III

MONEY, CREDIT AND PRICES

3.1 The objectives of monetary policy continue to be the pursuit of price stability and the need to ensure the availability of adequate credit for the productive sectors of the economy. The emphasis between these objectives, however, depends upon the specific circumstances of the year in question. In the face of a distinct moderation in the inflation rate, the thrust of monetary policy during 1997-98 was to provide conditions that enable adequate flow of credit to the productive sectors of the economy. Expansion of bank credit, in the conventional sense, to the commercial sector was perceptibly higher during 1997-98 than that of the previous year, although its full impact on the real sector was somewhat constrained. With net bank credit to government expanding and capital flows showing improvement, the increase in broad money was 17.6 per cent, above the long-term trend. However, during the course of the year, the economy was subjected to speculative forces in the foreign exchange market, between October 1997 and early January 1998, under the influence of the South-East Asian crisis, compelling the Reserve Bank to take strong monetary policy measures. However, with the presence in the foreign exchange, money and debt markets, the Reserve Bank could ensure that liquidity conditions were stable and market interest rates returned to normal levels.

MONETARY DEVELOPMENTS

3.2 The broad money (M_3) increase of 17.6 per cent (Rs.1,23,541 crore) in 1997-98 was higher than that of 16.2 per cent (Rs.97,841 crore) recorded in 1996-97 (Table 3.1), partly reflecting the lagged effects of the successive reductions in reserve requirements by four percentage points in the previous year. While M_3 growth in 1997-98 exceeded the indicated targeted range of 15.0 to 15.5 per cent for the year, it was nevertheless comparable to the long-run average rate of 17.2 per cent beginning 1981-82. The year-on-year M_3 growth rates, on a fortnightly basis, indicate that except for a brief period

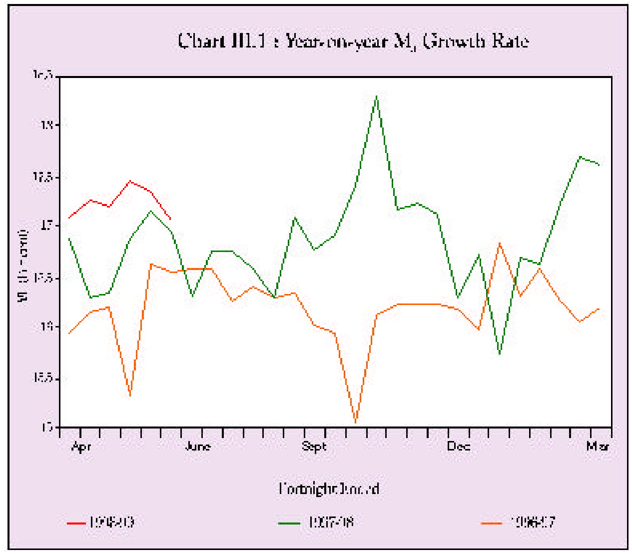


Chart III.1 : Year-on-year M_3 Growth Rate

during October-November 1997 and March 1998, the expansion of broad money in 1997-98 was in alignment with that in the previous year (Chart III.1). On an annual average basis, the growth rate of M_3 was placed at 16.9 per cent in 1997-98 as compared with 16.2 per cent in 1996-97.

3.3 The sharp increase in monetary growth during 1997-98 was reflected mainly in a spurt in bank deposits (Rs.1,10,035 crore or 19.4 per cent as compared with an increase of Rs.84,162 crore or 17.4 per cent in 1996-97), which in turn was rendered possible by a substantial accretion to scheduled commercial banks' time deposits (21.2 per cent). This was particularly so in the last fortnight of March 1998 when aggregate deposits of scheduled commercial banks increased by Rs.22,262 crore. In contrast to the developments in 1996-97, when the accretion to scheduled commercial banks' time deposits was driven by inflows under non-resident deposit schemes, the increase in time deposits in 1997-98 was essentially domestic in nature reflecting a combination of favourable factors, *viz.*, interest rate deregulation in respect of short-term time deposits and the increased risk perception associated with competing deposit takers such

Table 3.1 : Variations in Monetary Aggregates

(Per cent)

Item	1997-98P	1996-97	April-June 1998-99P	April-June 1997-98P
1	2	3	4	5
I. Reserve Money	13.1	2.8	1.5	4.4
II. Narrow Money (M_1)	11.1	12.0	3.3	3.9
III. Broad Money (M_3)	17.6	16.2	3.6	4.1
IV. Components of Broad Money				
a) Currency with the Public	9.9	11.7	8.8	9.3
b) Aggregate Deposits (i+ii)	19.4	17.4	2.4	2.6
i) Demand Deposits	12.4	13.0	-4.1	-4.7
ii) Time Deposits	21.0	18.5	3.8	4.2
V. Sources of Broad Money				
a) Net Bank Credit to the Government (i+ii)	14.6	12.0	8.9	6.6
i) Net Reserve Bank Credit to the Government	8.8	2.3	11.2	0.6
Of which: to Centre	10.7	1.6	11.3	3.3
ii) Other Banks' Credit to the Government	18.9	20.5	7.3	11.1
b) Bank Credit to Commercial Sector	14.9	9.2	-0.8	-0.7
c) Net Foreign Exchange Assets of the Banking Sector	20.0	28.4	-0.3	8.0

P Provisional.

as non-bank financial companies. Currency expansion at 9.9 per cent (Rs.13,095 crore) in 1997-98 was lower than that of 11.7 per cent (Rs.13,829 crore) in the preceding year, contributing to deceleration of narrow money to 11.1 per cent or Rs.26,607 crore in 1997-98 from 12.0 per cent or Rs.25,780 crore in 1996-97 (Table 3.1 and Appendix Table III.1).

3.4 The high rate of increase in M_3 during 1997-98 was enabled by strong increases in both domestic credit and net foreign exchange assets of the banking sector. A sharp increase of Rs.55,882 crore (14.9 per cent) in bank credit to the commercial sector during 1997-98 (Rs.31,659 crore or 9.2 per cent in 1996-97), driven mainly by a spurt in scheduled commercial banks' non-food credit and expansion of net bank credit to the government by Rs.42,000 crore or 14.6 per cent in 1997-98 (Rs.30,842 crore or 12.0 per cent in 1996-97) formed about four-fifths of the overall increase in M_3. The significant increase in net bank credit to government was indicative of the rise in the Centre's gross fiscal deficit. Net foreign exchange assets of the banking sector showed an increase of Rs.21,073 crore (as against that of Rs.23,355 crore in 1996-97).

3.5 Reserve money growth at Rs.26,248 crore (13.1 per cent) during 1997-98 was substantially higher than that of Rs.5,528 crore (2.8 per cent) in 1996-97 (Table 3.1 and Appendix Table III.2). It may be recalled that the modest increase in the monetary base in 1996-97 was essentially on account of the four percentage point decline in cash reserve requirements amounting to Rs.17,850 crore. With the cash reserve ratio remaining more or less unchanged in 1997-98, scheduled commercial banks' balances with the Reserve Bank increased significantly by Rs.11,948 crore (20.6 per cent) in line with the substantial expansion in bank deposits as against the decline of Rs.9,429 crore in 1996-97. The primary money expansion emanated from capital inflows, particularly in the first half and again towards the close of the year and the increase in the monetised deficit in the second half of the year. Owing mainly to strong money market support especially *via* 14-day and 364-day Treasury Bills in the first half of the year, the Centre's fiscal position looked comfortable till the last quarter of the year when resort was made to ways and means advances (WMA) from the Reserve Bank from the second week of February 1998. Refinance utilisation by scheduled commercial banks was negligible for the larger part of the year barring January 1998 when tightness in the call market forced banks to avail of refinance from the Reserve Bank.

3.6 Notwithstanding the net sales under open market operations (Rs.7,614 crore), the increase in the monetised deficit mainly reflected funding of tap 91-day Treasury Bills (following their discontinuance) into 4.6 per cent Special Securities 1997 (Rs.7,143 crore) and fresh subscription to Central Government securities (Rs.13,028 crore) (Table 3.2).

Table 3.2 : Variations in Net Reserve Bank Credit to the Central Government

(Rupees crore)

Item	1997-98	1996-97	1995-96	April-June 1998-99	April-June 1997-98
1	2	3	4	5	6
Net Reserve Bank Credit to the Centre (1+2+3+4-5)	12,914 (10.7)	1,934 (1.6)	19,855 (20.1)	15,162 (11.3)	4,038 (3.3)
1. Loans and Advances	2,000	0	0	4,953	0
2. Treasury Bills held by Reserve Bank	-44,026	10,086	9,601	-4	-42,475
a) *Ad hoc* Treasury Bills	-33,738	4,631	5,896	0	-33,738
b) Discounted Treasury Bills	-9,464	7,126	659	0	-7,464
c) Auction Treasury Bills	-824	-1,671	3,045	-4	-1,273
3. Reserve Bank's holdings of Dated Securities@	55,666	-8,607	11,782	7,514	44,574
a) Central Government Securities$	24,843	-8,620	11,782	7,514	6,101
4. Reserve Bank's holdings of Rupee Coins	-118	28	-2	71	-82
5. Central Government Deposits	608	-428	1,526	-2,629	-2,021
Memo Items					
1. Market Borrowings of Dated Securities by the Centre*#	43,390	27,911	38,634	35,030	16,000
2. Reserve Bank's subscription to fresh Dated Securities *	13,028	3,698	12,655	14,000	5,884
3. Repos (-) / Reverse Repos (+) *	2,442	-1,424	99	-6,174	-3,225

* At face value. # Excludes Treasury Bills.

@ Includes Special Securities 1997 worth Rs. 50,818 crore created on conversion of *ad hoc* and tap Treasury Bills outstanding as on Mach 31, 1997.

$ Includes special securities worth Rs. 20,000 crore converted into marketable securities.

Parenthetic figures constitute percentage variations over previous year.

Following the phasing out of *ad hoc* Treasury Bills effective April 1, 1997, government balances with the Reserve Bank in excess of the statutory minimum daily balances which were previously used to retire *ad hocs*, were invested in dated securities purchased from the Reserve Bank. With government balances recording large surpluses in the first half of the year, mainly on account of the success of the primary auctions of government securities, the Reserve Bank converted non-transferable 4.6 per cent special securities worth Rs. 20,000 crore into marketable securities in four phases of Rs. 5,000 crore each in order to ensure an adequate stock of government securities for open market operations to modulate liquidity conditions.

3.7 The intra-year variations in primary liquidity presented challenges to liquidity management both in the context of the credit requirements of the government as well as of the capital inflows and the need to obtain orderly conditions in the foreign exchange market (Chart III.2). In the first half of the year, sustained capital inflows necessitated dollar purchases by the Reserve Bank so as to prevent undue exchange rate appreciation and to maintain external competitiveness. Reflecting this, the net foreign exchange assets of the Reserve Bank increased by Rs.11,546 crore (adjusted for revaluation) during April–September 1997 as compared with Rs.5,548 crore (adjusted for revaluation) in the corresponding period of the previous year. The concomitant liquidity generation facilitated the completion of the bulk of the Central

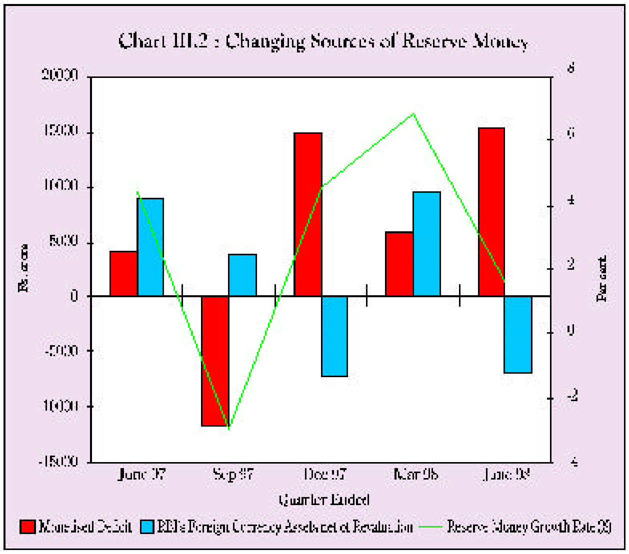


Chart III.2 : Changing Sources of Reserve Money

Government's market borrowing programme at relatively lower rates of interest leading to surpluses in the Central Government account which reduced the monetised deficit and contained the monetary impact of capital inflows. In August 1997, the Centre's monetised deficit recorded a peak surplus of Rs. 10,255 crore. While the net Reserve Bank credit to the Central Government declined by Rs.7,731 crore during the first half of the year, government securities were absorbed by scheduled commercial banks to the tune of Rs.22,765 crore.

3.8 The situation changed in the second half of the year when volatility in the foreign exchange market in the context of the South-East Asian crisis necessitated a series of monetary measures to be taken during November 1997-January 1998. Apart from dollar sales, which resulted in a decline of Rs.7,150 crore in the net foreign exchange assets of the Reserve Bank (adjusted for revaluation) during the third quarter of 1997-98, the policy initiatives were essentially aimed at reducing excess liquidity and the scope for arbitrage between the easy money market and the foreign exchange market. The measures included deferment of pre-announced CRR cuts and raising of reserve requirements in two phases of 0.5 percentage point each to 10.5 per cent, reduction of refinance limits available to scheduled commercial banks, introduction of fixed rate repo auctions and all-round increase in interest rates with the repo rates being progressively raised from 4.5 per cent to 9 per cent, the Bank Rate from 9 per cent to 11 per cent and interest rate surcharge on import finance from 15 to 30 per cent. These measures siphoned off liquidity from the system as reflected in a temporary hardening of call rates and effectively impeded spillovers into the foreign exchange market. Furthermore, dollar sales by the Reserve Bank curbed the volatility in the exchange rate. The absorption of liquidity also resulted in reduced money market support to the government borrowings *via* 14-day and 364-day Treasury Bills and in turn led to an increase in the Centre's monetised deficit. The Reserve Bank used repos and 14-day Treasury Bill auctions as well as reverse repos with primary dealers in order to modulate liquidity, provide a stable corridor of interest rates and at the same time moderate exchange rate fluctuations.

3.9 With the turnaround in capital inflows beginning March 1998 which resulted in an accretion of Rs.7,938 crore (adjusted for revaluation) to the Reserve Bank's net foreign assets in the month of March 1998, some of the monetary policy measures initiated in the previous two months were partially rolled back. The fixed rate for repos auctions was reduced to 8 per cent effective March 18, 1998, the Bank Rate was lowered by 50 basis points to 10.5 per cent effective March 19, 1998 and the CRR was scaled down by 25 basis points each in two phases effective March 28 and April 11, 1998, respectively.

Trends During the First Quarter : 1998-99

3.10 Broad money (M_3) increased by Rs.30,015 crore (3.6 per cent) during the first quarter of 1998-99 which was comparable to the increase of Rs.28,803 crore (4.1 per cent) during the corresponding quarter of the previous year. The increase in M_3 was driven by currency expansion of 8.8 per cent and scheduled commercial banks' time deposits growth of 3.7 per cent (Table 3.1 and Appendix Table III.1). The year-on-year M_3 growth rate at 17.1 per cent as on June 19, 1998 was also comparable to that of 17.0 per cent as on June 20, 1997 (Chart III.1).

3.11 Net bank credit to the Government increased substantially by Rs.29,519 crore or 8.9 per cent during 1998-99 (up to June 19) as against Rs.18,948 crore or 6.6 per cent in the corresponding quarter of the previous year essentially reflecting the sharp increase in the borrowings of the Central Government. Bank credit to commercial sector declined by Rs.3,562 crore (0.8 per cent) as against a decline of Rs.2,515 crore (0.7 per cent) during the corresponding period of the previous year.

3.12 Reserve money increased by Rs.3,411 crore (1.5 per cent) during the first quarter of the current financial year as against the increase of Rs.8,825 crore (4.4 per cent) during the corresponding period of 1997-98 (Table 3.1 and Appendix Table III.2). The subdued expansion of reserve money, in spite of a significant enlargement of the Centre's monetised deficit, was due to the contraction in net foreign assets of the Reserve Bank. The increase in the net Reserve Bank credit to the Centre of Rs.15,162 crore was mainly driven by the incremental WMA availed of by the Centre (Rs. 4,953 crore) and the Reserve Bank's subscription to fresh dated securities (Rs.14,000 crore at face value) moderated by net repos (Rs.6,174 crore at face value) (Table 3.2).

Interest Rates

3.13 Reflecting the comfortable liquidity position, nominal interest rates, particularly at the short-end of the maturity spectrum, exhibited a declining trend during 1997-98 till November 1997, aided as it were by a number of factors such as the sharp increase in liquidity brought about by reduction in CRR in the previous year by about four percentage points, large growth in deposits and a low rate of inflation. The implicit cut-off yield on 91-day Treasury Bills declined from 7.96 per cent in end-March 1997 to 6.22 per cent in October 1997 touching a historical low of 5.72 per cent in mid-April 1997 while that of 364-day Treasury Bills declined from 10.1 per cent to a historical low of 7.98 per cent over the same period. During the period April-November 1997, the repo rates ranged 2.4–4.9 per cent while the cut-off yield on 14-day Treasury Bills, introduced in June 1997, remained unchanged at 4.95 per cent. Long-term nominal interest rates, as indicated by the coupon rate/cut-off yield in respect of government dated securities also declined; for example, a 5-year Central Government security issued in September 1997 at 11.15 per cent was 154 basis points lower than that of a security of similar maturity issued in May 1997. The PLRs of major scheduled commercial banks also declined by 200 basis points from 14.5-15.0 per cent in end-March 1997 to 12.5-13.0 per cent in end-November 1997.

3.14 The scenario, however, changed starting December 1997 as short-term nominal interest rates rose in response to the policy initiatives taken to reduce inter-market arbitrage in order to stem the volatility in the foreign exchange market. The repo rate was progressively hiked to 9.0 per cent by mid-January 1998. The cut-off yield on 14-day Treasury Bills rose to 7.30 per cent and that of 91-day Treasury Bills increased to 7.33 per cent in January 1998. The hardening of interest rates was, however, largely confined to the short-end of the maturity spectrum.

3.15 The policy measures initiated in mid-January 1998 reduced the availability of refinance and increased its cost to the banks which prompted them to raise short-term deposit rates (up to one year) from 5.0-8.0 per cent in December 1997 to 6.0-12.5 per cent in March 1998, leaving longer term deposit rates unchanged. Consequently, the PLRs of major public sector banks rose from 12.5-13.0 per cent in December 1997 to 14.0 per cent during the last quarter of 1997-98 which was also associated with the spurt in non-food credit. The rates on CDs and CPs were also in tune with the liquidity situation (for details refer to Section V).

3.16 The South-East Asian crisis brought to the fore the need to maintain appropriate levels of interest rates and orderly conditions in the forex market with reference to the monetary conditions obtaining in the economy (Box III.1).

3.17 During the first quarter of 1998-99, there was a general softening of interest rates across the maturity spectrum. With the restoration of orderly conditions in the foreign exchange market, the Bank Rate was reduced by one half of one percentage point to 10 per cent on April 2, 1998 and further to 9 per cent on April 29, 1998, realigning it to the pre-January 17, 1998 level. Interest rates linked to the Bank Rate were accordingly revised downwards. Furthermore, the fixed Repo rate was reduced by three percentage points from 8 per cent to 5 per cent during the first quarter of 1998-99. The implicit cut-off yield on the 14-day

Treasury Bills declined from 7.3 per cent in March 1998 to 5.7 per cent by end-June 1998, while the cut-off yield on the 91-day and the 364-day Treasury Bills remained more or less unchanged at around 7.33 per cent and 7.98 per cent, respectively. At the longer end of the maturity spectrum, while the implicit yield on the 10-year government dated security declined by 5 basis points, the implicit yield on the 6-year government paper increased by 18 basis points during the first quarter of 1998-99. In response to the easy liquidity conditions, the PLRs of public sector banks also declined from around 14 per cent during March 1998 to 12.75-13.00 per cent during June 1998.

BANKING DEVELOPMENTS

3.18 Banking developments during 1997-98 were characterised by a sharp accretion to deposits, especially of time deposits, for the second year in succession and a pick-up in

Box III.1
Monetary Conditions Index (MCI)

Following the financial innovations and sharp reductions in transaction costs, variations in quantity aggregates could no longer explain appropriately the variations in aggregate demand and prices. This prompted developed economies to switch from targeting quantity aggregates to targeting rate variables such as short-term interest rates or the exchange rate, or sometimes even directly targeting the goal variable *i.e.*, inflation. However, of late, there have been efforts on the part of some countries *viz*., Canada, New Zealand, Italy, France, Germany, Sweden, Finland, *etc.* to construct a monetary conditions index (MCI), based upon a combination of rate variables, so as to aid their liquidity management consistent with their overall framework of monetary policy. Country experiences indicate that there could be three possible uses of MCI: i) operating target (Canada), ii) leading indicator (Sweden) and iii) measure of monetary conditions (in majority of other countries).

MCI typically reflects the degree by which monetary policy measures have been resisting inflationary pressures in the economy. It is measured as the weighted sum of the change in the short-term interest rate and exchange rate relative to the base period.[1] The weights are generally derived from econometric models. Higher the weight of the interest rate relative to that of the exchange rate, greater is the importance of the former relative to the latter in influencing aggregate demand and prices. Apart from the interest rate and the exchange rate, it is feasible to use any other variable which has a bearing on the goal variable of monetary policy and which the central bank could influence. For example, technically bank credit could be used in the absence of the central bank's control over the financing of government deficit as well as over the behaviour of the net foreign exchange assets of the banking sector, under a monetary targeting framework. In practice, no country uses quantity variables since monetary targeting has been abandoned in these economies.

Cross-country experiences show that MCI is used by those countries which have been targeting short-term interest rates and the exchange rate as part of their intermediate targets of monetary policy. Moreover, given the high degree of openness (as measured by the value of trade as proportion of GDP) of these economies, monitoring of MCI is one possible way of incorporating the exchange rate directly into the framework of monetary policy. Technically, therefore, the greater the openness of an economy, the higher would be the weight of the exchange rate relative to that of the interest rate. This is particularly important in the context of a flexible exchange rate policy and growing internationalisation of economies where both interest rates and the exchange rate play a critical role in the transmission mechanism of monetary policy. Nevertheless, the analytical foundation of the MCI has been criticised on the ground that while the interest rate is exogeneous, the exchange rate is endogeneous and, therefore, these two variables should not be considered as substitutes in the way they are interpreted under MCI (Mervyn King, 1997). Therefore, the movements in the MCI needs to be interpreted with caution.

It needs to be emphasised, however, that the information requirements for evolving a monetary conditions index are substantial. In the Indian context, the absence of high frequency data on output developments and turnovers in different markets, in particular, circumscribe the perspective of monetary conditions.

1. Technically, MCI(v) = α $(r_t - r_b)$ + β $(q_t - q_b)$ + 100 where r and q refer to interest rate and exchange rate respectively, and t and b refer to current period and base period, respectively while v denotes demand pressure which is the MCI focus or target variable.

References

1. Caballero, J.C., J. Martinez Pages and T. Sastre, (1997), 'The Use of Monetary Conditions Indices from a Central Bank's View Point', *Banco De Espana*, July.

2. Freedman, C., (1995), 'The Use of Indicators and of the Monetary Conditions Index in Canada' in T.J.T. Balino and C. Cottarelli (eds.), *Frameworks for Monetary Stability – Policy Issues and Country Experiences*, IMF.

3. King, Mervyn, (1997), 'Monetary Policy and Exchange Rate', *Bank of England Quarterly Bulletin*, May.

4. Reserve Bank of New Zealand, (1996), 'Summary Indicators of Monetary Conditions', Economics Department, *Reserve Bank of New Zealand Bulletin*, Vol.59, No.3.

Table 3.3 : Variations in Major Banking Aggregates

(Per cent)

Item	1997-98	1996-97	1995-96	1990-91 to 1995-96
1	2	3	4	5
1. Aggregate Deposits	19.7	16.5	12.1	17.3
2. Demand Deposits	13.1	12.4	4.8	19.4
3. Time Deposits	21.2	17.5	14.0	17.0
4. Bank Credit	16.4	9.6	20.1	16.8
5. Food Credit	64.4	-22.4	-20.2	37.8
6. Non-food Credit	15.1	10.9	22.5	16.5
7. Investments in Government Securities	17.7	20.2	12.4	21.1

credit expansion (Table 3.3 and Appendix Table III.3). Moreover, the prevalence of easy liquidity conditions during the major part of 1997-98, facilitated banks' investments in government securities at a lower yield.

3.19 The increase in bank credit during 1997-98 at 16.4 per cent, though higher than that of 9.6 per cent recorded in 1996-97 was, however, significantly lower than the average of 19.5 per cent in the preceding three years. Food credit increased sharply mainly due to relatively large procurement of wheat and rice, as against a decline during 1996-97. The expansion in non-food credit was higher at Rs.40,789 crore (15.1 per cent) as compared with Rs.26,581 crore (10.9 per cent) in the previous year. The total flow of resources to the commercial sector from the commercial banks was higher at Rs.54,442 crore during 1997-98 as compared with Rs.30,951 crore in the previous year (Box III.2).

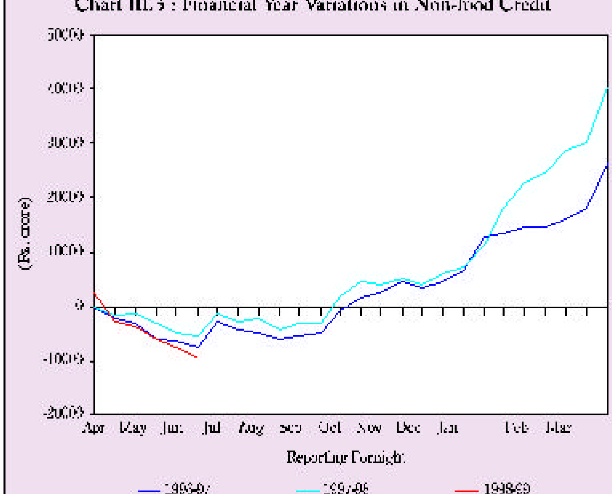
3.20 The pattern of deposit expansion and credit disbursal during 1997-98 was, however, somewhat uneven. Nearly one-third (Rs.33,152 crore) of the increase of Rs.99,811 crore in aggregate deposits during 1997-98 was accounted for by the two reporting fortnights ended September 26, 1997 (Rs.10,891 crore) and March 27, 1998 (Rs.22,262 crore). In particular, nearly one-fifth of the increase in time deposits was accounted for by these two reporting fortnights; the increase of this order was partly due to the application of interest on time deposits. Moreover, the increase in demand deposits (Rs.17,073 crore) during these two reporting fortnights exceeded the expansion for the year as a whole by 43.4 per cent which may be partially attributed to window dressing by the banks on the days leading to the half-year-end (September) and year-end (March) closing of accounts. The unwinding of demand deposits began in the fortnight ended April 10, 1998 when demand deposits declined by Rs.3,322 crore.

3.21 Again, in line with the trends witnessed in the previous year, non-food credit expansion was concentrated in the last quarter of the financial year which accounted for over four-fifths of the total increase in non-food credit during 1997-98 (Chart III.3). This was followed by a sharp decline of Rs.2,936 crore in the fortnight ended April 24, 1998.

3.22 In the context of credit delivery mechanisms, notwithstanding a substantial expansion of credit flow, intricate procedures and delays in the sanctioning of credit to the small and medium scale industrial sectors continued to pose problems. For simplifying and enhancing the efficiency of the delivery mechanism in regard to credit to the small scale industrial sector, the recommendations of the one-man Committee (Chairman : Shri S.L. Kapur) set up by the Reserve Bank, are being examined by the Bank.

3.23 During the year 1997-98, banks'

Chart III.3 : Financial Year Variations in Non-food Credit



Box III.2

Total Flow of Resources to the Commercial Sector

Conventional bank credit comprises banks' advances in the form of loans and advances, cash credit, overdrafts and inland and foreign bills purchased and discounted. However, with deregulation, there has been a conspicuous shift in the banks' asset portfolio mix with investments in money and capital market instruments such as commercial paper as well as shares and debentures issued by the commercial sector becoming important. This factor needs to be factored in to arrive at a measure of the total flow of non-food resources from banks to the commercial sector.

Scheduled commercial banks were allowed to subscribe to shares and debentures of corporates (including PSU bonds) up to 5.0 per cent of their incremental aggregate deposits of the previous year with a sub-ceiling of 1.5 per cent for corporate shares in October 1993. Investments in PSU bonds were excluded from the 5.0 per cent ceiling in January 1994. Within the ceiling, banks were allowed to directly subscribe, including through private placements, to corporate shares and debentures. Further, they were allowed to purchase shares and debentures in the secondary market within the existing 5.0 per cent ceiling in October 1996. Preference shares/debentures/bonds of private sector bodies were excluded from the 5.0 per cent limit in the monetary and credit policy for the first half of 1997-98. At present, the only restriction on banks' investments in non-SLR securities is the cap of 5.0 per cent of their incremental deposits in the previous year on investments in ordinary shares of corporates.

Scheduled commercial banks' incremental investments in market instruments issued by the corporate sector expanded by nearly three-fold by Rs.13,653 crore in 1997-98 as compared with Rs.4,370 crore in the previous year. Thus, added to non-food credit, the total non-food resource flow from scheduled commercial banks to the corporate sector amounted to Rs.54,442 crore in 1997-98 as against Rs.30,951 crore in 1996-97 (Table 3.4).

In addition to the above, the commercial sector received funds from sources other than banks, *viz*., bills rediscounted with financial institutions, capital issues, GDR issues, foreign currency convertible bonds and borrowings from financial institutions aggregating Rs.53,937 crore in 1997-98 as compared with Rs.57,486 crore in 1996-97. Additionally, there was a sharp increase in private placements amounting to Rs.27,069 crore in 1997-98 as compared with Rs. 15,066 crore in 1996-97.

Table 3.4 : Total Flow of Non-food Resources to Commercial Sector

(Rupees crore)

Item	1997-98P	1996-97P
1	2	3
I. Scheduled Commercial Banks (I.1+I.2)	54,442	30,951
I.1 Non-food credit	40,789	26,581
I.2 Other Investments (2.1+2.2+2.3)	13,653	4,370
2.1 Commercial Paper	1,454	617
2.2 Bonds/Debentures/Preference Shares Issued by	11,933	3,685
2.2.1 Public Sector Undertakings	4,760	3,348
2.2.2 Private Corporate Sector	7,173	337
2.3 Equity Shares issued by PSUs and Private Corporate Sector	266	67
II. Other Banks	7,276	8,544
III. From Other Sources (III.1+III.2+III.3+III.4+III.5)	53,937	57,486
III.1 Bills rediscounted with financial institutions	-800	655
III.2 Capital Issues @ (2.1+2.2)	-1,644	14,124
2.1 Non-Government Public Companies	-4,207	10,080
2.1.1 Debentures and Preference Shares	-5,197	3,968
2.1.2 Equity shares	990	6,112
2.2 Public Sector Undertakings and Government Companies	2,563	4,044
III.3 Global Depository Receipts (GDRs) and Foreign Currency Convertible Bonds (FCCBs) Deposits	4,378	3,275
III.4 Issue of Commercial Paper (CP) #	-600	-47
III.5 Borrowings from Financial Institutions $	52,603	39,479
IV. Total Flow of Non-food Resources (I+II+III)	1,15,655	96,981
Memo Items		
1. Loans to Corporates against shares	15	-
2. Private Placements	27,069	15,066

P Provisional.
@ Adjusted for banks' investments in shares and debentures.
# Excluding CPs issued to banks.
$ Adjusted for bills rediscounted by banks with financial institutions.

investments in government securities increased by Rs.22,765 crore during the first half and only by Rs.5,302 crore during the second half. This pattern of investment was mainly because the bulk of the market borrowing programme of the Central and state governments was completed during the first half of the year itself when non-food credit growth was sluggish. The pick-up in bank credit in the second half of the year, particularly during the last quarter, coupled with lower yields on government securities in the secondary market, resulted in a compositional shift of banking resources away from investments in these securities. As a consequence, the ratio of incremental investment in SLR securities to incremental deposits which had risen over 100 per cent during the first half of 1997-98 (up to September 13) fell to 28.2 per cent for the year as a whole. Nevertheless, as at end-March 1998, banks continued to hold SLR securities far in excess of their statutory requirements.

3.24 A disaggregated analysis of the deposit expansion across the major bank groups shows that given the low deposit base, private sector banks recorded a high deposit growth during 1997-98; within this group, the new private sector banks exhibited a strong deposit growth of 62.3 per cent (Rs.7,134 crore) which was of a lower order than that of 98.6 per cent (Rs.5,689 crore) witnessed in 1996-97. The Regional Rural Banks recorded a deposit growth of 23.6 per cent. The three major bank groups *viz.*, SBI and its subsidiaries, nationalised banks and foreign banks, however, registered lower orders of growth than the aggregate deposit growth of 19.7 per cent for the system as a whole during 1997-98, with foreign banks recording the lowest deposit growth of 15.3 per cent.

3.25 The trends in credit disbursal across major bank groups during 1997-98 were more or less akin to that in respect of deposit mobilisation. Credit growth of private banks (23.9 per cent), again on account of a low credit base, was significantly higher than that of the scheduled commercial banks as a whole (16.4 per cent). More significantly, the credit dispensation by the nationalised banks was more perceptible and wide-spread with sixteen banks recording double-digit growth in non-food credit as against seven banks during 1996-97. Reflecting the trends in deposit and credit expansion, the incremental credit-deposit ratios of the SBI group and nationalised banks increased substantially during 1997-98 after exhibiting a steep decline in the previous year, while those of foreign banks, private banks and RRBs, declined further during the year.

Trends During the First Quarter : 1998-99

3.26 Aggregate deposits increased by Rs.14,447 crore (2.4 per cent) in the first quarter of 1998-99 as compared with Rs.13,381 crore (2.6 per cent) in the corresponding period of the previous year. Partly reflecting the seasonal downswing in the demand for non-food credit, bank credit declined by Rs.5,056 crore (1.6 per cent) in the first quarter of 1998-99 as compared with a decline of Rs.2,732 crore (1.0 per cent) in the corresponding period of the previous year. Non-food credit witnessed a perceptible decline of Rs.9,399 crore (3.0 per cent) during the first quarter of 1998-99 as compared with a decline of Rs.5,210 crore (1.9 per cent) in the comparable period of the previous year. However, food credit expanded by Rs.4,343 crore (34.8 per cent) as compared with an increase of Rs.2,478 crore (32.6 per cent) during the first quarter of 1997-98. The increase in investments in government securities was lower at Rs.13,168 crore (7.0 per cent) as compared with that of Rs.17,460 crore (11.0 per cent) in the corresponding period of the previous year. Reflecting this, the ratio of incremental investments in government securities to incremental deposits declined to 91.1 per cent in the first quarter of 1998-99 from 130.5 per cent in the comparable period of 1997-98 (Table 3.3 and Appendix Table III.3).

Sectoral Deployment of Credit

3.27 Gross bank credit of select scheduled commercial banks increased sharply by Rs.41,292 crore (15.9 per cent) during 1997-98 as against a rise of Rs.27,131 crore (11.7 per cent) in the previous year. The industry-wise distribution of gross bank credit shows that while iron and steel, petroleum, electricity and cotton textiles continued to record sizeable credit expansion, chemicals witnessed a large credit expansion in 1997-98 in contrast to a decline in the previous year. On the other hand, a decrease in credit was observed in respect of ‘other metals and metal products’ during 1997-98. Extension of bank credit to infrastructure industries and computer software stood at Rs.3,163 crore and Rs.616

crore, respectively, as at the end of March 1998 (Appendix Tables III.4 and III.5).

Export Finance

3.28 The export credit refinance limits of scheduled commercial banks declined from Rs.6,654 crore (26.1 per cent of outstanding export credit eligible for refinance) in March 1997 to Rs.2,403 crore (8.4 per cent) in March 1998 but increased to Rs.5,380 crore (18.4 per cent) by June 1998 reflecting restoration of refinance limits in April 1998. Aggregate export credit increased from Rs.30,112 crore as at end-March 1997 to Rs.34,430 crore as at end-March 1998, although as a percentage of net bank credit, it dropped marginally from 10.9 per cent to 10.7 per cent over this period. As on June 19, 1998, aggregate export credit was Rs.34,956 crore (11.0 per cent of net bank credit) (Appendix Table III.6).

General Refinance

3.29 The general refinance facility was introduced with effect from April 26, 1997. The limit under this facility which was fixed at one per cent of each bank's fortnightly average outstanding aggregate deposits in 1996-97, was reduced to 0.25 per cent in mid-January 1998 as part of the monetary policy measures to stem the volatility in the foreign exchange market. The amounts utilised under this facility as at end-March 1998 and as at-end June 1998 were negligible as a result of comfortable money market conditions.

Bank Credit to Priority Sector

3.30 The aggregate priority sector advances of the public sector banks increased from Rs.79,131 crore as on the last reporting Friday of March 1997 to Rs.91,319 crore as on the last reporting Friday of March 1998; the share of priority sector advances in net bank credit increased marginally from 41.7 per cent to 41.8 per cent over this period as against the target of 40 per cent. The priority sector advances of private sector banks, also increased from Rs.8,831 crore in March 1997 to Rs.9,502 crore in September 1997 although as proportion of their net bank credit, declined from 41.2 per cent to 39.9 per cent during this period. The priority sector advances of foreign banks operating in India increased from Rs.6,129 crore (37 per cent of net bank credit) in March 1997 to Rs.6,938 crore (34 per cent of net bank credit) in March 1998 and remained above the target of 32 per cent.

PRICE TRENDS

3.31 There was a distinct moderation in the price situation during 1997-98, notwithstanding a relatively higher order of monetary expansion and an increase in the administered prices of certain petroleum products. The annual inflation rate measured in terms of variation in the Wholesale Price Index (WPI) on a point-to-point basis, declined to 5.3 per cent from 6.9 per cent a year ago. On an average basis too, the inflation rate was placed lower at 4.8 per cent than that of 6.4 per cent in the preceding year and a double-digit rate during 1990-91 to 1995-96.

3.32 The annual rate of inflation in terms of Consumer Price Index for Industrial Workers (CPI-IW) on a point-to-point basis was also placed lower at 8.3 per cent during 1997-98 than that of 10.0 per cent during 1996-97; on an average basis, the decline to 6.8 per cent was sharper from 9.4 per cent in the previous year and 9.1 per cent during the 1980s (Table 3.5 and Appendix Table III.7).

3.33 A significant aspect of the price situation during 1997-98 was that the weekly annualised inflation rate not only varied in a lower range of 3.4-6.7 per cent than that of 4.2-7.9 per cent in 1996-97 but it was consistently lower than the inflation rate during the corresponding period of the previous year since July 1997 (Table 3.6 and Chart III.4). The annualised

Table 3.5 : Main Inflation Indicators

(Per cent)

Item	1997-98	1996-97	1990-91 to 1995-96	1980-81 to 1989-90
1	2	3	4	5
1. WPI*				
a) Point-to-point basis	5.3	6.9	9.8	7.5
b) Average basis	4.8	6.4	10.2	8.0
2. CPI #				
a) Point-to-point basis	8.3	10.0	10.4	8.9
b) Average basis	6.8	9.4	10.5	9.1

* All Commodities. # Industrial Workers.

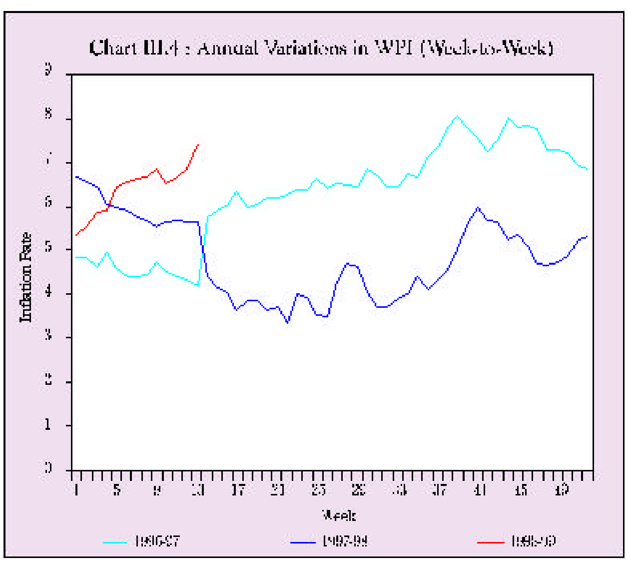
Table 3.6 : Frequency Distribution of Annualised Inflation Rates @

(Base : 1981-82 = 100)

Range of Annualised Inflation Rate (Per cent)	Number of Months 1997-98	1996-97	1995-96
1	2	3	4
3.0 - 5.0	7	3	2
5.1 - 7.0	5	5	2
7.1 - 9.0	–	4	5
9.1 – 11.0	–	–	3
Memo Items			
Average	4.9	6.4	7.8
Median	4.7	6.4	8.5
Standard Deviation	0.9	1.6	1.9

@ Month-wise (Average of weeks).

inflation rate, which was placed at 6.7 per cent in the first week of April 1997, declined gradually by 1.0 percentage point by end-June 1997. In July 1997, the inflation rate fell sharply to 3.6 per cent essentially reflecting the higher base on account of the steep increase in petroleum prices effected during the corresponding period of the previous year. Thereafter, the inflation rate hovered in a lower range of 3-5 per cent up to end-December 1997, notwithstanding a hike in prices of select petroleum products in September 1997. The overall price situation came under slight pressure during January to mid-February 1998 with the financial year, however, closing at a moderate inflation rate of 5.3 per cent.



3.34 The significant reduction in the inflation rate during 1997-98 could be attributed to both demand and supply side factors. Notwithstanding the estimated decline in agricultural output, the supply position was comfortable, with stocks of foodgrains remaining high at 18.12 million tonnes at end-March 1998 as against the norm of 14.50 million tonnes. Reflecting this, the composite index of food items which has a weight of 27.5 per cent in the overall index of WPI increased by 4.5 per cent in 1997-98 as against a double digit rise of 11.0 per cent in 1996-97. This, in turn, has contributed to a fall in agricultural incomes. Together with slack in export demand and sluggish industrial growth, there has been subdued demand in the economy.

3.35 A disaggregated analysis of the WPI shows that, on an average basis, the Fuel group recorded the highest rise of 12.7 per cent (13.6 per cent in 1996-97), while the 'Primary Articles' group registered an increase of 3.4 per cent (8.0 per cent in 1996-97). Within the 'Primary Articles' group, while the prices of wheat, pulses and fruits and vegetables declined during 1997-98, those of milk, eggs, fish and meat, tea, raw cotton and petroleum crude and natural gas registered sharper increases. The price variation in respect of 'Manufactured Products' group remained at the previous year's level of 4.1 per cent in 1997-98. Within the 'Manufactured Products' group, while prices of cement and edible oils recorded a decline over the previous year, those of gur showed a steep increase (Appendix Table III.7).

3.36 An analysis of the weighted contributions of different groups to the total price rise, on an average basis, during 1997-98 indicates that 'Manufactured Products' contributed the maximum to the price rise with a share of 47.6 per cent in 1997-98 which was higher than that of 36.1 per cent in 1996-97 (Table 3.7 and Appendix Table III.8). The share of the Fuel group increased further to 29.1 per cent in 1997-98 from 22.0 per cent in 1996-97. On the other hand, the weighted contribution of 'Primary Articles' declined sharply from 41.9 per cent in 1996-97 to 23.7 per cent in 1997-98.

3.37 The variations in the Consumer Price Index for Industrial Workers (CPI-IW) continued to be higher than those in the WPI during

Table 3.7: Contribution of Major Groups to Inflation (on Average Basis)

(Base : 1981-82 = 100)

(Per cent)

Item	1997-98	1996-97	1990-91 to 1995-96	1980-81 to 1989-90
1	2	3	4	5
1. Primary Articles (32.3)	23.7	41.9	34.5	33.2
2. Fuel Group (10.7)	29.1	22.0	10.9	12.6
3. Manufactured Products (57.0)	47.6	36.1	54.7	54.2
4. All Commodities (100)	100	100	100	100

Figures in parentheses indicate relative weights.

1997-98, reflecting the persistence of the trends observed since 1995-96. The inflation differential between CPI-IW and WPI, however, narrowed down on an average basis during 1997-98 from that in the past two years. During the year, the differential in the annualised (point-to-point) variations in the CPI and WPI was as low as 0.5 percentage point in November 1997 and hovered around 1.5 percentage points, except during April 1997 and January-February 1998, when it exceeded 3.0 percentage points partly reflecting the relatively high retail prices of certain food articles such as oil and fats, fruits and vegetables, eggs, fish and meat and condiment and spices. Besides, higher retail price increases were observed in respect of items such as housing, medical care and education and recreation which are not included in the WPI commodity basket (Appendix Table III.9).

3.38 The centre-wise data on CPI-IW indicate that the decline in the rate of inflation was wide-spread. Out of the 70 centres for which CPI-IW are constructed, while no centre had recorded an inflation rate of less than 5 per cent in 1996-97, 17 centres did so during 1997-98. A noteworthy aspect of price rise during 1997-98 was the occurrence of single digit rate of inflation in all the centres except five as against double digit rates of inflation witnessed in 26 centres during the corresponding period of 1996-97 (Table 3.8).

Table 3.8 : Centre-wise Frequency Distribution of Average Inflation Rate (CPI-IW)

Range of Inflation Rate (Per cent)	Number of Centres		
	1997-98	1996-97	1995-96
1	2	3	4
Up to 5.0	17	–	–
5.1- 7.5	33	11	6
7.6 - 9.9	15	33	32
10.0 – 12.5	4	19	24
Above 12.5	1	7	8

Trends During the First Quarter : 1998-99

3.39 The moderation in the price situation witnessed during 1997-98, was somewhat reversed in the first quarter of 1998-99. From the beginning of May 1998, the annualised variation in the WPI, on a point-to-point basis, consistently exceeded the inflation rate during the corresponding period of the previous year. At the end of the first quarter, the annual inflation rate was placed at 7.4 per cent as compared with 5.6 per cent in the corresponding period of 1997-98 and 5.3 per cent at end-March 1998. On a financial year basis, the inflation rate at 3.1 per cent at end-June 1998, was higher than that of 1.1 per cent at end-June of the previous year. The upward trend in the inflation rate during the first quarter of 1998-99 was mainly attributable to the sharp rise in the prices of a few primary articles, particularly fruits and vegetables which increased by as much as 33.6 per cent, on a point-to-point basis during the first quarter of the financial year as compared with a rise of 1.5 per cent in the corresponding period of the previous year. The price variations in respect of cereals and oilseeds at end-June 1998 were also higher than those in the comparable period of the previous year. As a consequence, the average weighted contribution of the ‘Primary Articles’ group at the end of June 1998 was as high as 73.7 per cent (with the share of fruits and vegetables alone being 47.3 per cent) as compared with 5.8 per cent in the corresponding period of the previous year (Appendix Tables III.7 and III.8). Reflecting the upward trend in prices of food articles, the CPI-IW increased by 12.4 per cent on a point-to-point basis at end-June 1998 as compared with 6.6 per cent in the corresponding period of the previous year.

BULLION MARKET

3.40 The average domestic price of gold in the Mumbai market declined by 14.3 per cent to Rs.4,347 per 10 gms. in 1997-98 from Rs.5,071 per 10 gms. in the previous year. The average price of silver in the Mumbai market, however, increased by 2.6 per cent to Rs.7,352 per kg. in 1997-98 from Rs.7,165 per kg. in 1996-97 (Table 3.9).

3.41 The monthly average price of gold in the Mumbai market declined fairly steadily from Rs.4,788 per 10 gms. in April 1997 to Rs.3,995 per 10 gms. in December 1998 and remained at that level up to March 1998 except for a slight rise during January 1998. In the London market, prices also declined from $ 344 per troy ounce in April 1997 to $ 289 per troy ounce in December 1997. The lowest price for the financial year was recorded on December 12, 1997 at $ 283.05 per troy ounce which was a record low for the last eighteen and half years. The difference between the average prices of gold in the domestic and international markets narrowed from 18.4 per cent in 1996-97 to 15.1 per cent in 1997-98, reflecting the favourable impact of liberalisation of the Indian gold market which facilitated greater integration of the markets.

3.42 The substantial decline in the price of gold in the international market resulted from a number of factors *viz*., the reported large scale sale of gold by the European central banks to attain the fiscal deficit target envisaged in the Maastricht Treaty and the excessive speculation by the market regarding gold prices as a result of this sale as well as a changing perception regarding the utility of gold as a hedge against inflation in the presence of alternative high-return investment avenues.

3.43 According to World Gold Council (WGC), as against an increase of 9.0 per cent in world demand, the demand for gold in India increased by 45.0 per cent to a record level of 737 tonnes during 1997 from 507 tonnes in 1996, reflecting the increased response to the decline in prices. The substantial increase in domestic demand for gold was met by ease of supply facilitated by (i) allowing non-resident Indians to import 10 kg. of gold (as against 5 kg. earlier) once in every six months with effect

Table 3.9 : Gold and Silver Prices

Year/Month	Gold (Rupees per 10 grams) Mumbai-London			Silver (Rupees per Kilogram) Mumbai-New York		
	Mumbai	London*	Spread@	Mumbai	New York$	Spread@
1	2	3	4	5	6	7
1990-91	3,451.52	2,164.26 (374.65)	1,287.26 (59.5)	6,760.79	2,579.21 (449.86)	4,181.58 (162.1)
1995-96	4,957.60	4,188.58 (389.36)	769.02 (18.4)	7,220.50	5,811.03 (540.18)	1,409.47 (24.3)
1996-97	5,070.71	4,283.97 (375.52)	786.74 (18.4)	7,165.07	5,762.65 (505.21)	1,402.42 (24.3)
1997-98	4,347.07	3,775.93 (316.94)	571.14 (15.1)	7,352.27	6,153.96 (521.38)	1,198.31 (19.5)
April 1998	4,210.22	3,941.42 (308.68)	268.79 (6.8)	8,810.00	8,024.88 (629.15)	785.12 (9.8)
May 1998	4,141.92	3,887.10 (298.67)	255.82 (6.6)	7,988.96	7,161.03 (556.41)	827.93 (11.6)
June 1998	4,215.38	3,968.86 (292.22)	246.53 (6.2)	7,765.00	7,144.01 (525.98)	620.99 (8.7)

* Figures in brackets indicate average prices in $ per oz.
@ Figures in brackets indicate percentage spread.
$ Figures in brackets indicate average prices in cents per oz.

Sources : 1. Bombay Bullion Association.
2. Press Trust of India.

from January 1, 1997, (ii) allowing 12 authorised agencies to import gold under Open General Licence (OGL) without any limit on quantity and sell it in the local market against rupees after payment of approximately 5 per cent duty and (iii) lower prices in the international market.

3.44 The monthly average price of silver in Mumbai market fell from Rs.6,969 per kg. in April 1997 to Rs.6,332 per kg. in July 1997. Thereafter, it exhibited a near-steady increase to Rs.8,557 per kg. in March 1998. The price of silver in the Mumbai and New York markets reached a high of Rs.9,350 per kg. and 731 cents per ounce, respectively, on February 5, 1998. The average spread between the domestic and international prices of silver declined to 19.5 per cent in 1997-98 from 24.3 per cent in 1996-97 with the prices in the domestic market moving in tandem with the international market prices.

Trends During the First Quarter : 1998-99

3.45 During the first quarter of 1998-99, the monthly average gold prices both in the domestic and international markets remained below those prevailing in the corresponding period of 1997-98. In the domestic market, the monthly average price of gold increased by 5.5 per cent over its March level to Rs.4,215.4 per 10 grams in June 1998, while in the London market, it declined by 1.2 per cent to US $ 292.2 per troy ounce over the same period primarily due to depreciation of the rupee against the US dollar. The average spread in gold prices between the Mumbai and London markets narrowed to 6.5 per cent during April-June 1998 from 19.9 per cent during the corresponding period in the previous year reflecting greater integration between the two markets. The monthly average of silver prices in Mumbai market declined by 9.5 per cent over its March level to Rs.7,765 per kg. in June 1998, while in the New York market, the monthly average price of silver declined sharply by 14.7 per cent to 526 cents per ounce during the same period. The average spread between Mumbai and New York markets narrowed to 10 per cent during April-June 1998 from 25.7 per cent in the corresponding quarter of 1997-98 (Table 3.9).