as reflected in the return of exchange rate stability and rally in equity prices.

The volume of world trade in goods and services is projected to increase by 7.2 per cent in 2000 as against 4.7 per cent in 1999. While the inflation rate in advanced economies at 1.4 per cent in 1999 and 1.9 per cent (projected) in 2000 ruled low, that in respect of developing countries is expected to decelerate to 5.7 per cent from 6.6 per cent in 1999 and 10.1 per cent in 1998. World manufacturing prices in US dollars are expected to bottom out in 2000 and record an increase of 1.4 per cent in 2000 after a continuous decline in the preceding four years. This is an encouraging sign for the developing countries' export growth. High crude oil prices, which broke through US $ 30 per barrel in February 2000 – the highest since the Gulf war days - are, however, a major cause for concern. The oil prices have moderated in the recent weeks but still remain firm in relation to previous years. *S*ome other areas of concern are: the possibility of lop sided growth among principal currency areas creating increased payments imbalances, seemingly misaligned exchange rates among several key currencies relative to fundamentals and the downside risk of the current high level of stock valuations.

Gross private capital flows to the emerging market economies remained subdued in 1999. Despite a moderate increase to US $ 172.9 billion in 1999 from US $ 149.8 billion in 1998, they remained below the average of US $ 258 billion during 1996 and 1997. On account of large repayments, net flows rose marginally from the decade low of US $ 60 billion in 1998 to US $ 64.4 billion in 1999. Net capital flows, too, are projected to remain subdued in 2000.

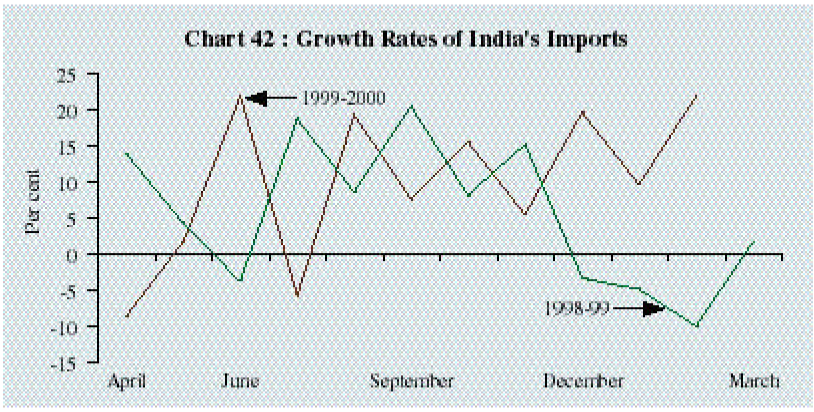


The matrix of international economic factors - barring the uptrend in oil prices - remain favourable to the Indian economy. The balance of payments (BoP) situation remained comfortable during the year despite a number of adverse developments in the form of domestic uncertainty, border tensions and a spurt in international crude prices. Foreign currency assets of the Reserve Bank enlarged by US $ 5.5 billion during 1999-2000 on top of an increase of US $ 3.5 billion in the previous year. The foreign exchange market remained generally stable and was, in fact, characterised by excess supply conditions on account of a turnaround in export growth coupled with portfolio investment inflows. Reflecting the favourable developments in the foreign exchange market, the average six-month forward premia eased to under 5 per cent as against around 8 per cent during 1998-99.

The BoP data available for the first three quarters (April-December) of 1999-2000 indicate marked buoyancy in private transfers and software exports. The recovery in merchandise exports coupled with robust growth in software earnings and continuing buoyancy in private transfers suggest that the current account deficit in 1999-2000 would be well below 1.5 per cent of GDP, which could easily be financed through normal capital flows, despite higher POL imports on account of the increase in crude oil prices.

Merchandise Trade

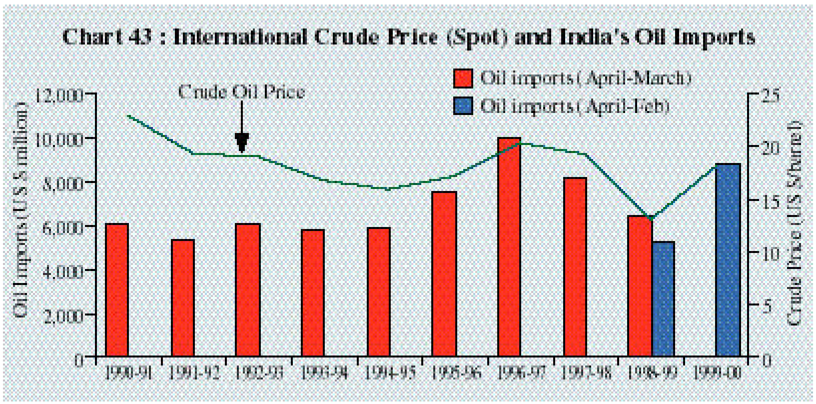
The trade deficit at US $ 8.7 billion during 1999-2000 (up to February 2000) was higher than that of US $ 8.1 billion in the corresponding period of 1998-99 according to the Directorate General of Commercial Intelligence and Statistics (DGCI&S) data, as export growth was largely offset by a sharp increase in oil imports.



Exports recorded a growth of 11.1 per cent during 1999-2000 (up to February 2000) in sharp contrast to a decline of 1.9 per cent during the corresponding period of 1998-99, largely on account of a recovery in manufactured goods' exports. Exports showed a sustained increase from the beginning of the year breaking the declining trend witnessed in the previous year. Export growth, after reaching the peak of 30.7 per cent in November 1999, decelerated in December 1999, turned negative in January 2000 and then recovered to 9.7 per cent in February 2000 (Chart 41).

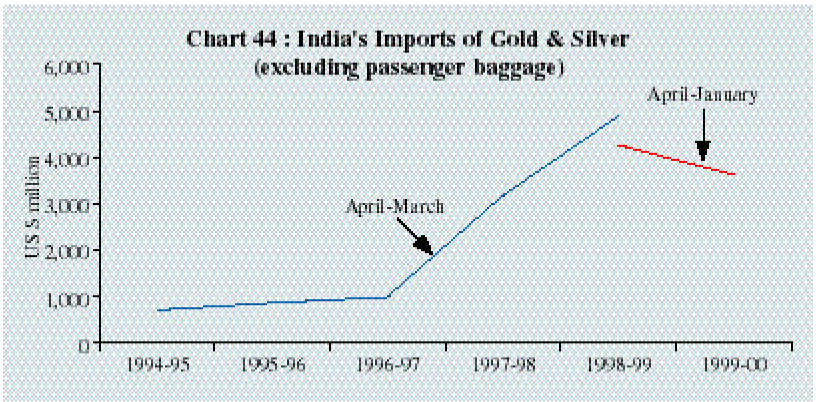
Import growth at 10.2 per cent during 1999-2000 (up to February 2000) remained higher than 3.1 per cent during the corresponding period of 1998-99 (Chart 42). The oil import bill surged by 66.4 per cent during 1999-2000 (up to February 2000) in contrast to a decline of 25.2 per cent during the corresponding period of 1998-99 with the increase in international oil prices by about 39 per cent during 1999 over the level in 1998 (Chart 43). On year-on-year basis, the oil price rose from US $ 11.45 a barrel during January 1999 to US $ 25.31 a barrel during January 2000, showing an increase of 121.0 per cent. Non-oil imports, on the other hand, decelerated to 1.1 per cent during 1999-2000 (up to February 2000) from an increase of 9.8 per cent during the corresponding period of 1998-99. Capital goods imports declined by 20.2 per cent during 1999-2000 (up to January 2000) in contrast to an increase of 9.5 per cent in the comparable period of the previous year. The decline in capital goods imports has growth implications as imported capital goods could be technology embodied in nature and could accompany flow of foreign investment. Imports of gold and silver, which had increased at a very fast rate during 1997-98 and 1998-99, declined by 14.8 per cent during 1999-2000 (up to January 2000).

Even with this decline, imports of gold and silver remained at a very substantial level of US $ 3.6 billion during 1999-2000 (up to January 2000) as against US $ 4.3 billion during the corresponding period of 1998-99 (Chart 44). Non-oil non-gold imports recorded a marginal increase of 2.4 per cent during 1999-2000 (up to January 2000) as against 5.3 per cent during the corresponding period of the previous year.



Current Account

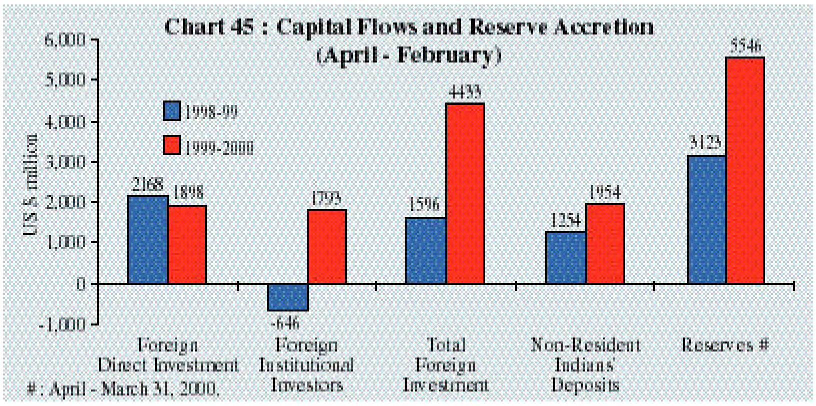
The current account deficit at US $ 4.1 billion during 1999-2000 (up to December 1999) was marginally lower than that of US $ 4.3 billion during the corresponding period of 1998-99. The net invisible surplus at US $ 7.2 billion during April - December 1999 was the same as that during the corresponding period of last year. Higher miscellaneous invisible payments were compensated by a 17.0 per cent increase in private transfers to US $ 8.9 billion and a 58.7 per cent surge in software exports to US $ 2.9 billion.



Capital Account

Capital flows, led by portfolio inflows and non-resident deposits, continue to remain strong, enabling the build-up of reserves. Foreign investment inflows during 1999-2000 (up to February 2000) at US $ 4.4 billion were significantly higher than that of US $ 1.6 billion in the corresponding period of 1998-99 on account of higher portfolio inflows (Chart 45). Foreign institutional investor (FII) inflows amounted to US $ 1.8 billion during 1999-2000 (up to February 2000) in contrast to an outflow of US $ 0.6 billion during the comparable period of the previous year. Similarly, the resources raised under

GDRs/ADRs increased to US $ 0.6 billion during 1999-2000 (up to February 2000) from US $ 15 million during the corresponding period of the previous year. Direct investment inflows during 1999-2000 (up to February 2000) at US $ 1.9 billion, however, were lower as compared with the corresponding period of 1998-99 (US $ 2.2 billion). Drawals under external commercial borrowings (ECBs) at US $ 2.2 billion during 1999-2000 (up to December 1999), were almost the same as in the corresponding period of 1998 (excluding RIBs). The demand for ECBs, notwithstanding the decline in average six-month forward premia from 8.2 per cent during April-December 1998 to 5.2 per cent during April-December 1999, was sluggish partly reflecting the attractiveness of borrowing from domestic sources. Inflows under NRI deposits during 1999-2000 (up to February 2000) at US $ 2.0 billion were significantly higher than that of US $ 1.3 billion in the corresponding period of 1998-99. The proportion of FCNRB deposits swapped into rupees continued to be within reasonable limits.



Reserves

Total foreign exchange reserves as on March 31, 2000 amounted to US $ 38.0 billion or around eight months of imports. The foreign currency assets of the Reserve Bank increased to US $ 35.1 billion as on March 31, 2000, on account of the turnaround in export growth and portfolio investment despite the surge in POL imports. The value of monetary gold increased marginally by US $ 14 million to US $ 3.0 billion over the same period. Forward liabilities at US $ 0.7 billion as on March 31, 2000 worked out to less than 2.0 per cent of the outstanding foreign currency assets, reflecting the conscious policy of the Reserve Bank to contain such liabilities at a manageable level in relation to the size of reserves.

[1] The actual ICOR is computed as a ratio of rate of real gross domestic capital formation and growth rate of real GDP. The ICOR could be seen as having two components *viz*., a permanent component capturing the underlying trend in productivity and a cyclical component capturing the temporary shocks. An idea about the trend component of ICOR can be had by filtering out the effects of cyclical component from the actual ICOR. The Hodrick-Prescott (HP) filter is a commonly used method to estimate the trend component of a series. The HP filter is easy to implement and tractable for policy purposes. The estimates of trend component of ICOR presented here follow the HP method, using the sample data of saving, investment and growth rate for the Indian economy for the period 1980-81 to 1998-99.

[2] Permanent component of output growth in this exercise has been generated by using the HP filter (see

footnote 1).

[3] The gross fiscal deficit is the excess of total expenditure including revenue and capital expenditure and net disbursement of loans by the Central government (excluding the States' and UTs' share of small savings) over the revenue receipts and proceeds from disinvestment.

[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.