Financial Markets

5.1 Financial market activities during 1998-99 came under the impact of several domestic and international uncertainties. Responding to these developments, the Reserve Bank announced monetary policy measures from time to time during the year to counter the emerging volatility in the money and forex markets. As a result, barring brief periods of volatility, financial markets in general exhibited orderly conditions during the greater part of 1998-99. Short-term money market rates ruled generally low in 1998-99, reflecting the comfortable liquidity conditions on account of significant deposit growth juxtaposed with sluggish growth in non-food credit. While short-term measures were initiated to address the financial market uncertainties, the Reserve Bank undertook several important structural reform measures in the financial sector that bear close affinity to the recommendations made by the second Narasimham Committee Report (as discussed in detail in Section I). In the process, the development of the financial market was further promoted. It was also facilitated by the improvement in the size and turnover of different market segments, and enlargement of the number of players and instruments.

5.2 Monetary policy was generally successful in influencing market expectations, with market participants responding reasonably well to policy measures. A persistent lack of investors' interest severely restricted the growth of primary equity market during 1998-99, while the private placement market (comprising mostly debt instruments) emerged as the leading source of mobilisation of funds, which again was dominated by top rated corporates. The term loan market exhibited the sentiments of the credit market, with deceleration in the assistance disbursed by financial institutions (FIs). The debt markets were, however, relatively more vibrant with activity than the equity counterpart. The government securities market came under pressure with the market borrowing of the Central and the State governments exceeding the budgeted amount by a large margin. However, an active debt management policy (as detailed in Section I) played a critical role in staving off the pressure in the government securities market, ensuring fairly stable interest rate condition in the medium and long-term segments of the market. As a result, there was a decline in the government's cost of borrowing through dated securities.

5.3 These developments provide the backdrop for an overview of developments in different organised financial markets, namely, the money, foreign exchange, equity, term lending, corporate bond (comprising PSU bonds and corporate debentures), gilt-edged, hire-purchase and leasing finance markets and housing finance market. The developments in the organised credit market have already been covered in the discussion on banking developments (Section III), while Section VI provides information on the developments in the foreign exchange market in the context of the evolution of the balance of payments situation.

Money and Foreign Exchange Markets

5.4 During 1998-99, particularly in the first half of the year, money market conditions were strongly influenced by short-term developments in the forex market, and the response of the Reserve Bank to meet these challenges. The measures undertaken by the Reserve Bank in the money market segment were aimed at promoting efficient functioning of the market, while ensuring stability and liquidity in the system. The money market recorded heightened activity and formed the main passage for the transmission of monetary policy impulses. The market remained relatively calm for the large part of the year, responding as it was to the Reserve Bank's policy measures.

Call/Notice Money Market

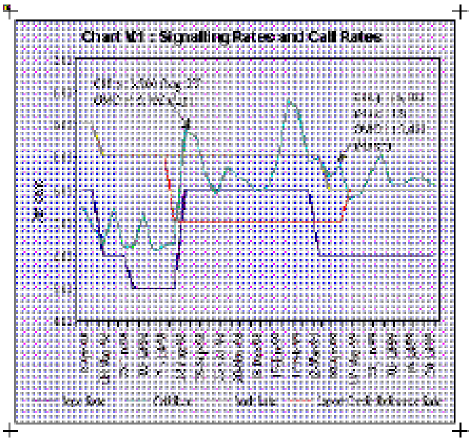
5.5 The average call rates generally remained stable and moved within a limited range. In general, the movement was confined to an informal corridor set by the Bank Rate and the fixed repo rate during the year, barring a brief period in August 1998 and again in January and March 1999 (Appendix Table V.1 and Chart V.1). During April 1 - August 19, 1998, the daily peak call rates remained in single digit. Following the policy measures (increase in CRR and fixed repo rate) announced on August 20, 1998 to squelch speculative pressure on the Rupee and reduce arbitrage opportunities in the domestic money market, call rates rose sharply to 30 per cent on August 21, 1998 (Table 5.1). While the rate receded for a brief period, it again rose to 21.0 per cent on August 29, 1998, the day when the 1 percentage point CRR hike was effected. Following the release of RIB funds by the State Bank of India, liquidity conditions eased considerably and call rates ruled in single digit in September 1998 (except on September 12 when it touched 12.5 per cent).

Table 5.1 : Behaviour of Call Rates

Month	Mean(%)	High(%)	Low(%)	CV
1	2	3	4	5
1997-98	**7.85**	**110.00**	**0.05**	**0.50**
1998-99				
April	6.85	9.10	4.50	0.10
May	6.97	9.60	5.00	0.16
June	6.63	9.00	4.00	0.17
July	6.38	9.00	1.00	0.21
August	8.86	30.00	1.00	0.50
September	8.52	12.50	5.75	0.10
October	8.71	9.75	5.00	0.10
November	8.07	10.50	6.60	0.06
December	8.74	10.25	5.00	0.10
1999				
January	10.66	35.00	6.25	0.04
February	8.95	10.00	7.50	0.04
March	8.46	14.00	5.75	0.15
1998-99	**8.15**	**35.00**	**1.00**	**0.14**
1999-2000				
April	7.90	14.00	0.25	0.12
May	9.14	11.00	7.00	0.09
June	8.20	9.00	7.00	0.08
July	8.19	9.50	7.00	0.08

CV : Co-efficient of Variation.

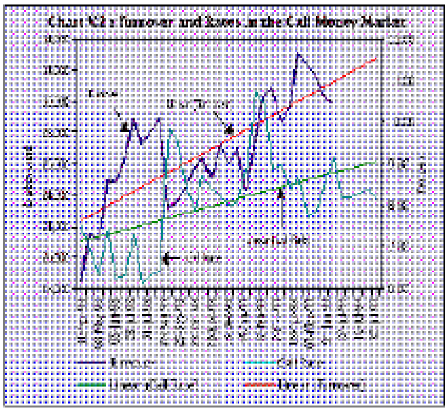
5.6 The second half of the financial year witnessed generally improving liquidity conditions and call rates moved in a range of 5.0-10.5 per cent except for a brief period during January 1999 and March 1999. This was despite an active open market sale of securities by the Reserve Bank from its portfolio during this period. The favourable conditions in the call market mainly reflected the sluggish growth in non-food credit and liquidity injection by the Reserve Bank through refinance window and reverse repo operations with the PDs. As an aberration, call money rate touched 35.0 per cent during January 14-17, 1999. It was, however, a temporary phenomenon caused by incorrect estimation of liquidity situation by some banks, a panic reaction due to bank employees' strike and two consecutive holidays covering the reporting Friday at some centres. Call rates hardened again during the second half of March, ruling in double digits for 5 days (peaking at 14 per cent on end-March, 1999) reflecting the usual seasonal factors associated with the advance tax payments, year-end window dressing by banks and absence of financial institutions as lenders in the money market who had reportedly earmarked funds to meet their disbursement targets for the fiscal year. On the whole, call rates, however, showed a decline of about 50 basis points in March 1999 over February 1999, reflecting the monetary policy measures announced on March 1, 1999. During the first quarter of 1999-2000, call rates declined to 8.20 per cent in June 1999 from 8.46 per cent in March 1999. At this level call rates were nevertheless substantially higher than 6.63 per cent in June 1998. The smaller seasonal decline in non-food credit offtake coupled with large amounts of market borrowing by the Central Government during the first quarter exerted pressure on call rates.



5.7 A notable feature in the call/notice money market in 1998-99 was the sharp improvement in the average daily turnover which increased by Rs.9,396 crore (39.8 per cent) from Rs.23,613 crore during the fortnight ended March 27, 1998 to Rs.33,009 crore during the fortnight ended March 26, 1999. However, on an annual basis, the increase was more modest with the average daily turnover increasing from Rs.25,043 crore during 1997-98 to Rs.26,228 crore during 1998-99. The general upward trend in turnover, which has been evident for the past few years is due to the increase in the width and depth of the market as given by the enlargement of the number of players and instruments which, in turn, was the outcome of institutional reform measures in the financial sector during 1990s. Among the factors which contributed to the rise in the volume of turnover in 1998-99, the most important ones were the growth in the activity of the primary dealers (PDs) supported by refinancing facility from the Reserve Bank, the Reserve Bank's active operations in the market through the repos, which provided a floor to the call rates and liquidity enhancing and stabilising measures undertaken by the Bank during the year. During 1998-99, the six PDs accounted for a sizeable turnover in the call money market with a share of 22.6 per cent of the total turnover.

5.8 An interesting aspect of the call/notice money market in 1998-99 was that the total turnover in the market varied inversely with movements in interest rates in the call money market during the first half of 1998-99 (Chart V.2). The daily average turnover (borrowings plus lendings) sharply declined from the level of Rs.23,613 crore during the fortnight ended March 27, 1998 with call rates ranging 7.0-9.8 per cent to Rs.18,394 crore during the fortnight ended April 10, 1998 when the rates came under pressure. As liquidity conditions eased and the interest rates softened, the turnover increased reaching a high of Rs.28,932 crore in the fortnight ended August 14, 1998. A tightening of liquidity conditions again resulted in the sharp decline in the turnover to Rs.23,112 crore in the following fortnight. With the return to normalcy in the money market, the turnover exhibited a near steady rise reaching the 1998-99 peak of Rs.33,009 crore during the fortnight ended March 26, 1999. However, the average daily turnover showed a declining trend since April 1999 from Rs.32,314 crore during the fortnight ended April 9, 1999 to Rs.29,915 crore during the fortnight ended May 21, 1999.

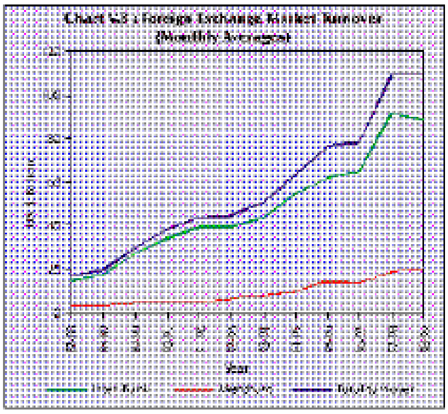
5.9 There was a sharp rise in the average daily turnover of commercial banks from Rs.12,107 crore (with borrowing and lending at Rs.8,084 crore and Rs.4,023 crore, respectively) during the fortnight ended March 27, 1998 to Rs.19,773 crore (with borrowing and lending at Rs.12,056 crore and Rs.7,717 crore, respectively) during the fortnight ended March 26, 1999 with average for 26 fortnights ruling at Rs.15,579 crore for 1998-99. The average daily turnover of PDs increased from Rs.5,720 crore during the last fortnight of 1997-98 to Rs.6,755 crore during the fortnight ended March 26, 1999; the peak turnover reached Rs.7,778 crore during the fortnight ended January 29, 1999 and the average for all fortnights stayed at Rs.5,889 crore. The average daily lendings by non-bank institutions showed a steady decline during the year from Rs.5,786 crore during the last fortnight of 1997-98 and improved marginally only from the last few fortnights of 1998-99, reaching the 1998-99 peak of Rs.6,481 crore during the last fortnight of 1998-99, when call rates hardened somewhat to act as an incentive for lendings by the non-bank institutions. A participant-wise analysis of volume of turnover in the call/notice money market during 1998-99 reveals the usual pattern of public sector banks and non-bank institutions acting as major lenders and foreign banks and PDs as major borrowers. While the share of public sector banks in total lendings increased during 1998-99, that of non-bank institutions declined sharply. In the case of borrowings, while the share of foreign banks increased, that of both public sector banks and PDs declined. In the current financial year so far (up to May 21, 1999), turnover of all the categories of participants registered a marginal decline. Average daily turnover of commercial banks and PDs, during the fortnight ended May 21, 1999, stood at Rs.18,746 crore and Rs.6,175 crore, respectively. The average daily lendings of non-bank institutions was Rs.4,994 crore during the above fortnight. During 1998-99, two mutual funds, *viz.*, Kotak Mahindra and Infrastructure Leasing and Financial Services (IL&FS) were permitted to participate as lenders in the call/notice money market. Besides, 17 other entities were also permitted to lend in call/notice money market through PDs. In 1999-2000 (up to July), two more mutual Funds, *viz.*, Dundee Mutual Fund and ING Security Trust Mutual Fund were permitted to participate as lenders in the call/notice money market.



Foreign Exchange Market

5.10 Foreign exchange market remained reasonably calm during 1998-99 except for some bouts of pressure in the early part of the year due to speculative activities in the wake of developments in South-East Asia and the fall-out of economic sanctions. Turnover in the foreign exchange market during 1998-99 at an average of US $ 109 billion per month remained almost unaltered from the level in 1997-98 (Chart V.3). The average monthly merchant turnover increased from US $ 18 billion in 1997-98 to US $ 21 billion in 1998-99. The rate of increase was, however, lower at 16.7 per cent during 1998-99 as compared with an increase of 38.5 per cent in 1997-98, reflecting some slowdown in merchandise trade and subdued capital transactions. The average monthly turnover in the inter-bank market fell from US $ 91 billion in 1997-98 to US $ 88 billion in 1998-99, reflecting the decline in speculative activity following the measures announced by the Reserve Bank during June and August 1998 to ensure orderly market conditions.

5.11 The merchant turnover continued to be dominated by spot transactions, which accounted for about 46 per cent of the total while the forward segment dominated the inter-bank market with a share of 41 per cent. The forward transactions were relatively higher in the early part of 1998-99 constituting 23 to 28 per cent and 44 to 52 per cent of the total turnover in merchant and inter-bank segments, respectively, reflecting the uncertainty in the forex market which had pushed up the forward premia.



Repo Operations by the Reserve Bank

5.12 The Reserve Bank continued with the scheme of 3-4 day fixed rate repos in Central Government securities first introduced on November 29, 1997, to absorb short-term liquidity in the system and thereby provide greater manoeuvrability in short-term liquidity management as well as to bring about orderly conditions in both money and forex markets. The fixed rate repo acted as a floor for call rates while the refinance /reverse repos with PDs at the Bank Rate provided a ceiling. During 1998-99, reflecting the easy liquidity conditions, the Reserve Bank reduced the repo rate in stages from 8 per cent in early April to 5 per cent till August 20, 1998. Thereafter, to check the volatility in the foreign exchange market, the repo market was made more attractive with the rate revised upwards to 8 per cent which continued till March 1, 1999. With the return to stability in the forex market, the repo rate was brought down to 6 per cent, effective March 2, 1999.

5.13 The daily outstanding amount of fixed rate repo averaged Rs.3,713 crore during 1998-99 as against Rs.2,039 crore in 1997-98, showing that liquidity condition remained fairly easy during most part of the year. Despite a lower repo rate during April to August 20, 1998, the average outstanding repo was substantially higher at Rs.6,162 crore than Rs.2,617 crore during the period September 1998 to February 1999, when money market rates had hardened.

Inter-linkages among Money and Forex Markets

5.14 The inter-linkages among the money, forex and repo markets continued to be a significant feature of the financial market activity in 1998-99. During the first quarter of 1998-99, excess liquidity characterised the domestic money market reflecting primarily a large decline in non-food credit. Despite a reduction in the fixed rate repo from 8 per cent at the beginning of April 1998 to 5 per cent by June 15, 1998, the repos continued to provide a profitable avenue for banks to park their surplus funds. With the repo rate acting as the floor, call rates exhibited a declining trend tending to hug the lower repo rate. As call rates ruled well below the informal ceiling set by the Bank Rate (also the export credit refinance rate), borrowings by commercial banks from the Reserve Bank's export credit refinance window were small. From a net purchaser of foreign currency in April 1998, the Reserve Bank turned into a substantial seller in May and June 1998 to stabilise the forex market, and in the process draining out excess liquidity (Table 5.2).

5.15 Despite substantial repos and OMO in August the market remained comfortable on liquidity. On the other hand, uncertainties in the forex market led to hardening of the forward premia. Consequently, the turnover in the inter-bank forex market and money market increased in the first fortnight. In view of the decline in exports, the rates on export credit refinance were reduced by 2 percentage points to 7 per cent (i.e. at 2 percentage points below the Bank Rate) on August 6, 1998 for the period up to March 31, 1999. This measure contributed to further augmenting of liquidity in the system as it provided banks with a channel of obtaining liquidity at a relatively cheaper cost. On August 20, 1998, a package of monetary policy measures was put in place to counter destabilising speculative activity in the forex markets. The repo rate was raised by three percentage points and CRR was increased by one percentage point to drain out liquidity. As liquidity was sucked out, call rates increased, and the turnover in the domestic and the inter-bank segments of the forex market declined. This not only arrested the speculative pressure on the exchange rate but also led to significant accretion to foreign exchange reserves.

5.16 As stability returned to the forex market, the inter-bank turnover in the forex market declined during the third quarter of 1998-99. The resumption of capital inflows improved the domestic liquidity situation through the Reserve Bank's purchase of the US dollar from the market which was partly offset by open market sale by the Bank. Despite the hike in the repo rate, the outstanding amount of repos declined as call rates ruled above the repo rate. The borrowings from the Reserve Bank's export credit refinance window exhibited a substantial increase, coupled with higher liquidity support to the PDs and the UTI.

5.17 The fourth quarter was dominated by increased FII activities in the capital market which helped in further easing of domestic liquidity condition. With the easing of forward premia, turnover in the forex market remained at about the previous quarter's level. On the domestic front, while money market conditions led to a softening of call rates, an aggressive OMO coupled with the seasonal pick-up in credit off-take exerted some upward pressure on domestic money market rates resulting in banks and PDs resorting to the Reserve Bank's refinance window, even as the average outstanding repos declined.

Table 5.2 : Developments in Money, Forex and Repo Markets (April 1998 - June 1999)

Month	Comm. Banks' Borro-wings from the Reserve Bank (Rs. crore)*	Average daily Turn-over in the Inter-bank Forex Market (US $ million)	Fixed Repo Rate (in per cent)	FEDAI Indicative Rate (Rs./ US $)	Net Foreign Currency Sale (-)/ Purchase (+) (US $ million)**	OMO Net Sales(-)/ Purchase (+) (Rs. crore)	Average Repos Out-standing (Rs. crore) @	Average Reverse Repos Out-standing (Rs. crore) @	Average daily Turnover in Call/ Notice Money Market (Rs. crore)	Average daily Call Rates (in per cent)
1	2	3	4	5	6	7	8	9	10	11
1998										
April	166	3,377	6.0-8.0	39.6572	+201	- 215	9,133	80	21,471	6.85
May	519	4,774	6.0	40.4708	- 754	- 34	4,412	82	24,945	6.97
June	755	5,459	5.0-6.0	42.2423	- 1,627	- 13	6,872	0	25,393	6.63
July	643	4,597	5.0	42.5102	- 121	- 1,442	4,545	67	27,639	6.38
August	1,075	5,072	5.0-8.0	42.7563	+542	- 6,902	3,689	834	26,022	8.86
September	3,306	4,978	8.0	42.5217	+760	- 689	6,322	1,263	23,967	8.52
October	3,675	4,899	8.0	42.3338	+95	- 880	2,769	941	26,011	8.71

November	4,084	3,697	8.0	42.3810	+75	-6,707	3,504	250	26,112	8.07
December	3,150	2,926	8.0	42.5530	- 84	- 1,493	1,567	353	26,454	8.74
1999										
January	5,330	3,681	8.0	42.5061	+477	- 5,092	694	407	28,884	10.66
February	6,109	3,756	8.0	42.4656	+858	- 2,780	845	0	29,726	8.95
March	2,894	4,279	6.0	42.4487	+1,420	- 3,422	206	0	31,371	8.46
April	5,221	3,974	6.0	42.7250	+38	- 7,021	1,198	51	32,007	7.90
May	4,960	3,585	6.0	42.7712	+975	- 7,832	10	545	30,109	9.14
June	3,863	3,429	6.0	43.1355	-157	- 3,785	0	360	-	8.20

* Outstanding as on last reporting Friday of the month. ** Include spot, swap and forward transactions. @ Cash value.

5.18 During the first quarter of 1999-2000, an aggressive open market sales coupled with the smaller seasonal decline in non-food credit exerted pressure on call rates which ruled above 8 per cent (export credit refinance rate) during May-June 1999. Consequently, borrowings from the Reserve Bank remained substantial, while average repos outstanding was negligible in June 1999. The Reserve Bank injected liquidity through reverse repos and foreign currency purchases. With the rupee depreciating to 43.39 per US dollar on June25, 1999, the Reserve Bank undertook measures to stabilise the foreign exchange market.

Other Money Market Segments

Certificates of Deposit (CDs) Issued by Banks

5.19 A strong growth in bank deposits coupled with deceleration in non-food bank credit during 1998-99 prompted banks to reduce their dependence on higher cost bulk deposits (Appendix Table V.2). The outstanding amount of CDs which had reached a peak of Rs.14,584 crore as on April 10, 1998 declined consistently throughout the year to Rs.4,186 crore as on December 18, 1998. The outstanding amount of CDs declined further to Rs.3,717 crore as on March 26, 1999. During the current financial year 1999-2000, the declining trend in the outstanding amount of CDs continued reaching a level of Rs.2,111 crore during the fortnight ended July 2, 1999.

5.20 Reflecting the easy market conditions, the typical discount rate on CDs with a maturity of 3 months declined from 13.0 per cent as at end-March 1998 to 10.0 per cent as at end-March 1999 and that on CDs with a maturity of one year also came down from 15.5 per cent to 11.75 per cent during the same period. During the current financial year (up to the fortnight ended July 2, 1999), typical interest rates on CDs with a maturity of 3 months further came down to 9.5 per cent and CDs with a maturity of one year to 10.0 per cent. The sharp reduction in interest rate on CDs as well as in the outstanding level of CDs not only indicated the prevailing liquidity conditions and the general downward movement of interest rates in the economy but also the high opportunity cost of mobilising resources through this route when credit demand remained quite subdued.

Commercial Paper (CP)

5.21 Reflecting the easy liquidity conditions and the declining trend in interest rates in other segments of the money market, the discount rate on CP declined considerably during 1998-99; this trend continued to be witnessed during 1999-2000 also (Appendix Table V.3). This facilitated access by the top-rated corporates to the CP market at discount rates that were lower than even the PLR of banks. The typical effective discount rates on CP declined from 14.2-15.5 per cent in the fortnight ended March 31, 1998 to 8.5-11.0 per cent in the fortnight ended August 31, 1998. However, following the tightening of monetary conditions in mid-August 1998, the discount rates firmed up and ruled in the range of 11.0-13.0 per cent during the fortnight ended September 30, 1998. During the second half of the financial year, however, discount rates declined, albeit marginally, and moved in the range of 10.1-12.9 per cent. For the financial year 1999-2000 up to July 15, 1999, the typical discount rates on CP further declined from the range of 10.1-12.5 per cent in March 1999 to that of 10.0-11.5 per cent in the first fortnight of July 1999.

5.22 With the decline in the discount rates, the outstanding amount of primary issues of CP increased substantially from Rs.1,500 crore as at end-March 1998 to Rs.5,679 crore as on December 15, 1998. Consequent upon some firming up of money market rates during the fourth quarter alongwith the pick-up in non-food credit, the outstanding amount of CP declined to Rs.4,770 crore as at end-March 1999. However, in the financial year 1999-2000 so far, the outstanding amount of CP increased substantially to Rs.6,311 crore as on July 15, 1999. Reflecting the increased activity in the CP market, the cumulative amount of primary issues of CP during 1998-99 increased sharply to Rs.24,722 crore from Rs.13,512 crore during 1997-98. Accordingly, the fortnightly average outstanding amount of CP during 1998-99 was significantly higher at Rs.4,514 crore than Rs.2,806 crore in the preceding year. During 1999-2000 (up to July 15), cumulative amount of primary issues stood at Rs.8,803 crore as compared with Rs.6,484 crore during the comparable period of the previous year. The fortnightly average outstanding amount of CPs in 1999-2000 (up to July 15) increased to Rs. 6,529 crore from Rs.3,169 crore in the corresponding period of the previous year. The bulk of CP issues emanated from the manufacturing companies.

Mobilisation of Short-term Resources by Financial Institutions

5.23 The aggregate amount of resources raised by financial institutions by way of term money, CDs, term deposits and inter-corporate deposits (ICDs) declined from Rs.8,130 crore (51.1 per cent of limit) as on March 27, 1998 to Rs.6,828 crore (34.2 per cent of limit) as on March 26, 1999. It further declined to Rs.5,840 crore (29.5 per cent of the aggregate limit of Rs.19,777 crore) as on June 18, 1999. Instrument-wise developments indicate that the financial institutions prefered ICDs followed by term money, term deposits and CDs. The outstanding amount of ICDs issued by FIs increased markedly by Rs.1,386 crore from Rs.2,064 crore as on March 27, 1998 to Rs.3,450 crore as on March 26, 1999. The ICDs, however, declined to Rs.3,300 crore as on June 18, 1999. The outstanding amount of term money borrowings by Fls increased sharply from Rs.273 crore as on March 27, 1998 to a peak of Rs.1,888 crore in December 1998 and thereafter declined to Rs.943 crore as on March 26, 1999 and further to Rs.579 crore on June 18, 1999. However, the outstanding amount of CDs issued by FIs declined gradually by Rs.3,022 crore from Rs.4,885 crore as on March 27, 1998 to Rs.1,863 crore as on March 26, 1999 and further to Rs.1,453 crore as on June 18, 1999. Similarly, the outstanding amount of term deposits declined from Rs.908 crore to Rs.573 crore on March 26, 1999 and further to Rs.507 crore on June 18, 1999.

5.24 Reflecting the generally easy conditions in the money market, interest rate offered on term money borrowings by the Fls declined from 13 per cent during the fortnight ended March 27, 1998 to 11.15-11.40 per cent during the fortnight ended March 26, 1999 and further to 11 per cent during the fortnight ended June 18, 1999. The interest rate range on CDs issued by the Fls narrowed from the range of 11.50-15.25 per cent in March 1998 to 12.29-13.00 per cent in March 1999. Interest rates on term deposits moved in the range of 10.00-12.00 per cent between March 27, 1998 and March 26, 1999. During 1999-2000 (up to June 18, 1999), the interest rates moved in the range of 9.00-12.00 per cent.

Commercial Bill Market

5.25 The activity in the bills rediscounting market continued to remain subdued during 1998-99. The outstanding amount of commercial bills rediscounted by commercial banks with various Fls, however, increased from Rs.286 crore as at end-March 1998 to Rs.473 crore as at end-March 1999 and further to Rs.629 crore as at end of May 1999. During 1998-99 and 1999-2000 so far (up to July), four mutual funds, *viz*., Kotak Mahindra, Dundee Mutual Fund, IL&FS and ING Savings Trust Mutual Fund were permitted to participate in the bills rediscounting market, but only as lenders.

Money Market Mutual Funds (MMMFs)

5.26 As of now, there are twelve money market mutual funds (MMMFs), which have been given in principle approval by the Reserve Bank. Out of these, three MMMFs, *viz*., UTI, IDBI Mutual Fund and Kothari Pioneer Mutual Fund have floated schemes.

Non-banking Financial Companies (NBFCs)

5.27 The Reserve Bank accorded registration to 607 NBFCs as deposit taking entities up to June 30, 1999 which are covered under the Bank's comprehensive regulatory/supervisory process while another 7,054 NBFCs were registered as non-deposit accepting/holding entities subject to, *inter alia*, their having the minimum required NOF.

5.28 The aggregate public deposits of NBFCs in terms of the survey data as reported by 1,724 NBFCs stood at Rs.20,237 crore as on March 31, 1998 and was equivalent of 3.4 per cent of the aggregate deposits of the commercial banks. Consequent upon the amendments to the Reserve Bank of India Act, 1934 during 1997, the Bank has narrowed down its focus by confining its regulatory attention only in relation to public deposits. Public deposits was a component of the regulated deposits. Hence, the quantum of public deposits mobilised by NBFCs as on March 31, 1998 does not lend itself to be compared with the regulated deposits reported for the earlier periods (Appendix Table V.4 of the Bank's Annual Report for 1997-98).

Housing Finance Market

5.29 The overall minimum target for 1998-99 for housing finance by commercial banks was fixed at 1.5 per cent of their incremental deposits over the previous year's level, or the amount of housing finance allocation fixed for the year 1997-98, whichever was higher. For 1999-2000, commercial banks have been advised to compute their share of minimum housing finance allocation at 3 per cent of their incremental deposits over the level of the previous year or the amount of housing finance allocation fixed for the year 1998-99, whichever was higher. Banks are, however, free to exceed this limit.

National Housing Bank

5.30 The National Housing Bank (NHB) continued to promote sound and healthy growth in various segments of the housing finance system through resource promotion, institution building and regulation. In its endeavour towards introducing securitisation of mortgages and development of a secondary mortgage market, the NHB continued its efforts to formalise the legal and operational structure for the first issue of mortgage backed structures (MBS). In order to promote the role of Self Help Groups (SHGs) and NonGovernmental Organisations (NGOs) in housing sector, the NHB introduced a refinance scheme in January 1999 for housing loans advanced by Housing Finance Companies (HFCs) to Community-based Finance Institutions (CFIs) for onward lending to members of the SHGs. The scheme would promote linkage between the formal and informal sectors. The NHB amended certain regulatory directions, which came into force effective January 1, 1999. The amendments related to i) mandatory credit rating of not below ‘A' for deposit acceptance by HFCs having NOF of at least Rs.25 lakh; ii) revised ceiling on deposits and a separate sub-ceiling for public deposits; iii) restriction on brokerage payment to 2 per cent of the deposits collected; and iv) prescription for maintenance of liquid assets at 12.5 per cent of the public deposits out of which at least 6 per cent would be in the form of approved securities. Subsequent to the amendments making credit rating mandatory for acceptance of public deposits, the NHB issued guidelines on prudential norms to HFCs having NOF above Rs.25 lakh.

5.31 During 1998-99 (July-June), the NHB raised resources amounting to Rs.575 crore through various instruments such as tax free bonds, priority sector bonds, SLR bonds and by way of borrowings from LIC and Asian Development Bank (ADB). The cumulative amount of outstanding borrowings stood at Rs.3,857.4 crore as at end-April 1999. During July 1998 - March 1999, NHB provided refinance to eligible institutions amounting to Rs.610 crore. Cumulatively, the total refinance amounted to Rs.4,237 crore of which 78.2 per cent was availed of by HFCs, 16.5 per cent by the co-operative sector institutions and 5.3 per cent by the scheduled banks.

Equity, Debt and Term Lending Markets

5.32 The capital market exhibited a mixed trend during 1998-99. While the primary market showed some signs of revival in terms of resource mobilisation by way of new capital issues, the secondary market activity continued to remain depressed for most part of the year. The corporates, however, continued to raise sizeable funds from the private placement market while the new issues market was mostly dominated by a handful of mega issues. The secondary market suffered due to both internal and external factors. However, after the presentation of the Union Budget for 1999-2000 with a package of incentives for the capital market, the secondary market activity witnessed a sharp improvement in March 1999, which off-set most of the losses in the index in the previous months. Resource mobilisation by mutual funds suffered a major setback due mainly to net outflow of funds in respect of US-64 scheme of UTI in the latter half of the year.

Primary Market Developments

New Issues Market - Prospectus and Rights Issues

5.33 During 1998-99, aggregate resource mobilisation through prospectus and rights issues floated by the non-government public limited companies (private sector), government companies, public sector undertakings and banks and financial institutions (in the public sector) increased by 101.1 per cent to Rs.9,365 crore from Rs.4,657 crore in the previous year. The amount raised by non-government public limited companies increased by 59.7 per cent to Rs.5,013 crore and that by banks and financial institutions in the public sector by 194.9 per cent to Rs.4,352 crore (Table 5.3). Notwithstanding this recovery, the mobilisation through primary issues remained far below from those in 1995-96 and 1996-97, suggesting that the primary market was still not close to its potential. Furthermore, total resource mobilisation from the primary market masked the otherwise general unimpressive performance as only a few mega issues in public and private sectors contributed to an overwhelming share of the amount mobilised. Excluding mega-issues, the resources mobilised through new capital issues showed a decline.

5.34 The share of equity issues in new capital issues by private sector companies during 1998-99 increased to 51.1 per cent from 37.0 per cent during the previous year (Appendix Table V.4). The premium charged as a proportion of total amount raised from equity issues declined to 51.7 per cent from 56.2 per cent in the previous year. While non-financial private sector companies raised bulk of the resources by way of equity issues (92.3 per cent), companies in the financial sector (dominated by ICICI) relied primarily on debt issues (87.7 per cent). The mega-issues (Rs.100 crore and above) dominated new capital issues of the private sector companies, accounting for 83.6 per cent (Rs.4,194 crore) of the total as compared with 61.2 per cent (Rs.1,921 crore) during 1997-98, implying that only large corporates could access the capital market. The number of mega-issues went up to 10 from 8 in the previous year. The average size of new issues floated by private sector companies as a result increased sharply to Rs.104 crore as compared with Rs.31 crore during the previous year.

Table 5.3 : Mobilisation of Resources from the Primary Market*

(Amount in Rupees crore)

Item	1998-99 P		1997-98	
	No. of Issues	Amount	No. of Issues	Amount
1	2	3	4	5
A. Prospectus and Rights				
1. Non-Government Public Limited Companies (Private Sector)	48	5,013.1 (59.7)	102	3,138.3 (-69.9)
2. Public Sector Undertakings	-	-	-	-

(PSU Bonds)		(-)		(-)
3. Government Companies	-	-	1	42.9
		(-)		(- 93.4)
4. Banks/Financial Institutions	3	4,352.0	4	1,475.6
(in the Public Sector)		(194.9)		(-66.1)
5. Sub-total (1+2+3+4)	51	9,365.1	107	4,656.8
		(101.1)		(- 69.8)
B. Private Placement +				
1. Private Sector	178	16,982.7	139	9,202.2
		(84.6)		(398.3)
a) Financial		12,174.2		4,323.8
b) Non-financial		4,808.5		4,878.5
2. Public Sector	160	32,681.3	118	20,896.4
		(56.4)		(66.2)
a) Financial		20,382.4		9,659.7
b) Non-financial		12,298.9		11,236.7
3. Sub-total (1+2)	338	49,664.0	257	30,098.6
		(65.0)		(99.8)
C. Total (A+B)		**59,029.1**		**34,755.4**
		(69.8)		**(13.8)**

P Provisional.
* Including both debt and equity.
+ Estimates based on information gathered from arrangers, FIs and newspaper reports.
- Nil / Negligible.

Note : Parenthetic figures represent percentage variations over the previous year.

Private Placement Market

5.35 During the last few years, private placement market has emerged as the major route for raising of resources by corporate entities. During 1998-99, banks, FIs and public and private sector companies mobilised Rs.49,664 crore (84.1 per cent of total resource mobilisation from the primary market) through this route, which was higher by 65.0 per cent than the amount of Rs.30,099 crore raised during the previous financial year. The public sector accounted for 65.8 per cent or Rs.32,681 crore of the amount raised through private placement. The public financial sector contributed about 41 per cent of the total amount raised through private placement while 24.8 per cent was contributed by the non-financial public sector. Resource mobilisation by private sector through the private placement route nearly doubled from Rs.9,202 crore in1997-98 to Rs.16,983 crore in 1998-99, with private financial sector accounting for 24.5 per cent of the total mobilisation. The debt instruments, mostly bonds and debentures, constituted 95.3 per cent of the total amounts raised by way of private placement. The equity portion was raised in the form of preference shares. The interest rates on debt instruments floated by the public sector entities in the private placement market ruled in the range of 10.75-16.00 per cent for maturities ranging from 1 year to 5 years. The corresponding range on debt instruments of the private corporate sector was 10.00-16.50 per cent.

5.36 The recent growth of private placement market has brought to fore the issue of regulation, if this market should continue to play a major role in resource mobilisation by the corporate sector. At present, private placement does not come under the usual disclosure and protection of investors' interest norms as prescribed by the SEBI, even though most of the issues are rated by credit rating agencies. Default risk to investors could be a potential problem which may pose systemic risks if the investors involved happen to be large financial institutions.

Mutual Funds

5.37 Mutual funds continued to witness lacklustre activity in terms of resources mobilised mainly due to depressed secondary market conditions during most part of 1998-99. The conditions, however, improved in April 1999 with the announcement of several incentives for mutual fund investors in the Union Budget for 1999-2000. The poor resource mobilisation by mutual funds in 1998-99 to a large extent, could be attributed to problems faced by the UTI. During 1998-99, UTI registered a sharp decline of 94.1 per cent in total resource mobilisation to Rs.170 crore from Rs.2,875 crore during the previous year. This was mainly because of the exceptional redemption pressures faced by the UTI in respect of its US-64 scheme during October 1998, which was triggered by negative reserves reported for the scheme. Resource mobilisation by other mutual funds during 1998-99 increased substantially by 156.4 per cent to Rs.2,890 crore from Rs.1,127 crore during the previous year. Aggregate funds mobilised by all mutual funds (including UTI) in respect of all schemes (growth oriented, income oriented and balanced schemes) at Rs.3,060 crore during 1998-99 were lower by 23.5 per cent over the previous year (Table 5.4). A notable development during 1998-99 was the sharp rise in the share of resources mobilised by private sector mutual funds to 68.3 per cent from 16.9 per cent during 1997-98.

Disinvestment by Public Sector Enterprises

5.38 In view of the continued dip in the capital market activity, the actual mobilisation under the disinvestment programme of the government fell short of the targeted amount in the budget for the fourth successive year. The Union Budget for 1998-99 had set a target of Rs.5,000 crore to be mobilised through disinvestment in public sector enterprises. This target was based on the capital market conditions at the beginning of 1998-99 and reflected a modest effort against a sharp shortfall of 81.1 per cent from the target for 1997-98. However, new possibilities opened up when the government considered the option of buy-back and equity swap, which allowed an upward revision of the proceeds from disinvestment to Rs.9,006 crore. Buy-back of shares essentially means repurchase by a company of its own shares. As buy-back of shares through negotiated deals is not allowed by the Ordinance promulgated by the Government, the offer for buy-back is required to be made to all shareholders. Thus, buy-back of shares allows the Government to raise the targeted amount, although it does not necessarily enable it to reduce its stake to the desired extent. Also, buy-back of shares is possible only in case of cash-rich PSUs. In case of cross holding or equity swaps, the stake of one enterprise is held by another enterprise.

This allows the Government to raise funds without losing management control over the PSUs.

Table 5.4: Mobilisation of Resources by Mutual Funds

(Amount in Rupees crore)

	Item	1998-99 P		1997-98	
		No. of Schemes	Amount	No. of Schemes	Amount
	1	2	3	4	5
1.	UTI @	84	170.0	79	2,875.0
2.	Public Sector Mutual Funds	19	799.2	17	448.5
3.	Private Sector Mutual Funds	65	2,090.3	41	678.3
	Total (1 to 3)	**168**	**3,059.5**	**137**	**4,001.8**

P Provisional.
@ Net sales value with premium under all domestic schemes, includes re-investment sales.

Source : UTI and respective mutual funds.

5.39 Actual proceeds from disinvestment during 1998-99 amounted to Rs.5,369 crore. The complete impact of disinvestment programme of the Government on the capital market activity, however, would be felt only when the shares are off-loaded to the public at large. The target for 1999-2000 has been set at Rs.10,000 crore. The Disinvestment Commission has so far brought out ten reports and has given its recommendations for 49 PSUs out of the 65 PSUs referred to it so far.

Euro Issues through Foreign Currency Convertible Bonds (FCCBs) and Global Depository Receipts (GDRs)

5.40 During 1998-99, resource mobilisation by the Indian corporates through Euro issues registered a significant decline; only three issues aggregating Rs.1,148 crore were floated as against seven issues aggregating Rs.4,009 crore during 1997-98, reflecting industrial slowdown and depressed market overseas.

Secondary Market Developments

5.41 During 1998-99, the stock markets remained in the grip of bearish conditions for the larger part of the year. Even though the year commenced on a positive note reflecting the renewed investment interest by FIIs and expectations of a favourable budget, the buoyancy in the stock market was short lived. In April 1998, the markets reacted positively to the formation of the Government at the Centre. However, subdued conditions set in during May to October 1998 on account of reversal of market optimism surrounding the Budget, the imposition of economic sanctions, downgrading by international rating agencies, the continuing industrial slowdown, the problems with the US-64 scheme of the UTI, and the uncertainties on account of crises in major South-East Asian markets, Russia and Brazil. Investment by FIIs in the Indian stock markets too failed to pick up and remained negative (-)Rs.2,234 crore, between May and October 1998. Share prices staged a recovery during November 1998 and March 1999, contributed mainly by the US decision to ease economic sanctions, issue of guidelines by SEBI for buyback of shares, revival of FII buying interest and expectations that the Insurance Regulatory Authority (IRA) Bill would be passed in the Parliament. In particular, share prices increased sharply in March 1999 following a positive reaction to the market-friendly Budget for the year 1999-2000, which contained many encouraging proposals for the revival of stock markets. Improvement in the FII interest and the stabilisation of the East Asian financial market conditions also aided the recovery process.

5.42 Mirroring this trend, the BSE 30-scrip Sensitive Index (SENSEX) (Base: 1978-79=100) touched the year's high of 4280.96 on April 21, 1998. The index declined to 2764.16 by October 20, 1998 but recovered thereafter. The year-on-year variation in stock prices indicated two clear phases of high and low during 1998-99 (Chart V.4). While both the indices (BSE SENSEX and S&P CNX Nifty) exhibited a downturn during the first half, they started to recover by October 1998 and showed a continuous upturn since then. In particular, the SENSEX, which stood at 3233.86 on February 26, 1999 before the Union Budget for 1999-2000 was presented, increased to 3399.63 on the following day, resulting in a gain of 165.77 points in a single day. The SENSEX reached 3784.11 on March 9, 1999 and closed the year at 3739.96. On a point-to-point basis, the index, however, registered a net loss of 152.79 points (-3.9 per cent) during 1998-99. On an average basis, the index registered a decline of 13.6 per cent over the year in comparison with the growth of 9.9 per cent in the previous year (Table 5.5, Appendix Table V.5). S&P CNX Nifty (NSE-50) Index (Base: November 3, 1995=1000) showed a movement similar to the SENSEX; the average index for 1998-99 declined by 12.3 per cent as compared with an increase of 7.9 per cent in the previous year (Table 5.6). During the current fiscal year (up to end-June 1999), share prices have continued the bullish momentum, with the SENSEX rising by 10.7 per cent to 4140.43 as at end-June 1999.

5.43 The volatility in the BSE SENSEX as measured by the coefficient of variation at 11.8 per cent during 1998-99 was significantly higher than 7.9 per cent during 1997-98. The dispersion (the range between high and low) at 1517 during 1998-99 was also higher than that of 1338 recorded during 1997-98 (Appendix Table V.5).

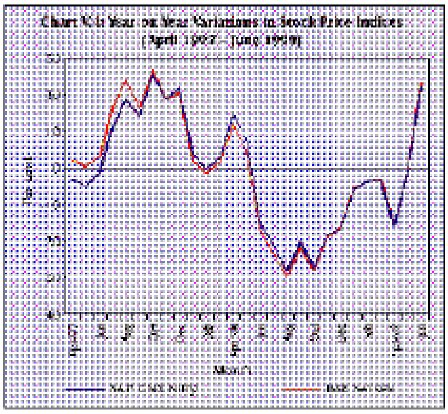


Table 5.5 : Important Indicators of the Stock Exchange, Mumbai

(Amount in Rupees crore)

Indicators	1998-99	1997-98	Percentage variation 1998-99	Percentage variation 1997-98
1	2	3	4	5
1. BSE SENSEX				
(i) Average	3,294.78	3,812.86	- 13.6	9.9
(ii) End of the Year	3,739.96	3,892.75	- 3.9	15.8
2. Price - Earning Ratio @	12.86	14.51	- 11.4	- 5.4
3. Price - Book Value Ratio @	2.26	2.73	- 17.2	- 6.8
4. Yield @ (Per cent per annum)	1.82	1.53	19.0	- 0.6
5. Turnover	3,11,999	2,07,845	50.1	67.2
6. Market Capitalisation as at end-March	5,42,942	5,60,325	- 3.1	20.8

@ Based on 30 scrips included in the SENSEX and are averages for the year.

Source: Stock Exchange, Mumbai.

5.44 The total turnover in BSE at Rs.3,11,999 crore during 1998-99 registered an increase of 50.1 per cent on top of 67.2 per cent increase in the previous year partly attributable to the rapid progress of trading in demat form. The market capitalisation of listed scrips at BSE declined by 3.1 per cent to Rs.5,42,942 crore, as against an increase of 20.8 per cent during 1997-98. This seems to suggest that the positive impact of wealth effect on consumption demand did not appear to be in evidence. The average price-earning ratio declined for the third consecutive year to 12.9 (Table 5.5). The annualised yield based on the 30 scrips comprising SENSEX increased to 1.82 per cent in 1998-99 from 1.53 per cent in the previous year. The average price-book value ratio based on the 30 scrips declined to 2.26 from 2.73 in 1997-98.

5.45 The total turnover on the capital market segment of NSE at Rs.4,14,474 crore registered an increase of 12.0 per cent during 1998-99 as compared with an increase of 25.7 per cent in the previous year. As at end-March 1999, the number of companies listed on NSE stood at 645 with market capitalisation of Rs.3,35,209 crore as against 612 listed scrips with market capitalisation of Rs.3,08,520 crore as at end-March 1998 (Table 5.6). The National Securities Clearing Corporation Limited (NSCCL), which handles the clearing and settlement functions of NSE, guarantees settlement on behalf of its clearing members through its Settlement Guarantee Fund (SGF). The size of the SGF increased to around Rs.580 crore as on March 31, 1999, as compared with Rs.421 crore as on April 1, 1998. NSE formed a joint venture with Standard & Poor's Financial Information Service (S&P) and Credit Rating Information Services of India Limited (CRISIL), which was incorporated in the name of India Index Services & Products Limited (IISL), for launching equity index business in India. NSE and NSCCL commenced Automated Lending & Borrowing Mechanism (ALBM) for lending and borrowing of securities from February 10, 1999.

Foreign Institutional Investors (FIIs)

5.46 Net FIIs investments, which turned negative for the first time during November 1997, followed a mixed trend thereafter. The cumulative investment by FIIs reached a peak of Rs.30,664 crore as at end-April 1998. FII activity during 1998-99, however, resulted in a net outflow of Rs.806 crore as compared with a net inflow of Rs.5,913 crore during 1997-98. The situation improved somewhat since the beginning of the current calendar year and markedly during the first quarter of 1999-2000, reflecting the increase in the weightage for Asian countries (including India) on account of a relatively better outlook for this region. Cumulative net investment by the FIIs which stood at Rs.29,689 crore at end-March 1999 increased to Rs.32,085 crore as at end-June 1999. The number of FIIs registered with SEBI stood at 450 as at end-March 1999.

Table 5.6 : Important Indicators of National Stock Exchange (Capital Market Segment)

(Amount in Rupees crore)

			Percentage variations	
Indicators	1998-99	1997-98	1998-99	1997-98

1		2	3	4	5
1.	S&P CNX Nifty Index				
	(i) Average	954.4	1088.0	-12.3	7.9
	(ii) End of the year	1078.1	1116.9	-3.5	15.3
2.	Turnover	4,14,474	3,70,193	12.0	25.7
3.	Listed Companies*				
	i) Number	645	612	5.4	11.3
	ii) Market Capitalisation	3,35,209	3,08,520	8.7	22.0
4.	Permitted Equities*				
	i) Number	609	745	-18.3	-20.1
	ii) Market Capitalisation	1,55,967	1,72,983	-9.8	3.9

* As at end of the year.

Note :NSE-50 has been renamed as S&P CNX Nifty.
Source : National Stock Exchange of India Ltd.

Banks' Investments in Capital Market

5.47 The year 1998-99 saw greater participation of banks in the capital market. Instrument-wise break-up of investments by the scheduled commercial banks reveals a clear preference for investments in bonds/ debentures/preference shares, which offer fixed returns. Such a preference needs to be seen in the context of the certainty of return on such investments, relatively low transaction costs of managing investment portfolio and the sufficiently high positive gain that these investments entail in relation to the inflation rate or the average cost of deposits. Such investments constituted 83.0 per cent of the banks' incremental investments in commercial sector during the year. Investments by banks during 1998-99 in bonds/debentures/ preference shares of the private corporate sector increased by Rs.8,068 crore (84.3 per cent), while those in the bonds of public sector undertakings increased by Rs.5,763 crore (31.2 per cent). During 1998-99, banks' investments in equities increased by Rs.931 crore as compared with an increase of Rs.340 crore in 1997-98.

Progress of Dematerialisation

5.48 The year 1998-99 witnessed an impressive progress with regard to the dematerialisation process in the country. SEBI added more number of scrips in the list for compulsory trading in demat form. Since January 4, 1999, all trades in 12 select scrips are required to be settled only in dematerialised form. SEBI expanded this list to cover 31 scrips from February 15, 1999, further to 64 scrips by April 15, 1999 and 104 scrips by May 31, 1999. The Union Budget for the year 1999-2000 announced abolition of stamp duty on transfer of debt instruments within the depository mode, which is expected to encourage the dematerialisation process further, and thereby infuse liquidity in the secondary debt market.

Operations of National Securities Depository Limited

5.49 The National Securities Depository Limited (NSDL) made further progress in expanding the coverage of dematerialised trading. This is reflected in the substantial increase in the number of companies, depository participants (DPs) and stock exchanges joining the NSDL. As at end-March 1999, the market value of dematerialised securities reached Rs.1,15,000 crore from Rs.22,700 crore a year ago. At present, nine stock exchanges have established connectivity with NSDL for offering trade in demat securities. The number of companies, which signed up with NSDL to get their securities admitted for dematerialisation reached 375 by end-March 1999, as compared with 191, a year ago. The market capitalisation of these companies constituted about 80 per cent of the market capitalisation of all listed companies in the country. So far, 365 companies have made available their shares for dematerialisation as compared with 171 in the previous year. The number of DPs operational as at end-March 1999, stood at 84 as against 49 as at end-March 1998, which included all custodians providing services to local and foreign institutions. At present, these DPs cater to investors from about 730 locations across the country. The number of beneficial owners, both institutional and retail, who had opened accounts with DPs of NSDL increased sharply to 4,08,000 as on March 31, 1999 from 11,000 a year ago.

Central Depository Service Limited

5.50 On February 8, 1999, SEBI approved the BSE promoted Central Depository Service Limited (CDSL), which would be the second depository after NSDL to offer trading in dematerialised form. The new depository is required to have a minimum equity capital of Rs.100 crore, out of which Rs.65 crore has been contributed by the BSE. The other promoters of the new depository include Bank of India, State Bank of India, Bank of Baroda and HDFC Bank.

Debt Market

Wholesale Debt Market - NSE

5.51 The wholesale debt market (WDM) segment of NSE, which commenced operations on June 30, 1994, has been playing a pivotal role in the development of an active debt market. During 1998-99, while there was a decline in the number of securities listed on WDM segment to 386 from 418 during 1997-98, the number of active securities (listed and permitted to trade) rose from 852 in 1997-98 to 1071 in 1998-99. There was, however, a decline in the volume of trade from Rs.1,11,263 crore during 1997-98 to Rs.1,05,469 crore during 1998-99; the average daily turnover at Rs.344 crore was also lower than the level of Rs.385 crore during 1997-98. The traded volume of corporate debentures declined from Rs.1,148 crore during 1997-98 to Rs.878 crore during 1998-99. The new additions to categories of securities on WDM segment were municipal bonds, statutory corporation bonds, corporate infrastructure bonds and mutual fund units. In order to enable market participants to take informed decisions, a new facility called 'Yield Calculator', which facilitates computation of yield for any security for any given settlement date was added to the online trading system. The National Securities Clearing Corporation Ltd. (NSCCL), a wholly owned subsidiary of NSE, obtained permission from the Reserve Bank to open Subsidiary General Ledger (SGL) accounts to offer constituent SGL facility to a wide range of investors at five centres in India. NSCCL also initiated steps to set up a common clearing and settlement framework for its SGL constituents to remove the counterparty risks.

Term Lending Institutions

5.52 During 1998-99, financial assistance sanctioned and disbursed by all-India Financial Institutions (AIFIs) increased at a much lower rate of 19.2 per cent and 7.6 per cent to Rs.90,040 crore and Rs.55,854 crore, respectively, than the increases of 44.4 per cent and 28.9 per cent, respectively, during 1997-98 (Appendix Table V.6). The sharp deceleration in both sanctions and disbursements during 1998-99 could be attributed to the existence of a number of external and internal uncertainties and their impact on delay in decisions on undertaking new investments and the projects in the pipeline. Sanctions by the all-India development banks, which constituted 88.3 per cent of total sanctions by all AIFIs taken together, increased at a rate of 20.6 per cent, while their disbursements grew by 7.7 per cent.

Government Securities Market

5.53 During 1998-99, developments in the Government securities market were influenced largely by the evolution in the fiscal position for the year, the liquidity conditions in the economy and the debt management strategy adopted by the Reserve Bank. The year witnessed severe demand pressure in the Government securities market, as the fiscal deficit of the Government overshot the target by a wide margin, requiring additional funding requirements from the market to the extent of about Rs.15,000 crore. The notable deceleration in non-food credit off-take and injection of RIB funds to the market which enabled the banking sector to divert its surplus investible funds to the Government securities market, have helped to ensure the success of the debt management strategy adopted by the Reserve Bank to balance the objectives of successfully funding the Government's fiscal deficit and avoiding, at the same time, the pressures on interest rates and inflation expectations. As already indicated, the Reserve Bank adopted a conscious strategy of having securities on its books on private placement basis and of subsequently unloading them through active open market operations (OMO).

5.54 The gross issues of Central Government dated securities nearly doubled from Rs.43,390 crore in 1997-98 to Rs.83,753 crore during 1998-99 (Appendix Table V.7). After meeting the repayment liabilities of Rs.14,803 crore, the net borrowing amounted to Rs.68,950 crore in 1998-99 as against Rs.32,488 crore in 1997-98 representing an increase of 112.2 per cent. The Government raised an additional gross amount of Rs.10,200 crore through 364-day Treasury

Bills, which together with dated securities implied gross market borrowing of Rs.93,953 crore in 1998-99 as compared with Rs.59,637 crore in 1997-98. However, considering the maturing 364-day Treasury Bills of Rs.16,247 crore in 1998-99, the net amount raised through 364-day Treasury Bills was negative at Rs.6,047 crore, as against a positive amount of Rs.8,006 crore in 1997-98. Consequently, the net draft of resources from the market by the Central Government amounted to Rs.62,903 crore in 1998-99, showing an increase of 55.3 per cent over Rs.40,494 crore in 1997-98. Of the total amount of gross borrowing raised through dated securities, private placement with and devolvement on the Reserve Bank at Rs.38,205 crore formed 45.6 per cent as compared with 30.0 per cent (Rs.13,028 crore) in 1997-98. The devolvement on the primary dealers (PDs) increased to Rs.3,125 crore in 1998-99 from Rs.1,903 crore in 1997-98. While the market (excluding PDs and the Reserve Bank) absorption of fresh issues of Central Government dated securities was to the extent of Rs.42,423 crore, the subsequent OMO by the Reserve Bank resulted in a substantial decline in its holding with the corresponding increase of the market's share in holding these securities. At end-March 1999, changes in the Reserve Bank's net holding of Central Government securities was of the order of Rs.10,235 crore for 1998-99, as compared with Rs.5,311 crore (exclusive of conversion of Special securities worth Rs.20,000 crore) in 1997-98.

5.55 Recourse to floating the Central Government dated securities was taken on 24 occasions (including private placement with the Reserve Bank on 8 occasions) in 1998-99 as against 13 occasions (with private placement on 3 occasions) in the previous year. The frequent recourse to the market was necessitated on account of larger borrowing requirements and issuance of longer dated securities with smaller denominations. Of these 24 occasions, 11 occasions were during April-July 1998, when the Government had run into overdrafts with the Reserve Bank.

5.56 In view of the shortening of maturity structure of stock of government securities, longer dated securities, with maturity periods of 11, 12, 15 and 20 years were issued for an aggregate amount of Rs.11,324 crore or 13.5 per cent of the total primary issues during 1998-99. Inclusive of the 10- year maturities (amounting to Rs.19,885 crore), the total amount of issue of long-term maturities increased to Rs.31,209 crore (37.3 per cent of the total primary issues) from Rs.10,000 crore (23.0 per cent) in 1997-98. Consequently, the weighted average maturity increased to 7.71 years as against 6.59 years in 1997-98 and 5.51 years in 1996-97. Notwithstanding the tilt towards the longer dated securities in 1998-99, the uncertainty in market conditions and investor preference for shorter term maturities dictated heavy dependence on short to medium-term securities for mobilisation of market borrowing for the Central Government. Consequently, the total amount mobilised through 2-5 year papers amounted to Rs.26,399 crore, accounting for 31.5 per cent of total primary issues.

5.57 The interest rates in the primary market were influenced by the prevailing liquidity condition, the Reserve Bank's intervention by way of devolvement and private placement, the expectations regarding the critical macroeconomic parameters and the amount and frequency of issues during the year. The yield rates in all segments of maturities in the primary market firmed up during the year (Table 5.7). While at the shorter end, a 2-year issue commanded a primary market yield (at cut-off price) of 11.40 per cent in September 1998, the yield on 5-year issue increased from 11.10 per cent in April 1998 to 11.75 per cent in July 1998 and further to 11.78 per cent in August 1998. This trend was also discernible in the case of 6-year and 10-year securities, whose primary market yields firmed up during the course of the year up to September 1998. While the cut-off yield on 8-year and 9-year issues were placed at 11.75 per cent and 11.90 per cent, respectively, that on 10-year loan increased during the year from 12.0 per cent in early May to 12.25 per cent in September 1998. Among the new longer maturity loans, 11 and 12-year issues were placed privately with the Reserve Bank at coupon rates of 12.29 per cent and 12.32 per cent, respectively, in January 1999, while 15 and 20-year issues were made available on tap at coupon rates of 12.40 per cent and 12.60 per cent, respectively. The primary market yield curve was generally upward sloping with yield spread between 2-year issue in September 1998 and 5-year issue in August 1998 ruling around 38 basis points, while that between the 5-year issue in August 1998 and 10-year issue in September 1998 ruling at 47 basis points. Taking into account the term structure as well as the amounts raised, the weighted average yield rate on Central Government dated securities declined to 11.86 per cent in 1998-99 from 12.01 per cent in 1997-98.

5.58 The Union Budget for 1999-2000 has placed the net market borrowings at Rs.57,461 crore. Taking into account the repayments of Rs.26,553 crore (Rs.16,353 crore for dated securities and Rs.10,200 crore for 364-day Treasury Bills) the gross borrowings work out to Rs.84,014 crore. During 1999-2000 (up to August 3, 1999), the Central Government mobilised net borrowings of Rs.45,230 crore which alongwith the redeemed loans place the gross market borrowings at Rs.53,130 crore. As regards dated securities, the Central Government entered the market on 11 occasions (including 7 private placements with the Reserve Bank) and raised Rs.48,630 crore as gross and Rs.41,830 crore as net market borrowings. The devolvements on the Reserve Bank and the PDs amounted to Rs.23,500 crore and Rs.2,792 crore, respectively. The maturity period ranged between 6 to 20 years and the cut-off yield between 11.24 per cent to 12.45 per cent. A noteworthy development was the introduction of price-based auction for dated securities which would contribute to the reduction in the number of tradable securities in the market and facilitate STRIPS and trading in coupons.

Secondary Market Transactions

5.59 Reflecting the increasing depth attained by the government securities market, the aggregate volume of transactions (outright as well as repos) in Central and State government dated securities and Treasury Bills was significantly higher at Rs.2,27,228 crore during 1998-99 than Rs.1,85,708 crore in 1997-98. The volume of transactions in State government securities was marginal at Rs.1,544 crore. The bulk of the transactions was on outright basis amounting to Rs.1,87,531 crore (83 per cent) and the balance was by way of repos. Total turnover in government securities during 1998-99 amounted to Rs.5,33,850 crore as against Rs.4,20,655 crore in 1997-98. The outright turnover aggregated Rs.3,75,062 crore as compared with Rs.3,22,179 crore in 1997-98.

Open Market Operations (OMO)

5.60 The Reserve Bank resorted to active OMO during the year as a strategy to neutralise a large amount of private placement of government securities with itself and to maintain an orderly flow of liquidity in the market. An important aspect in the OMO during 1998-99 was the inclusion of Treasury Bills of varying maturities. During the first quarter, the Reserve Bank absorbed a large chunk of government dated securities(Rs.13,999.5 crore) to its portfolio, given the pressure stemming from Government finances. While net open market sale (including Treasury Bills) amounted to only Rs.262 crore during this period, the prevailing easy liquidity condition to some extent was neutralised by large scale repo operations. In the second quarter, with the increase in market absorption of fresh securities, the Reserve Bank's open market sale was activated with net sale amounting to Rs.9,034 crore, which more than offset the addition of Rs.4,205 crore to its portfolio. During the last two quarters, the private placement amounted to Rs.20,000 crore; however, the Reserve Bank conducted aggressive open market sales amounting to a similar order (Rs.20,374 crore) to neutralise the excess liquidity in the system. Consequently, the amount of open market sales of dated securities rose significantly to Rs.26,348.3 crore from Rs.7,614 crore in 1997-98. Inclusive of net sales of Treasury Bills (Rs.3,320.8 crore), the total OMO aggregated Rs.29,669.1 crore. The Reserve Bank did not purchase any security during 1998-99 and 1999-2000 (up to July 30, 1999), through its OMO window. During 1999-2000 (up to July 30, 1999), the Reserve Bank's open market sales of dated securities amounted to Rs.18,570 crore (Rs.1,704 crore in the corresponding period of the previous year).

Table 5.7 : Cut-off Yields(Primary Market) for Medium and Long-term Maturities

(Per cent per annum)

Year	5	6	7	8	9	10	11	12	15	17	20
1	2	3	4	5	6	7	8	9	10	11	12
1992-93	12.00	12.30	12.60	12.70	-	12.75	-	-	-	-	-
1993-94	13.00	13.12	13.25	13.31	13.40	12.50	-	-	-	-	-
1994-95	12.00 12.71	11.64	12.08 11.75	11.55	-	12.35	-	-	-	-	-
1995-96	13.85	-	13.80	-	-	13.75 14.00	-	-	-	-	-
1996-97	13.75 13.55	13.82	-	-	-	13.65 13.85	-	-	-	-	-
1997-98	12.69 11.15	11.83 11.57	12.59	11.19	-	13.05 12.15	-	-	-	-	-
1998-99	11.10 11.75 11.78	11.50 11.75 11.95 11.98	-	11.75	11.90	12.00 12.10 12.22 12.25	12.29	12.25 12.32	12.40	-	12.60
1999-2000	-	11.36	11.68	-	11.74	11.99	-	12.05	12.40	12.30	12.45

(up to August 3)	11.24	11.74	11.96 11.97	12.14	12.23	12.42

Treasury Bills

14-day Intermediate Treasury Bills

5.61 Following the decision to discontinue 91-day tap Treasury Bills with effect from April 1, 1997, the Government introduced a scheme of 14-day Intermediate Treasury Bills to enable State governments, foreign central banks and other specified bodies with whom the Reserve Bank has an arrangement, to invest their temporary surplus funds. The total bills outstanding as at the end of March 1999 was Rs.7,749 crore of which the share of State governments was 95 per cent.

14-day Auction Treasury Bills

5.62 The total issues of 14-day auction Treasury Bills during 1998-99 amounted to Rs.18,150 crore of which, non-competitive bids aggregated Rs.8,550 crore, representing about 47 per cent of the total issues; effective April 1, 1998, these non-competitive bids were kept outside the notified amount so that the cutoff yield would reflect liquidity conditions better (Appendix Table V.8). The notified amount varied within the range of Rs.100 crore and Rs.500 crore; it was varied depending on market interest and was higher in the first half than in the second. The subscriptions of the Reserve Bank aggregated Rs.2,804 crore accounting for about 15 per cent of the total issues. The outstanding at year-end amounted to Rs.200 crore. The implicit cut-off yield in 1998-99 varied in the range of 5.47 per cent to 9.39 per cent as compared with 4.95 per cent to 7.30 per cent in 1997-98 and thus, the average rate was higher at 7.79 per cent than that of 5.83 per cent in 1997-98.

5.63 During 1999-2000 (up to August 7), the total issues aggregated Rs.4,850 crore with the implicit cut-off yield varying in the range of 7.30 per cent to 8.61 per cent.

91-day Treasury Bills

5.64 A gross amount of Rs.16,697 crore (inclusive of Rs.5,847 crore received from non-competitive bids) was raised during 1998-99 in respect of 91-day Treasury Bills as against Rs.13,200 crore in the previous year. The gross issues nearly financed the total discharges (Rs.16,797 crore), which indicated the self financing character of these bills. In response to the changing liquidity conditions, the notified amount was varied between Rs.100 crore to Rs.500 crore. Since December 24, 1998 the notified amount was kept constant at Rs.100 crore which resulted in a lower year-end outstanding amount of Rs.1,500 crore. Due to lukewarm response from the market and also in order to maintain stability in short-term interest rates, the Reserve Bank increased its subscription to these Bills to Rs.3,014 crore (18 per cent of the total issues) from Rs.1,089 crore (8.3 per cent) in the previous year. However, the year-end Reserve Bank's holdings amounted to Rs.224 crore (14.9 per cent of the total outstanding Bills) as against Rs.627 crore (39 per cent) in 1997-98 on account of large-scale open market operations in these Bills in the last quarter of 1998-99.

5.65 The implicit yield at cut-off prices ranged higher at 7.17-10.05 per cent as compared with 5.72-7.33 per cent in 1997-98 with the average rate being higher at 8.56 per cent than 6.80 per cent in 1997-98. The hardening of interest rates during 1998-99 which began towards the end of August 1998 was mainly on account of the sharp 3 percentage points rise in the repo rate so as to contain pressure in the forex market. During 1999-2000 (up to August 7, 1999), the total issues of Treasury Bills amounted to Rs.4,160 crore, (inclusive of Rs.2,260 crore of non-competitive bids) with notified amount of Rs.100 crore per auction and the implicit cutoff yield remained within the range of 8.37 per cent to 9.29 per cent.

182-day Treasury Bills

5.66 During 1999-2000, the 182-day Treasury Bills were reintroduced with effect from May 27, 1999 with a notified amount of Rs.100 crore up to August 7, 1999. The total issues amounted to Rs.600 crore with an implicit cut-off yield varying within the range of 9.31 and 9.97 per cent.

364-day Treasury Bills

5.67 The year 1998-99 witnessed a sharp maturity mismatch in 364-day Treasury Bills, as the gross mobilisation at Rs.10,200 crore was lower than the repayment of Rs.16,247 crore (Appendix Table V.8). Accordingly, the net issues were at (-) Rs.6,047 crore as against Rs.8,006 crore in 1997-98. This development was, however, the result of a conscious policy decision to notify lesser amounts on account of unfavourable market response in terms of the lower average number of bids (19 as against 29 in 1997-98) and the amount (Rs.725 crore as against Rs.971 crore in 1997-98) received per auction. During the second half of the year, a favourable market response as reflected in the sharp increase in the number of bids received, prompted the Reserve Bank to increase the notified amount from the range of Rs.100-500 crore to Rs.750 crore in January 1999. The subscription by the Reserve Bank at Rs.1,572 crore was about 15 per cent of the total amount of issues in 1998-99.

5.68 The implicit yield at cut-off prices ranged higher at 7.97-10.72 per cent in 1998-99 as against 7.98-9.42 per cent in 1997-98 with the average yield at 9.51 per cent in 1998-99 being higher than 7.15 per cent during 1997-98. The implicit yield at cut-off prices which was kept unchanged at the historical 7.97 per cent during October 22, 1997-July 3, 1998, despite considerable devolvement on the Reserve Bank since April, was increased to 9.03 per cent on July 17, 1998. The yield was raised in subsequent auctions reaching the peak level of 10.72 per cent on October 9, 1998. The yield declined during the rest of 1998-99 and touched 10.07 per cent in March 1999.

5.69 During 1999-2000 (up to August 7, 1999), the gross amount mobilised was Rs.4,500 crore with an implicit yield at cut-off price ranging between 9.93 to 10.33 per cent.

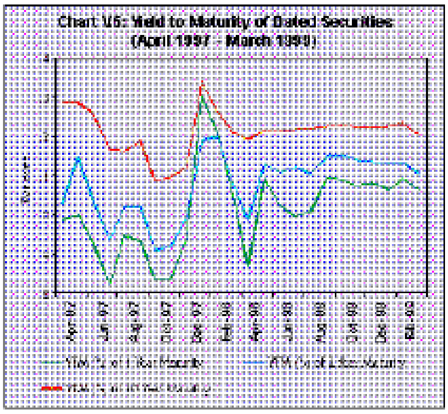
Operations of Primary Dealers (PDs)

5.70 The system of PDs was introduced in 1996 with the objective of strengthening the market infrastructure and making it liquid and broad based, developing underwriting and market making capabilities for government securities, improving trading in the secondary market, widening investor base and making PDs an effective conduit of OMO. The obligations cast upon PDs include an annual minimum bidding commitment for dated securities and Treasury Bills with a minimum success ratio and commitment to underwrite the gap between the subscribed/accepted amount and the notified amount where there is a shortfall. The PDs are allowed access to call money as well as repos/reverse repo markets and to trade in all money market instruments. They have access to SGL and current account facility with the Reserve Bank.

5.71 The number of PDs increased from 6 to 13 during 1998-99, but the new PDs became operational after March 1999. Thus, the analysis of the performance of the 6 PDs indicated that as against the bidding commitment of Rs.16,350 crore and Rs.26,900 crore, respectively, in Treasury Bills and Central Government dated securities in the primary market, the actual bids tendered by PDs were higher at Rs.32,134 crore and Rs.25,024 crore, respectively (Appendix Table V.9). Of these, the bids accepted were Rs.15,652 crore for Treasury Bills and Rs.13,252 crore for Central Government dated securities, respectively, indicating a success ratio of 49 per cent and 53 per cent. As against Rs.69,709 crore offered for underwriting, Rs.28,848 crore was accepted by the Reserve Bank. Total primary purchases (including devolvements) were Rs.18,019 crore in case of Treasury Bills and Rs.16,243 crore in Government of India dated securities. The amount of devolvement to PDs in total issues amounted to Rs.5,358 crore, of which Rs.2,991 crore was in dated securities and Rs.2,367 crore in Treasury Bills. PDs purchased securities up to 19 per cent of the total issues in Central Government dated securities in the primary market and to the extent of 40 per cent of the total issues of auction Treasury Bills. The average daily borrowing of the PDs aggregated Rs.5,610 crore while average daily lending amounted to Rs.2,370 crore in the call/notice/term money market. A total commission/ underwriting fee of Rs.83.31 crore was paid to the PDs during 1998-99, as against Rs.110 crore in the previous year.

Yield Conditions

5.72 The developments regarding the yield rates in the primary market discussed earlier referred to the interest cost at which the Government borrowed from the market at the time of entering the market. A more accurate indicator of the yield conditions in the Government securities market is provided by the transactions in the secondary market. In the secondary market the yield rate of 1-year maturity which peaked at 13.01 per cent in January 1998, reflecting the monetary tightening measures in place during this period, started to climb down in subsequent months reaching a low of 8.67 per cent in April 1998, when liquidity conditions improved following the reversal of monetary policy measures (Chart V.5). Thereafter reflecting the intra-year liquidity conditions, short term yield rate typically followed the course of monetary policy changes during the year. The 1-year yield rate reached the level of 10.65 per cent by March 1999; representing an increase of 15 basis points over that in March 1998 (Table 5.8). In the medium-term segment, the 5-year yield rate hardened from 11.48 per cent in March 1998 to 11.94 per cent in October 1998; thereafter it started to decline reaching 11.55 per cent at end-March 1999. Consequently, the 5-year yield rate strengthened by 7 basis points during 1998-99. At the longer end, the 10-year yield rate after declining from 12.12 per cent in March 1998 to 11.92 per cent in April 1998, exhibited an increasing trend during the major part of the year up toFebruary 1999. However, the long-term yield rate fell sharply from 12.33 per cent in February 1999 to 12.03 per cent in March 1999, recording a decline of 9 basis points during 1998-99. The trends in the yield movement in the Government securities market during the year showed that, while the short term rates responded quickly and pronouncedly to changes in monetary policy rates, long-term rates exhibited somewhat sticky behaviour reflecting the ripple impact of policy changes. The yield curve which shifted downward sharply in April 1998 with the steepness towards lower end of the maturity spectrum, reversed and moved upward in subsequent months up to September 1998, following the August 1998 measures (Chart V.6). The yield curve, thereafter, moved downward and the trend was further precipitated by the easing of monetary policy in March 1999.



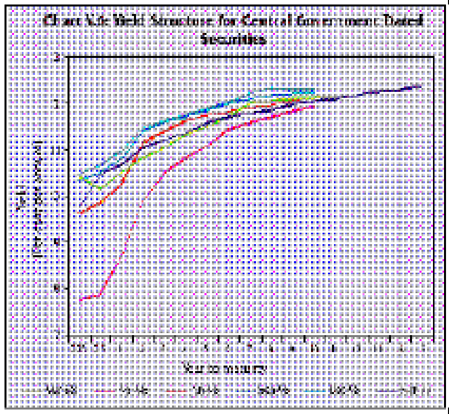


Table 5.8 : Yield to Maturity of Central Government Dated Securities during 1998-99

(in per cent)

	Residual Maturity in Years						
	0.25	0.5	1	2	5	8	10
1	2	3	4	5	6	7	8
End-March 1998	10.42	10.13	10.50	10.80	11.48	12.02	12.12
Minimum (April 1998)	7.74	7.88	8.67	9.86	11.06	11.68	11.92
Maximum	10.61 (Feb.)	10.72 (Feb.)	10.95 (Sept.)	11.50 (Oct.)	11.94 (Oct.)	12.30 (Sept.)	12.33 (Feb.)
End-March 1999	9.70	10.43	10.65	11.03	11.55	11.84	12.03
Memo Items							
1. Range (Maximum - Minimum)	2.87	2.84	2.28	1.64	0.88	0.62	0.41
2. Year-end Variation	- 0.72	0.30	0.15	0.23	0.07	- 0.18	- 0.09

5.73 The average yield spread between 1 and 10-year maturity for Central Government dated securities declined by 50 basis points from 223 basis points in 1997-98 to 173 basis points in

1998-99. On a point-to-point basis, the yield spread declined from 162 basis points as at end-March 1998 to 138 basis points as at end-March 1999 (Table 5.9). The maximum yield spread (325 basis points) was in April 1998 compared to the minimum (120 basis points) in May 1998. Similarly, the average spread between 2 and 10-year maturity declined by 62 basis points from 165 basis points in 1997-98 to 103 basis points in 1998-99.

5.74 The components of spread are basically term risk premia and inflation expectations. The lower spread was mainly attributable to the lower maturity rate moving up, thus responding instantaneously to changes in short-term dealing rates of the Reserve Bank such as the repo rate and the cut-off yield rates on Treasury Bills as well as liquidity shortage, while the rate for higher maturity remained sticky. Similarly, the higher spread showed that the lower maturity rate declined spontaneously responding to interest rate signals of the Reserve Bank and surplus liquidity in the system, while there was a lag for the response of higher maturity rates to materialise. The stickiness of long-term rates may be reflecting rigid long-term inflation expectations and a relatively higher risk premia arising from uncertainties surrounding the fiscal policy and the Government borrowing programme in future.

5.75 The rigid long-term expectations may also be reflecting information bottlenecks, which are particularly relevant in drawing long-term contracts, reducing rate volatility, basing investment decisions in a more rational manner and reacting to market developments in a quick and efficient way. Thus, timely and adequate availability of information on financial statistics plays a critical role in promoting stability and improving the response of the market towards policy changes (Box V.1).

Table 5.9 : Yield Spread of Central Government Dated Securities during 1998-99

(in per cent)

	Spread of 10-year over 1-year	Spread of 10-year over 2-year
1	2	3
End-March 1998	1.62	1.32
Maximum	3.25 (April)	2.06 (April)
Minimum	1.20 (May)	0.80 (October)
End-March 1999	1.38	1.01
Memo Item		
Average		
1998-99	1.73	1.03
1997-98	2.23	1.65

Box V.1

Issues in Financial Statistics

Globalisation and deregulation of financial markets have accelerated the pace of financial innovations and brought forth the need for regular and timely flow of qualitative financial statistics for pursuing sound macroeconomic policies as well as promoting financial stability. Particularly, in the aftermath of South-East Asian financial crisis, the traditional issues in financial statistics such as timeliness in dissemination, accuracy, transparency, harmonisation, international comparability *etc*. have come into sharper focus. Many unconventional issues relating to classification, valuation and measurement of financial transactions have also attracted attention in the context of deregulation and financial innovations.

Efficient use of financial statistics requires greater harmonisation of financial statistics with other system of accounts such as national accounts, balance of payment statistics, government finances and monetary statistics (IMF, 1996; RBI, 1998). Harmonisation of financial statistics could be achieved by consistency and standardisation of the data set that emerges from the commercial banks and other financial institutions. The availability of data on total flow of funds amongst various sectors of the economy at short and regular intervals helps to analyse the transmission mechanism of monetary policy; to derive inter-sectoral linkages; and to monitor the effective functioning of the market. The flow of funds data are difficult to compile in view of the differences in the timing of data submissions by different institutions and the poor quality of such information. The need for data standardisation, wider coverage and higher frequency has become important from the view point of analysis and establishing the linkages among various market segments.

Financial statistics rarely cover data on informal markets although in some economies their size makes them relevant for policy. Measurement of the impact of informal markets on economic activity is, however, difficult due to uncertainty about their definition and inherent problem of measuring undocumented, small scale and fluid markets (IMF, 1996). Activities associated with informal sectors include barter, trade advance, money lending, curb deals, informal foreign exchange market, *etc*.

Financial markets are much more unstable than the product markets and are information driven. Hence, timeliness in dissemination of reliable information assumes special importance (Reddy, 1998). Further, growing globalisation of financial markets and increasing dependence of financial institutions on non-fund and off-balance sheet activities have necessitated quick dissemination of financial information as it facilitates market discipline and helps to evolve a prudential regulatory mechanism that is essential for sound market operations.

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