V FINANCIAL MARKETS

5.1 There has been a growing evidence of integration among different segments of the financial markets during 1997-98. Not only have the size and turnover of the financial markets increased but also the number of instruments traded has expanded sizeably.

5.2 The first three quarters of the year witnessed low overnight (call) rates and significant reductions in the interest (discount) rates in respect of other money market instruments such as certificates of deposit (CDs) and commercial paper (CP). The prevalence of relatively easy liquidity conditions owing to the lagged impact of CRR cuts in the preceding year and sharp accretion of deposits facilitated an early completion of the government's market borrowing programme at a relatively low cost. The softening of interest rates was discernible across the maturity spectrum for the second consecutive year. However, the pressure on the foreign exchange market during the last quarter of the year, emanating from the South-East Asian crisis, necessitated strong monetary measures which had the effect of tightening of liquidity. Consequently, the money market rates moved up during the last quarter of the year. The capital market, however, continued to exhibit subdued conditions during 1997-98 reflecting both reduced demand for funds from corporates and lack of investor support. Nevertheless, the disbursements by all-India financial institutions showed a sizeable increase of 28.5 per cent during 1997-98. Open market operations were undertaken by the Reserve Bank for short term liquidity management in order to ensure orderly conditions in both money and forex markets. Against this backdrop, this Section deals with developments in different organised financial markets, namely, the money, foreign exchange, equity, term lending, corporate debt (comprising PSU bonds and corporate debentures), gilt-edged, hire-purchase and leasing finance markets dominated by non-banking financial companies (NBFCs) 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.

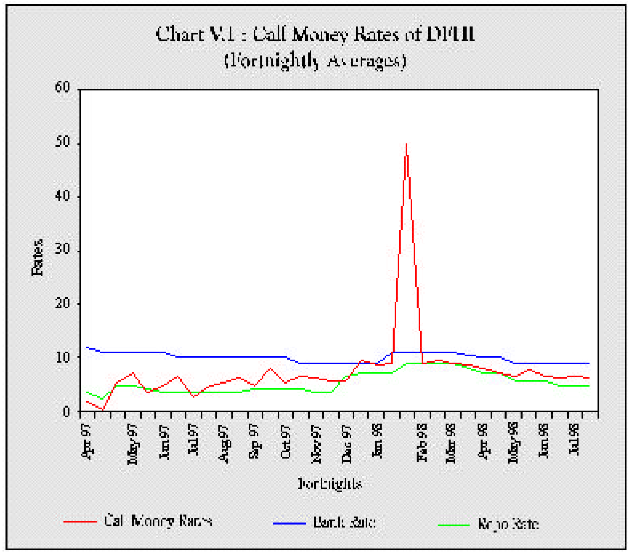
5.3 The first quarter of 1998-99 was characterised by renewed turbulence in the forex market. Foreign currency sales were marked in May-June 1998. However, the liquidity effects were more than offset by the monetisation of the government's deficit coupled with a decline in resource flow from banks to the commercial sector. There was considerable softening of interest rates in the domestic money markets, although these rates were somewhat higher than those during the comparable period of the previous year.

MONEY AND FOREIGN EXCHANGE MARKETS

5.4 The money market acts as the main conduit for transmission of monetary policy impulses, by equilibrating the demand for and supply of funds at the short-end of the market. The central bank intervenes to influence liquidity and thereby money and other market rates. The money market instruments consist of i) call (overnight) and short-notice (up to fourteen days) money, ii) term money, iii) commercial paper (CP), iv) certificates of deposit (CDs), v) money market mutual funds (MMMFs), vi) commercial bills and vii) Treasury Bills. Among these, call and short-notice money and Treasury Bills form the most important segments of the Indian money market. Banks, financial institutions (FIs) and Primary Dealers (PDs) are the major players in these segments of the money market. Mutual funds have also been permitted to participate as lenders in the call/notice money and bills rediscounting markets.

Call/Notice Money Market

5.5 During the first half of 1997-98, call money rates were generally low and DFHI's fortnightly average lending rates ranged between 0.50 per cent and 7.16 per cent and that of scheduled commercial banks' rates ranged between 0.10 per cent and 13.00 per cent. During the third quarter of 1997-98, call/notice money rates were moderate and DFHI's fortnightly average lending rates ranged 5.33-9.41 per cent and the scheduled commercial banks' rates ranged 0.10-11.50 per cent, except when the DFHI's and scheduled commercial banks' lending rates increased sharply to 30.0 per cent and 53.0 per cent, respectively, on December 18, 1997. The steep rise in the call/notice money rates during the second half of December 1997 is attributable to the combined effect of outflow of funds from the banking system on account of advance tax payments and the hike in CRR from 9.5 per cent to 10.0 per cent, effective December 6, 1997.



5.6 The Reserve Bank's liquidity mopping up measures of January 16, 1998 undertaken to squelch the pressure on the forex market were manifested in the DFHI's fortnightly average call money lending rates which reached a historical high of 50.0 per cent in the fortnight ended January 30, 1998 (surpassing the previous peak of 42.9 per cent pertaining to the fortnight ended May 17, 1991) with the DFHI's and the scheduled commercial banks' rates reaching a high of 110 per cent and 140 per cent, respectively, on January 24, 1998 (Appendix Table V.1). The high call rates had the desired impact of eliminating arbitrage opportunities of the market participants who had resorted to borrowing from the call money market and lending in the forex market. With the central bank intervening through both open market operations and foreign exchange market in both the spot and forward segments, call rates softened to 9.3 per cent by mid-February 1998. Following the rolling back of some of the measures announced in January 1998, call rates settled down finally within the interest rate corridor given by the repo rate and the Bank Rate (Chart V.1). Call rates softened further to around 7.2 per cent by the end of April 1998 and to 6.4 per cent by the end of July 1998 and moved in tandem with the fall in the repo rate.

5.7 During 1997-98, the call/notice money market was broad based further by increasing the number of participants in the market; one private sector mutual fund and 17 corporate entities were permitted to operate as lenders in the market through PDs. The average daily turnover in the market exhibited an increase from Rs.19,492 crore during the fortnight ended March 28, 1997 to Rs.23,613 crore during the fortnight ended March 27, 1998, and further to Rs.24,703 crore during the fortnight ended June 5, 1998; the average daily turnover had reached a peak of Rs.25,476 crore during the fortnight ended August 29, 1997. A noticeable feature in the call/notice money market during the financial year 1997-98 was a sharp decline in the share of lendings by public sector banks compensated by a marked increase in the lendings of non-bank institutions as well as private sector banks, and pronounced increase in borrowings of foreign banks and PDs. The average daily lendings of public sector banks declined to Rs.2,938 crore (26.4 per cent of total lendings in the market) during the fortnight ended March 27, 1998 from Rs.4,229 crore (45.5 per cent) during the fortnight ended March 28, 1997 while that of private sector banks increased to Rs.681 crore from Rs.134 crore during the same period. The average daily borrowings of foreign banks rose sharply to Rs.5,131 crore (41.1 per cent of total borrowings in the market) during the fortnight ended March 27, 1998 from Rs.3,996 crore (39.2 per cent) during the fortnight ended March 28, 1997 while that of PDs increased to Rs.4,398 crore (35.2 per cent) from Rs.2,934 crore (28.8 per cent) during the same period. The average daily lendings of non-bank institutions rose sharply to Rs.5,786 crore (52.0 per cent) during the fortnight ended March 27, 1998 from Rs.3,408 crore (36.7 per cent) during the fortnight ended March 28, 1997.

Foreign Exchange Market

5.8 The average monthly turnover in the foreign exchange market rose significantly from about US $ 78 billion during 1996-97 to about US $ 109 billion in 1997-98, largely as a result of a spurt in inter-bank transactions in the second half of the year (Chart V.2). The average monthly turnover in the merchant section rose from about US $ 14 billion in 1996-97 to about US $ 18 billion reflecting the expansion in transactions relating to invisibles and capital flows. The inter-bank to merchant turnover ratio averaged 5:1 both during 1996-97 and 1997-98. However, in September 1997, as the exchange market turned unstable, the inter-bank to merchant turnover ratio rose to about 6:1.

5.9 In the merchant transactions, the share of spot transactions dominated, while the forward transactions accounted only for about 25-30 per cent. In the second half of 1997-98, the share of forward transactions exhibited some increase, rising to about 38 per cent in January 1998. Forward premia during 1997-98 continued to be determined largely by demand and supply conditions and market perceptions and did not mechanically follow interest parity conditions. As a result, during the second half of 1997-98, the Reserve Bank had to intervene in the forward market to reduce the demand-supply mismatch. Spot market interventions were supplemented by monetary policy measures to curb speculative

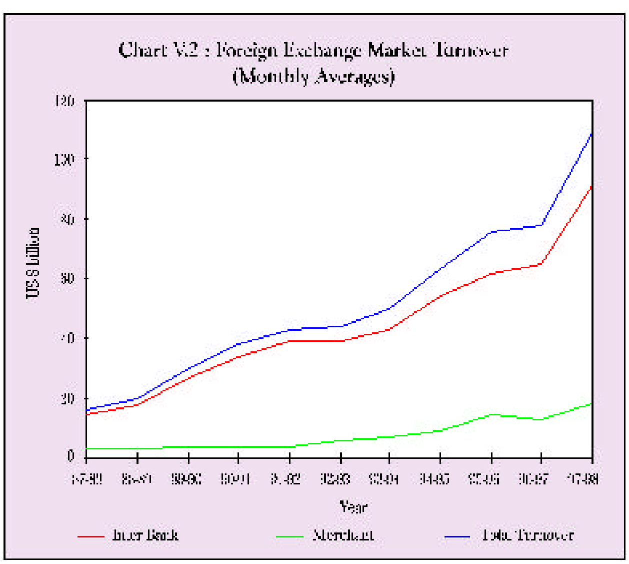


Chart V.2 : Foreign Exchange Market Turnover (Monthly Averages)

activities and to ensure the development of an orderly market. Policy measures relating to the foreign exchange market have already been detailed in Section I and developments relating to management of exchange rate are presented in Section VI.

Repos Market

5.10 During 1997-98, the Reserve Bank resorted to continued use of 3-4 day repos to manage short-term liquidity in the system. Repo auctions with the cut-off repo rate varying between 2.9 per cent and 5.0 per cent were conducted up to November 27, 1997. On November 29, 1997, the Reserve Bank commenced a scheme of 3-4 day fixed rate repos in Government of India securities in order to impart greater manoeuvrability in short-term liquidity management and bring about orderly conditions in both money and forex markets. The repo rate which was initially fixed at 4.5 per cent was raised to 5.0 per cent on December 3, 1997, 6.5 per cent on December 4, 1997, 7.0 per cent on December 11, 1997 and further to 9.0 per cent on January 17, 1998. As the forex market stabilised, the rate was reduced to 8.0 per cent on March 18, 1998, 7.0 per cent on April 3, 1998, 6.0 per cent on April 30, 1998 and further to 5.0 per cent on June 15, 1998. Repo rates have been acting as a floor to call money rates. The monthly/quarterly average outstanding amount of repos mirror liquidity conditions. Excess liquidity conditions were reflected in the significantly higher average volume of repos outstanding (cash value) during April to mid-August 1997 (Rs.3,194 crore) than during November to mid-December 1997 (Rs.1,855 crore) and February-March 1998 (Rs.2,378 crore). Particularly, the average outstanding amount of repos declined sharply to Rs.224 crore during mid-December 1997 to January 1998 despite the successive hikes in repo rates, in evidence of the tight liquidity conditions during this period. During the first quarter of 1998-99, however, the average outstanding amount of repos was sharply higher at Rs.7,406 crore despite the successive decline in the repo rate during this period, in part reflecting the market participants' interest rate expectations in view of the government's large market borrowing programme.

Interlinkages among Money, Forex and Repo Markets

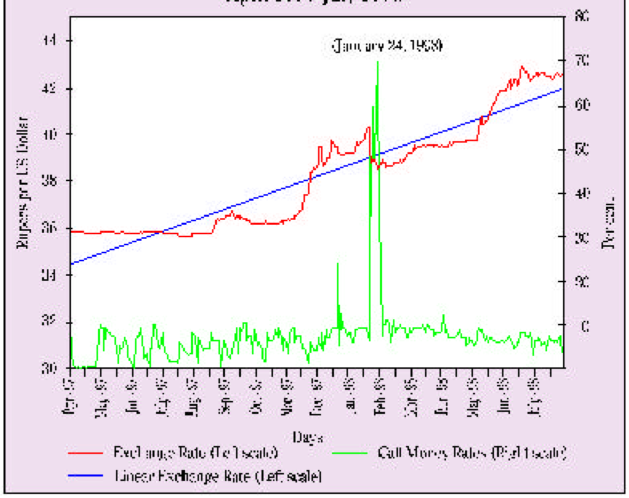
5.11 One of the major developments of the year is the visible emergence of interlinkages among money, forex and repo markets, in particular in the third and fourth quarters of 1997-98. In response to external shocks arising from the South-East Asian crisis and in recognition of the interlinkages a series of monetary policy measures were undertaken impinging on liquidity, foreign exchange and money market rates. The second half of 1997-98, when policy making was put to severe test, was markedly different from the first half of 1997-98 (Table 5.1). During the first quarter (April-June 1997), excess supply conditions existed in the forex market, and inter-bank call money rates were low. Liquidity was abundant and the Reserve Bank sold government securities to absorb liquidity through open market operations. Outstanding amounts of repos were also high. The first two months of the second quarter of the year reflected more or less the same trends. However, there was noticeable depreciation of the rupee in September 1997 (Chart V.3) and also, some sales of foreign currencies by the Reserve Bank. Reflecting the resultant liquidity drain, the average outstanding repos stood low and the reverse repos outstanding increased sharply. The turnover in the call market too showed a decline. In the third quarter, the months of November and December again witnessed pressures developing in the exchange markets with the FEDAI indicative rates depreciating sharply against the US dollar. Foreign currency sales were marked in these months, the liquidity effects of which were partially offset by reverse repo operations. The turnover in the call money market during these two months was also lower than that in the month of October 1997. In January 1998, the foreign exchange market again came under severe pressure, necessitating the Reserve Bank to undertake strong monetary policy measures leading to a sharp withdrawal of liquidity and increase in interest rates. As a consequence, call rates increased sharply, and in line with

Table 5.1 : Developments in Money, Forex and Repo Markets : April 1997 – June 1998

Month	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 Turn-over in Call/ Notice Money Market (Rs. crore)	Average Call Rates (in per cent)
1	2	3	4	5	6	7	8
1997							
April	35.8139	+641	-1,822	3,528	0	19,951	1.04
May	35.8145	-1,393	-65	916	0	23,193	6.95
June	35.8095	+1,335	-68	3,145	0	19,536	4.95
July	35.7372	+1,185	-103	4,830	0	23,894	4.09
August	35.9200	+872	-3	2,156	14	25,476	5.73
September	36.4318	-978	-2	567	178	23,232	6.84
October	36.2260	+189	-980	1,493	12	24,162	5.84
November	37.2358	-1,590	-507	1,869	18	23,399	5.88
December	39.2168	-407	+423	1,081	468	23,343	8.57
1998							
January	39.3843	+422	-25	155	1,399	21,929	26.34
February	38.8871	-642	-3	2,662	582	20,776	9.12
March	39.5007	+1,449	-4,460	2,122	88	23,613	8.96
April	39.6572	+201	-215	9,708	82	21,417	7.19
May	40.4708	-754	-34	5,564	82	24,945	6.98
June	42.2423	-1,627	-13	6,946	0	..	6.67

* Include spot, swap and forward transactions. @ Cash value. .. Not Available.

Chart V.3 : Interlinkages between Call Money Market and Forex Market : April 1997-July 1998



this development, the turnover in the money market recorded a further decline. As offsetting measures, foreign currency purchases were undertaken together with reverse repo operations. The impact of monetary management was such that in February orderly conditions were restored in the forex market and liquidity showed an improvement. With markets exhibiting confidence, foreign exchange inflows increased sharply in late February and in March 1998, enabling the Reserve Bank to sell large amounts of government securities under open market operations. In the first quarter of 1998-99, the rupee again came under severe pressure in May and June. Foreign currency sales increased significantly. Liquidity conditions, however, ruled easy owing to a sharp increase in the monetised deficit with the Reserve Bank accepting devolvement of Rs.13,999.5 crore in respect of dated securities and Rs.347.3 crore in 364-day Treasury Bills with a view to keeping interest rates at a low level. Decline in non-food credit also contributed to easy liquidity conditions which were reflected in higher outstanding amount of repos and higher turnover in call money market and steadily declining call rates moving in tandem with reduction in repo rates.

Other Money Market Segments

Certificates of Deposit

5.12 The generally easy conditions in the call/notice money market during the first half of 1997-98 were reflected in the decline in interest rates and the outstanding amount of high cost certificates of deposit (CDs) issued by scheduled commercial banks. The outstanding amount of CDs declined substantially to Rs.6,607 crore by December 19, 1997 from Rs.12,134 crore as on March 28, 1997 (Appendix Table V.2). However, banks resorted to high cost CDs in the fourth quarter of 1997-98 in response to the tight money market conditions and as non-food credit picked up. Accordingly, the outstanding amount of CDs issued by scheduled commercial banks increased sharply to Rs.14,296 crore by March 27, 1998. The discount rates on CDs which had declined to a range of 5.00-11.50 per cent in December 1997 from the range of 7.00-15.75 per cent at end-March 1997 increased sharply to 6.50-37.00 per cent in the fortnight ended February 13, 1998 following stringent liquidity conditions but moderated to 7.20-26.00 per cent during the fortnight ended March 27, 1998. The typical discount rates on CDs with a maturity of three months came down from 12.00-12.50 per cent in March 1997 to 8.50 per cent in December 1997 and showed a sharp upward movement to 13.00 per cent during the fortnight ended March 27, 1998. As liquidity conditions improved further during the first quarter of 1998-99, the outstanding amount of CDs declined to Rs.10,945 crore by June 5, 1998. The discount rates on CDs also declined to a range of 6.00-13.25 per cent with the typical discount rate for a maturity of three months declining to 10.50 per cent during the fortnight ended June 5, 1998.

5.13 The financial institutions' (FIs) reliance on CDs increased from Rs.4,299 crore as on March 28, 1997 to Rs.4,885 crore by March 27, 1998, but subsequently declined to Rs.3,837 crore as on June 19, 1998. The interest rates on CDs raised by FIs declined from 13.00-18.03 per cent in March 1997 to 11.00 -11.90 per cent in December 1997 before moving up to 11.50-15.25 per cent in March 1998. However, the rates declined to 11.00-12.75 per cent during the fortnight ended June 19, 1998.

Commercial Paper (CP)

5.14 The issue of CP is generally related inversely to the money market rates. The slow pick-up in non-food credit during the first three quarters of 1997-98 coincided with the sharp upsurge in the issue of CP by top-rated corporate entities which could access the CP market at rates lower than the short-term prime lending rates (STPLRs) of commercial banks. Even then, in general, the typical effective discount rate on CP having a maturity of three months was 2-4 percentage points higher than the cut-off yield on 91-day Treasury Bills, reflecting risk premium associated with CP. The outstanding amount of CPs increased sharply from Rs.646 crore as at end-March 1997 to a historical high of Rs.5,249 crore by mid-January 1998 (Appendix Table V.3). The typical effective discount rates on CP issues declined from 11.25-12.25 per cent in March 1997 to 8.00-10.75 per cent in December 1997. Subsequent tightening of money market conditions coupled with sharp expansion in non-food credit resulted in an increase in the typical effective discount rate on CPs to a considerably higher range of 14.22-15.75 per cent in March 1998. Consequently, the outstanding amount of CPs also declined sharply to Rs.1,500 crore by end-March 1998 and further to Rs.1,030 crore as on April 15, 1998. However, the decline in the typical effective discount rate to sub-PLR level of 10.50-12.50 per cent resulted in a sharp upsurge in the issue of CPs with the outstanding amount of CPs increasing to Rs.4,172 crore as on June 30, 1998. The outstanding amount of CPs, however, declined to Rs.4,102 crore as on July 31, 1998.

Term Money Borrowings by Financial Institutions

5.15 Reflecting the relative preference of FIs for long term resources (including term deposits), the outstanding amount of term money borrowings by FIs, having a maturity of 3–6 months, declined to Rs.273 crore as on March 27, 1998 from Rs.645 crore as on March 28, 1997 and stood at the level of Rs.387 crore as on June 19, 1998. In conformity with the trend in other money market instruments, interest rates on term money market borrowings of FIs declined from 12.35-12.70 per cent in March 1997 to 9.0 per cent in December 1997 but rose sharply to 13.00-15.25 per cent in March 1998 before declining to 12.25 per cent during the fortnight ended June 19, 1998. The outstanding amount of term deposits mobilised by the FIs increased to Rs.908 crore by the end of March 1998 from Rs.406 crore at the end of March 1997 with a decline in rate of interest to 10.50–12.00 per cent in 1997-98 from 13.50-14.00 per cent during 1996-97. The outstanding amount of term deposits as on June 19, 1998 was Rs.909 crore and the interest rate ranged 10.00-11.50 per cent.

Bills Rediscounting Market

5.16 Bills rediscounting market witnessed lower activity during 1997-98. The total amount of bills rediscounted by scheduled commercial banks with the financial institutions, mutual funds and the PDs decreased from Rs.1,029 crore at end-March 1997 to Rs.229 crore by end-March 1998 and then increased to Rs.593 crore as on June 30, 1998.

Non-banking Companies

5.17 The aggregate deposits of non-banking companies (NBCs) in terms of survey data as reported by 2,376 non-financial companies and 11,595 financial companies (NBFCs)[1] showed a marked increase of 20.9 per cent to Rs.3,57,153 crore at the end of March 1997 as compared with Rs.2,95,345 crore as at end-March 1996. Of this, the deposits of non-financial companies accounted for 62.7 per cent (Rs.2,23,873 crore). The aggregate regulated deposits of NBCs as reported by 13,971 companies, recorded a significant increase of 33.9 per cent to Rs.71,616 crore as at the end of March 1997, from Rs.53,481 crore reported by 12,530 companies in the preceding year (Appendix Table V.4). The aggregate regulated deposits of NBFCs increased to Rs.62,024 crore in March 1997 from Rs.45,440 crore in March 1996. The regulated deposits[2] of the NBFCs formed 12.3 per cent of the aggregate deposits of scheduled commercial banks as at the end of March 1997 as compared to 10.5 per cent as at the end of March 1996. Data for March 1998 are not as yet available but preliminary indications are that accretion to deposits of NBFCs has slowed down considerably.

Housing Finance Market

5.18 In order to enable larger flow of resources to the housing sector and as a part of

1. Inclusive of housing finance, miscellaneous non-banking and residuary non-banking companies.
2. The term 'regulated deposits' includes not only deposits from the public but also deposits from the shareholders, directors and other guaranteed by directors in their personal capacity, inter-corporate deposits and non-convertible debentures.

deregulating interest rates, effective October 22, 1997, banks were allowed to charge interest at different rates in respect of finance to housing finance intermediary agencies provided the rates were below the appropriate PLR rates. The overall minimum target for 1997-98 as well as for 1998-99 for housing finance allocation by scheduled commercial banks was fixed at 1.5 per cent of each bank's incremental deposits of the previous year, or the amount of housing finance allocation fixed for the previous year, whichever was higher.

National Housing Bank

5.19 The National Housing Bank (NHB) continued to promote the development of a sustainable housing finance system by ensuring availability of housing credit. It also enlarged the credit delivery network by inducing more primary lending institutions to undertake the activity of housing finance and enhanced the slab/ceiling in respect of refinance facility for individual housing loans from Rs.5 lakh to Rs.10 lakh. NHB also introduced a concessional rate of interest in respect of loans for housing in rural areas. The NHB amended certain provisions of the Housing Finance Companies (NHB) Directions, 1989, which came into force, effective September 17, 1997. The amendments related to i) compulsory registration with NHB of housing finance companies (HFCs) with net owned funds (NOF) of Rs.25 lakh and above; ii) restriction on acceptance of deposits by HFCs with NOF below Rs.25 lakh; iii) maintenance of certain percentage of liquid assets by all HFCs; iv) keeping the approved securities in custody with a scheduled bank and submission of quarterly return to NHB; and v) creation of a reserve fund before declaration of dividend. In all, 119 companies have applied for registration with NHB. NHB also revised the guidelines for extending equity support to HFCs.

5.20 During 1997-98 (July-June), NHB raised resources amounting to Rs.425 crore for providing refinance to the eligible institutions and disbursed Rs.533 crore by way of refinance and direct lending. Cumulatively, the total financial assistance amounted to Rs.3,648 crore of which 78.2 per cent was availed of by HFCs, 15.8 per cent by co-operative sector institutions, 5.5 per cent by scheduled banks and 0.6 per cent by public agencies and local bodies set up by Central/state governments.

EQUITY, DEBT AND TERM LENDING MARKETS

5.21 The capital market exhibited subdued conditions during 1997-98. The primary market remained depressed throughout the year due to cautious attitude of both investors and corporates, while the secondary market occasionally witnessed brief and unsustained spells of buoyancy. The major factors contributing to the dull capital market conditions were the reduced demand for funds from corporates, lack of investor support and increased recourse to the private placement market which enabled corporates to raise sizeable funds.

New Issues Market

5.22 During 1997-98, the aggregate new capital issues floated through prospectus and rights by the government companies, non-government public limited companies (private sector), public sector undertakings, banks and financial institutions (in the public sector) declined considerably by 69.9 per cent to Rs.4,657 crore from Rs.15,476 crore in 1996-97. The amount raised by non-government public limited companies declined by 69.9 per cent to Rs.3,138 crore and that by banks and financial institutions by 66.1 per cent to Rs.1,476 crore (Table 5.2). The lack of sustained buoyancy in the secondary market during 1997-98 impacted on the primary market in that the number and amount of new issues raised during the year decreased significantly. The continued sluggishness in the capital market is a matter of concern, since long-term prospects for sustained industrial development are critically dependent on revival of the primary market. An informal group set up for this purpose has made a number of useful recommendations which require to be implemented expeditiously (Box V.1).

5.23 The share of equity issues in new capital issues by the non-government public limited companies declined further to 37.0 per cent in 1997-98 from 58.7 per cent during 1996-97 (Appendix Table V.5). In equity issues, the share of non-government non-financial public limited companies declined to 77.5 per cent during 1997-98 from 87.1 per cent in 1996-97. This reflects the relative attractiveness of

Box V.1
Major Recommendations of the Informal Group on Primary Market

The Informal Group on Primary Market (Chairman: Dr. Shankar N. Acharya) suggested the institution of improved institutional arrangements including stringent listing requirements, adoption and strict enforcement of disclosure norms and standardisation of accounting norms in line with Generally Accepted Accounting Principles (GAAP) and the introduction of safety net/exit options in order to revive investors' confidence in the market by ensuring transparency and facilitating shareholders' discipline. Banks and insurance companies were to participate to a greater extent. GDR issuers could be persuaded to offer a part of their equity in the domestic market.

Norms for primary market issues could be made stricter with either pre-conditions relating to minimum net worth and profitability calculated by GAAP or in consultation with Institute of Chartered Accountants of India (ICAI) or the existing condition of getting the project appraised and funded by banks or FIs. A company going for public issue should not have any outstanding warrants or preference shares. While the auditors/CAs should be made accountable for the information certified by them, intermediaries must be made strictly accountable for defaults by client issuers with SEBI being empowered under the Act to blacklist individuals. The cost of equity issues should be reduced by popularising book building, reducing the number of mandatory collection centres, mandating the offer through depository and printing application form in newspapers. While the concept of 'at par' should be dispensed with in equity shares, investment in infrastructure issues may be made a part of priority sector lending requirement. New instruments such as 'puttable equity' or 'equity commitment notes' could be allowed. The facility of private placement should be restricted to not more than 99 qualified institutional investors and should be tradable on OTCEI. FIs/banks/mutual funds which participate in private placement should mandatorily give information on a regular basis to SEBI and the Reserve Bank.

In order to develop the secondary market, the Group emphasised the need to promote market making, develop low cost communication network and low cost trading systems through scripless trading and compulsory demat trading, and the creation of a Domestic Depository Receipt market. Derivative trading should be introduced after putting in place the necessary regulation.

assured returns on the securities in the debt market and the absence of possibility of capital appreciation of equities in the context of the sharp fall in secondary market activity. Notwithstanding the lower share of equity issues, the premium charged on equities by private corporates as a proportion of total amount of equity issues increased to 56.2 per cent during 1997-98 from 23.9 per cent in the previous year. The mega issues (Rs.100 crore and above) dominated new capital issues accounting for 70.8 per cent (Rs.2,221 crore) as compared with 46.7 per cent (Rs.4,869 crore) during 1996-97. The number of mega issues, however, declined to 8 from 13 in the previous year. The average size of new issues floated by private sector companies in 1997-98 was substantially higher at Rs.30.8 crore as compared with Rs.12.4 crore in 1996-97 because only reputed and large companies were able to tap the capital market.

5.24 In view of the subdued new issues market, the private placement market continued to flourish during 1997-98 with corporate entities raising substantial resources essentially through fixed income securities. During 1997-98, banks, financial institutions and public and private sector companies mobilised Rs.27,069 crore through this route accounting for 85.3 per cent of total resource mobilisation (Rs.31,726 crore) as compared with Rs.15,066 crore (49.3 per cent of resource mobilisation of Rs.30,542 crore) during 1996-97.

Mutual Funds

5.25 The performance of mutual funds, though better than that of the previous year, was not very encouraging in terms of the total funds mobilised by them mainly due to the depressed secondary market conditions. UTI, however, mobilised Rs.2,119 crore in 1997-98 as against a reverse flow of funds of Rs.3,043 crore in 1996-97 attributable to the bunching up of redemption of several close-ended schemes. The performance of mutual funds other than UTI continued to remain discouraging although the amount mobilised by them increased somewhat to Rs.1,186 crore during 1997-98 from Rs.1,062 crore in the previous year and their number as at the end of March 1998 increased to 34 from 32 as at the end of March 1997. Aggregate funds mobilised by mutual funds (including UTI) in respect of all schemes (growth oriented, income oriented and growth-cum-income oriented) were of the order of Rs.3,305 crore in contrast to a net outflow of Rs.1,981 crore in the previous

Table 5.2: Mobilisation of Resources from the Primary Market*

(Amount in Rupees crore)

Item	1997-98 P		1996-97	
	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)	102	3,138.3 (-69.9)	842	10,424.1 (-35.3)
2. Public Sector Undertakings (PSU Bonds)	—	— (–)	1	50.0 (–)
3. Government Companies (Equities *plus* Bonds)	1	42.9 (-93.4)	3	650.0 (-35.0)
4. Banking/ Financial Institutions (in the Public Sector)	4	1,475.6 (-66.1)	6	4,352.0 (25.6)
5. Sub-total (1+2+3+4)	107	4,656.8 (-69.9)	852	15,476.1 (-24.8)
B. Private Placement				
1. Private Sector	..	8,700.0	..	2,493.0
2. Public Sector	..	18,370.0	..	12,573.0
3. Sub-total (1+2)	..	27,069.0	..	15,066.0
C. Total (A+B)	..	31,725.8	..	30,542.1

P Provisional. — Nil/Negligible. .. Not Available.

* Including both debt and equity.

Note : 1. Parenthetic figures represent percentage variations over the previous year.

2. In the case of PSU bonds, the figures in columns 2 and 4 refer to the number of Public Sector Undertakings. The data on PSU bonds in this table exclude Rs.3,344.3 crore and Rs.2,982.5 crore mobilised through private placements during 1996-97 and 1997-98, respectively.

year (Table 5.3). However, bulk of the resources raised emanated from income oriented schemes.

Disinvestment by Public Sector Enterprises

5.26 The disinvestment programme of the government fell far short of the target for the year 1997-98 on account of subdued stock market conditions. As per the revised budget estimate, resource mobilisation through disinvestment of PSU stocks stood significantly lower at Rs.907 crore than the initial target of Rs.4,800 crore. During 1996-97, resource mobilisation through disinvestment of PSU stocks amounted to Rs.500 crore as against the targeted amount of Rs.5,000 crore. For 1998-99, a target of Rs.5,000 crore has been fixed. The Disinvestment Commission (Chairman: Shri G.V. Ramakrishna), which was set up in August 1994 for drawing up a long-term disinvestment programme for the PSUs has since submitted seven reports covering the disinvestment pattern for 41 PSUs out of 43 PSUs referred to it.

Table 5.3 : Mobilisation of Resources by Mutual Funds

(Amount in Rupees crore)

Item	1997-98P		1996-97	
	No. of Schemes	Amount	No. of Schemes	Amount
1	2	3	4	5
1. UTI @	79	2,119.0*	73	-3,043.0*
2. Public Sector Mutual Funds	17	528.5	12	186.8
3. Private Sector Mutual Funds	40	657.9	34	874.9
Total (1 to 3)	136	3,305.4	119	-1,981.3

P Provisional.

@ Net sales value with premium under all domestic schemes.

* Excludes re-investment sales.

Sources: UTI and respective mutual funds.

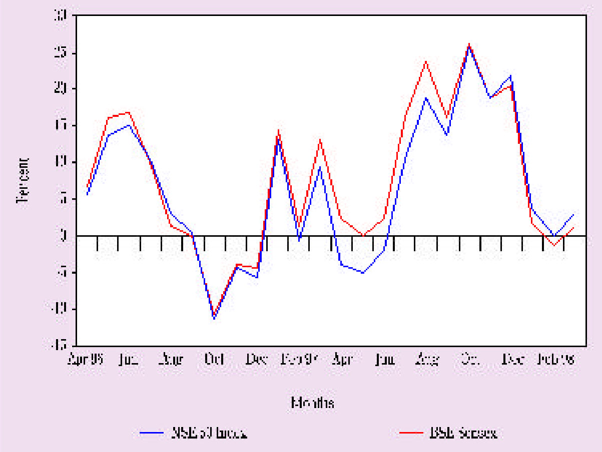
Euro Issues through Foreign Currency Convertible Bonds (FCCBs) and Global Depository Receipts (GDRs)

5.27 During 1997-98, seven Euro issues were floated by the Indian corporates for Rs.4,009 crore as against Rs.5,594 crore raised through 16 issues during the previous year. This could be attributed to depressed domestic stock markets.

Foreign Institutional Investors (FIIs)

5.28 During 1997-98, net investments by FIIs declined by 20.0 per cent to Rs.5,994 crore from Rs.7,492 crore during the previous year although the number of FIIs registered with the SEBI/Reserve Bank increased from 439 as at end-March 1997 to 496 as at end-March 1998. Net investments by FIIs slowed down considerably from August 1997 and turned negative during November 1997-January 1998 largely due to FIIs' attempt to reduce their exposure in the emerging markets following

Chart V.4 : Year-on-Year Variations in Stock Price Indices during 1996-97 and 1997-98



losses suffered in certain South-East Asian economies. Net investments by FIIs turned positive again during February-March 1998 with FIIs returning to the secondary market with renewed investment interest. The cumulative net investments of FIIs stood at Rs.30,501 crore as at the end of March 1998. During April-June 1998, however, FIIs' investments in net terms showed a decline. More recent information indicates that FIIs have shown a renewed interest in Indian markets.

Secondary Market Developments

5.29 After witnessing prolonged bearish conditions since July 1996, share prices staged a recovery in the first four months of 1997-98 due to higher order of investment by FIIs coupled with some favourable proposals in the Union Budget 1997-98. However, the recovery proved short-lived as subdued conditions set in during August 1997 – mid-February 1998 reflecting, *inter alia*, slowdown in industrial production and near-absence of active interest by FIIs in the secondary market in the wake of South-East Asian currency crisis. The stock market staged a smart recovery during February-March 1998 on account of renewed investment interest by FIIs and expectation of a favourable budget. Mirroring this trend, the BSE 30-scrip sensitive index (SENSEX) (Base 1978-79=100), moved up to 4548 by August 5, 1997 from 3361 on March 31, 1997 but declined to 3210 by January 28, 1998. It recovered partially to close the year at 3893, registering a net gain of 532 points (15.8 per cent) during 1997-98 on a point-to-point basis. On an average basis, the index registered an increase of 9.9 per cent over the year in comparison with 5.5 per cent in the previous year (Table 5.4, Appendix Table V.6 and Chart V.4). NSE-50 index (Base: November 3, 1995=1000) of share prices showed a movement similar to BSE SENSEX and the average index for 1997-98 at 1087.4 rose by 7.7 per cent as compared with an increase of 4.8 per cent in the previous year.

5.30 The volatility in the BSE SENSEX as measured by the coefficient of variation at 7.9 during 1997-98 was lower as compared with 8.6 during 1996-97. The dispersion (the range between high and low) at 1338 during 1997-98 was, however, marginally higher than that of 1324 recorded during 1996-97 (Appendix Table V.6).

5.31 The total turnover in BSE at Rs.2,07,644 crore during 1997-98 registered an increase of 67.1 per cent on top of 148.3 per cent in the previous year. The market capitalisation of listed scrips at BSE increased by 20.8 per cent to Rs.5,60,325 crore, as against a decline of 11.9 per cent during 1996-97. However, the average price-earning ratio declined for the second successive year to 14.5 (Table 5.4). The annualised yield based on the 30 scrips comprising SENSEX registered a marginal decline to 1.53 from 1.54 in the previous year.

Table 5.4 : Important Indicators of the Bombay Stock Exchange

			Percentage Variations	
Indicators	1997-98	1996-97	1997-98	1996-97
1	2	3	4	5
1. BSE SENSEX				
(i) Average	3812.86	3469.24	9.9	5.5
(ii) End of the Year	3892.75	3360.89	15.8	-0.2
2. Price-Earning Ratio @	14.50	15.34	-5.4	-23.0
3. Price-Book Value Ratio @	2.73	2.93	-6.8	-15.3
4. Yield (per cent per annum) @	1.53	1.54	-0.6	23.2
5. Turnover (Rupees crore)	2,07,644	1,24,284	67.1	148.3
6. Market Capitalisation as at end-March (Rupees crore)	5,60,325	4,63,915	20.8	-11.9

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

Source: Bombay Stock Exchange.

Table 5.5 : Important Indicators of National Stock Exchange (Capital Market Segment)

Indicators	1997-98	1996-97	Percentage Variations 1997-98	Percentage Variations 1996-97
1	2	3	4	5
1. NSE-50 Index				
Average	1087.4	1009.3	7.7	4.8
End of the Year	1116.9	968.3	15.3	-1.7
2. Total Turnover (Rupees crore)	3,70,193	2,94,504	25.7	337.7
3. Listed Companies				
No. of Listed Companies*	612	550	11.3	30.3
Market Capitalisation (Rupees crore)	3,08,520	2,52,894	22.0	16.2
4. Permitted Equities				
No. of Equities Permitted	745	932	-20.1	10.2
Market Capitalisation (Rupees crore)	1,72,983	1,66,473	3.9	-9.4

* As at end of the year.

Source: National Stock Exchange of India Ltd.

The average price-book value ratio based on the 30 scrips also declined to 2.73 from 2.93 in 1996-97.

5.32 The total turnover on the capital market segment of NSE at Rs.3,70,193 crore registered an increase of 25.7 per cent during 1997-98 as compared with the rise by over three fold in the previous year. As at end-March 1998, 612 scrips were listed on NSE with a market capitalisation of Rs.3,08,520 crore as against 550 listed scrips with market capitalisation of Rs.2,52,894 crore as at end-March 1997 (Table 5.5). NSE launched Defty (Dollar Denominated Nifty) Index on November 26, 1997, which expresses returns on NSE-50 in US dollar terms to facilitate investment decisions by FIIs and other off-shore funds. Moreover, an On-Line Position Monitoring System (OPMS) was introduced by the Clearing Corporation at NSE in order to constantly monitor and pre-empt market failure from excessive exposure of its members.

Operations of National Securities Depository Limited

5.33 The National Securities Depository Limited (NSDL), which commenced its operations in November 1996, made considerable progress during 1997-98 in popularising scripless trading in stocks and reducing risks associated with physical certificates. The depository infrastructure grew with more companies, depository participants (DPs) and stock exchanges joining the NSDL. The number of companies which signed up with NSDL to get their securities admitted for dematerialisation increased to 191 by end-March 1998 as compared with 40 a year ago. The market capitalisation of these companies constituted about 59 per cent of the aggregate market capitalisation in the Indian capital market. During 1997-98, 171 companies made their shares available for dematerialisation as compared with 23 in the previous year. The number of DPs operational as at the end of March 1998 stood at 49 as against 24, a year ago. Currently, DPs cater to investors from about 215 locations across the country.

5.34 About 11,300 investors, institutional as well as retail, opened accounts with NSDL and dematerialised about 1,760 million shares valued at Rs.22,670 crore as at the end of March 1998. The total value of trades in dematerialised securities at NSDL at Rs.355 crore during 1997-98 was substantially higher than that of a little over Rs.2 crore, a year ago.

Term Lending Institutions

5.35 During 1997-98, financial assistance sanctioned by all-India financial institutions (AIFIs) increased by 48.7 per cent to Rs.79,947 crore, while disbursements registered an increase of 28.5 per cent to Rs.51,855 crore. The wide gap between sanctions and disbursements during 1997-98 can be attributed to the large sanctions made in respect of infrastructure projects which enlarged by 217 per cent during 1997-98. Among these institutions, the all-India development banks took the lead with their sanctions and disbursements increasing by 53.9 per cent and 30.7 per cent, respectively. A significant feature of 1997-98 was that sanctions and disbursements of short term loans increased sharply by Rs.4,274 crore and Rs.3,562 crore, respectively, as compared with Rs.379 crore and Rs.397 crore, respectively, in the previous year. It may be indicated that in 1996-97, sanctions by all financial institutions (including state-level institutions) had declined by 16.5 per cent, while disbursements increased by 9.3 per cent (Appendix Table V.7). The sharp increase in both sanctions and disbursements during 1997-98 is a pointer to heightened prospects of capital formation in the years ahead.

Debt Market

Wholesale Debt Market – NSE

5.36 The wholesale debt market (WDM) at NSE continued to witness sharp expansion during 1997-98 as the number of securities listed on WDM segment rose to 418 from 307 during 1996-97; average daily turnover at Rs.385 crore also increased substantially from the level of Rs.145 crore in 1996-97. The traded volume of corporate debentures increased to Rs.1,697 crore in 1997-98 from Rs.479 crore during 1996-97. The number of active securities rose from 525 to 719, while the number of active participants increased to 79 during 1997-98 from 73 during 1996-97. Several new instruments such as deep discount bond, securitised debt, PSU infrastructure bond, government index bond, corporate floating rate bond and institutional tax-free bonds were added to this segment. National Securities Clearing Corporation (NSCC), a wholly owned subsidiary of the NSE was permitted to operate a Subsidiary General Ledger (SGL) account, which would be used for holding government securities and Treasury Bills with the Reserve Bank on behalf of provident funds, trusts, corporates and other retail investors of these securities. The new system would enable these investors to avoid delays and ensure safety of paperless trade using electronic book transfer.

Public Sector Bonds

5.37 During 1997-98, seven PSUs raised Rs.2,982 crore through bonds as against Rs.3,394 crore raised by ten PSUs in 1996-97. The entire amount was raised through private placement during 1997-98, while PSUs had mobilised Rs.3,344 crore through private placement and the balance Rs.50 crore through public issues during 1996-97.

GOVERNMENT SECURITIES MARKET

5.38 The developments in the government securities market are generally influenced by Central Government's actual borrowing *vis-à-vis* the budgeted amounts, the maturity structure of the debt issued or proposed to be issued, the absorptive capacity of the market, and the policies relating to domestic debt management. As stated earlier, the prevalence of relatively easy liquidity conditions and slow credit offtake during the first three quarters of 1997-98 facilitated an early completion of the government's market borrowing programme for the year. More than four-fifths of market borrowing was completed during the first half of 1997-98 itself. The Central Government raised in gross terms Rs.59,637 crore through issues of dated securities worth Rs.43,390 crore and 364-day Treasury Bills equivalent of Rs.16,247 crore (Appendix Table V.8). In net terms, the amount raised was Rs.40,494 crore. Excluding the private placements and subscription by the Reserve Bank and Primary Dealers (PDs), the market absorption of Central Government dated securities was higher at Rs.28,460 crore in 1997-98 compared with Rs.20,945 crore in the preceding year.

5.39 The Central Government entered the dated securities market on 13 occasions – including three private placements with the Reserve Bank (Rs.11,000 crore), eight auctions (Rs.27,000 crore) and two tap issues (Rs.5,390 crore) – one of them being capital indexed bonds (Rs.705 crore) during 1997-98. Of the eight auctions, only two auctions were partially subscribed by the Reserve Bank (Rs.2,028 crore) and the PDs (Rs.1,903 crore). The subscription by the Reserve Bank in total primary issues, inclusive of private placement, was 30.0 per cent (Rs.13,028 crore) of total issues of dated securities as against 13.2 per cent in 1996-97. The subscription by PDs was also higher at 4.4 per cent than 2.3 per cent in 1996-97. During 1997-98, the yields in primary auctions of dated securities of 3-10 year maturity ranged between 11.15 per cent and 13.05 per cent. The range was 13.40 to 13.85 per cent for 2-10 year maturity during 1996-97. Thus, there was softening of rates during 1997-98. Significantly, 5-year and 8-year securities were issued in August 1997 at low cut-off yields of 11.15 per cent and 11.19 per cent, respectively.

5.40 The gross (net) market borrowings of the Central Government is budgeted at Rs.79,376 crore (Rs.48,326 crore) for 1998-99. During 1998-99 (up to August 14, 1998), the Central

Government entered the dated securities market on 17 occasions (including two private placements with the Reserve Bank of Rs.5,000 crore each) and raised Rs.52,929 crore of which the subscription by PDs was Rs.2,354 crore (or 4.4 per cent) and that by the Reserve Bank was Rs.17,234 crore (or 32.6 per cent). The tenor of government securities has ranged 3-12 years with the coupon rates ranging from 11.10 per cent to 12.25 per cent. Inclusive of Rs.1,500 crore raised through auctions of 364-day Treasury Bills, the Central Government completed 68.6 per cent (Rs.54,429 crore) of the gross market borrowing programme by August 14, 1998.

Secondary Market Transactions

5.41 During 1997-98, the aggregate transactions in Central and state government securities and Treasury Bills (outright as well as repos) was significantly higher at Rs.1,85,708 crore than Rs.1,22,942 crore during 1996-97; this reflected increasing depth attained by the government securities market. The transactions in government dated securities aggregated Rs.1,40,700 crore (75.8 per cent). The bulk of the transactions was outright amounting to Rs.1,61,070 crore (86.7 per cent). The average monthly outright transactions in government dated securities during 1997-98 were substantially higher at Rs.9,991 crore than that of Rs.5,042 crore during 1996-97 reflecting easy liquidity and softening of interest rates.

5.42 The secondary market for Government of India (GoI) securities witnessed a softening of the yield (based on SGL transactions) during 1997-98 as compared with that during 1996-97. On a month-to-month basis, the yield generally showed a declining trend during 1997-98 barring the period January -February 1998 when the yield firmed up. In January 1998, inverted yield curve was observed with short-term rates touching 16-18 per cent. The average yield (yearly basis) on GoI securities of 5-year residual maturity decreased to 11.54 per cent from 12.55 per cent. Similarly, the average yield on GoI securities of 11-year residual maturity also decreased to 12.07 per cent from 12.84 per cent (end-April 1997).

Open Market Operations

5.43 The open market operations (OMO) including repo activities played an important role in neutralising excess liquidity situation during the greater part of the year as well as in containing volatility in the domestic money and foreign exchange markets. Reflecting this, the net sales of government securities during 1997-98 amounted to Rs.7,614 crore as against Rs.10,464 crore during 1996-97 and only Rs.583 crore in 1995-96 when tight liquidity conditions prevailed. Open market operations were carried out more aggressively during the second half of 1997-98 with a view to draining out liquidity from the market; net sales of government securities were, therefore, higher during the second half of 1997-98 (October-March) at Rs.5,551 crore compared with net sales of Rs.2,063 crore during the first half of 1997-98 (April-September). During 1997-98, the stock of marketable securities was augmented by conversion of Special Securities amounting to Rs.20,000 crore for conducting active OMO. During 1998-99 (up to August 7, 1998), the net sales amounted to Rs.2,047 crore.

Treasury Bills

14-day Intermediate Treasury Bills

5.44 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 with the rate set at par with the interest rate charged on WMA during a quarter to enable state governments, foreign central banks and other specified bodies with whom the Reserve Bank has special arrangements to invest their temporary surplus funds. The Intermediate Bills issued during 1997-98 amounted to Rs.1,57,724 crore (including renewals). Total Bills discharged (including renewals) were equivalent of Rs.1,04,379 crore. Bills rediscounted and renewed stood at Rs.45,586 crore and Rs.6,165 crore, respectively. Thus, the total Bills outstanding as at the end of March 1998 amounted to Rs.7,759 crore, of which the share of state governments was 94.8 per cent. During 1998-99 (up to August 7, 1998), the Intermediate Bills issued amounted to Rs.60,572 crore (including renewals). Total Bills discharged (including renewals) were Rs.38,195 crore. Bills rediscounted and renewed stood at Rs.22,470 crore and Rs.2,744 crore, respectively. Thus, the total Bills outstanding as on August 7, 1998 were Rs.7,666 crore.

14-day Auction Treasury Bills

5.45 14-day auction Treasury Bills were introduced on June 6, 1997, keeping in view the cash management requirements of various segments of the economy as also facilitating the emergence of a more comprehensive yield curve. The total issues during 1997-98 amounted to Rs.69,237 crore (Appendix Table V.9). The 14-day Treasury Bills received a favourable response from market participants to park their temporary surplus funds during periods of easy liquidity, *i.e.* up to November 1997. As money market rates hardened, the outstanding amount which had reached a peak of Rs.10,625 crore as on September 13, 1997 declined to Rs.240 crore by end-March 1998; this occurred despite a hike in the implicit cut-off yield, from 4.95 per cent since inception to 7.04 per cent on December 6, 1997 and further to 7.30 per cent on January 31, 1998 which remained unchanged upto April 18, 1998. Subsequently (up to August 17, 1998), however, the implicit cut-off yield showed varying trends and moved in the range of 5.47-7.04 per cent.

91-day Treasury Bills

5.46 As against an uniform notified amount of Rs.500 crore in each auction (excepting the last two auctions) during 1996-97, varying amounts in the range of Rs.100 crore - Rs.500 crore were placed in the weekly auctions during 1997-98. As a result, the total notified amount (outstanding value of 91-day Treasury Bills as at end-March) declined to Rs.13,200 crore (Rs. 1,600 crore) during 1997-98 from Rs.25,200 crore (Rs.5,700 crore) in the previous year (Appendix Table V.9). Due to easy liquidity conditions during the greater part of the year, the subscription by the Reserve Bank was lower at 8.3 per cent of the notified amount than 13.4 per cent during the previous year; however, in response to the hardening of liquidity conditions during the fourth quarter of the year, the Reserve Bank's holding was higher at 45.5 per cent as at end-March 1998 than 25.8 per cent as at end-March 1997. The implicit yield at cut-off prices ranged between 5.72 per cent (a historical low reached on April 17, 1997) and 7.33 per cent during 1997-98, lower than 6.92-12.97 per cent in 1996-97; however, the softening of the implicit cut-off yield on the 91-day Treasury Bills witnessed since April 1996 was reversed in December 1997 with the cut-off yield increasing from 6.22 per cent as at end-November 1997 to 7.33 per cent by March 1998. During 1998-99 (up to August 17, 1998), the notified amount ranged Rs.100-400 crore. The Reserve Bank's subscription ranged between Rs.10 crore and Rs.160 crore. The implicit yield at cut-off ranged between 7.17 per cent and 7.75 per cent.

364-day Treasury Bills

5.47 A gross amount of Rs.16,247 crore, was raised during 1997-98, almost double the level raised in the previous year (Rs.8,241 crore), indicating a net contribution of Rs.8,006 crore towards the government's resource mobilisation effort during the year. In view of the varying liquidity conditions, the number of bids received for 364-day Treasury Bills ranged 0-116 during 1997-98. During the last quarter of 1997-98, however, the number of bids received dipped sharply and ranged 0-6 as the cut-off yield at 7.98 per cent was not only non-responsive to the change in the liquidity scenario but was even lower than the repo rate during the greater part of the quarter, reflecting the completion of the (budgeted) gross market borrowing programme of the Central Government by October 1997. The implicit yield at cut-off prices declined from 10.10 per cent as at end-March 1997 to 7.98 per cent (a historical low) during October 1997-March 1998 (Appendix Table V.9). The bid amounts received per auction and accepted per auction increased to Rs.971 crore and Rs.625 crore, from Rs.586 crore and Rs.317 crore, respectively, in the previous year. During 1998-99 (up to August 17, 1998), a gross amount of Rs.1,500 crore was raised and the notified amount ranged Rs.100-400 crore. The cut-off yield which was left unchanged at 7.98 per cent was raised to 9.03 per cent in the auction of July 17, 1998. The subscription by the Reserve Bank and PDs amounted to Rs.472.3 crore (31.5 per cent of notified amount) and Rs.179 crore (11.9 per cent), respectively.

Operations of Primary Dealers

5.48 Primary Dealers (PDs) were giving two-way quotes in the press/screen and have been bidding in the auctions of 91-day/364-day Treasury Bills and in the auctions of dated securities. During 1997-98, the PDs bid higher at Rs.18,111 crore and Rs.19,302 crore, respectively, for Treasury Bills and Central

Government dated securities, as against a bidding commitment in the primary market of Rs.12,600 crore in Treasury Bills and Rs.14,700 crore in Central Government dated securities (Appendix Table V.10). Of these, the bids accepted were Rs.11,647 crore for Treasury Bills and Rs.11,916 crore for Central Government dated securities, indicating a success ratio of 64 per cent for Treasury Bills and 62 per cent for dated securities. As against Rs.36,979 crore offered for underwriting, Rs.16,408 crore was accepted and the amount devolved on PDs was Rs.6,734 crore of which Rs.4,610 crore was in 91-day and 364-day Treasury Bills and Rs.2,124 crore was in Central Government dated securities. PDs purchased securities in the primary market to the extent of 11.8 per cent of the total issues in auction Treasury Bills and 27.5 per cent of the total issues in Central Government dated securities. In the secondary market, PDs achieved a turnover of Rs.31,602 crore in Treasury Bills and Rs.81,035 crore in dated securities, out of which transactions on outright basis were Rs.22,257 crore and Rs.40,810 crore, in respect of Treasury Bills and dated securities, respectively. A total commission/underwriting fee of Rs.110 crore was paid to PDs during 1997-98.

Yield Spreads and Economic Activity

5.49 Easy liquidity conditions were reflected in the softening of interest rates on securities across the maturity spectrum for the second consecutive year in 1997-98. Further, the yield spread narrowed considerably during 1997-98 showing evidence of declining inflationary expectations in view of reduction in inflation since 1995-96. The yield spread between 91-day and 364-day Treasury Bills declined by 149 basis points to 65 basis points in 1997-98 and the yield spread between 91-day and 10-year paper declined by 87 basis points to 482 basis points (Table 5.6). The maximum coupon rate on 10-year maturity declined from 13.65 per cent in February 1997 to 13.05 per cent in April 1997. The coupon rate for a private placement with the Reserve Bank of a 10-year security was fixed substantially lower at 12.15 per cent reflecting secondary market yield on securities of similar maturity in March 1998. The cut-off yield of a 5-year security declined from 13.55 per cent in November 1996 to 11.15 per cent in September 1997. The cut-off yield on periodic auctions of Treasury Bills, in general, reflected varying liquidity conditions. The cut-off yield of 364-day Treasury Bills was reduced from 10.10 per cent in end-March 1997 to a historical low of 7.98 per cent between end-October 1997 and March 1998. After following a declining trend from 7.96 per cent in end-March 1997 to 6.22 per cent in November 1997 (it had reached a historical low of 5.72 per cent in the auction of April 17,

Table 5.6 : Yield Spread*

(Per cent)

Instrument	Last Issue 1997-98	Last Issue 1996-97	Last Issue 1995-96	Yield Differential @ 1997-98	Yield Differential @ 1996-97
1	2	3	4	5	6
I. 91-day Treasury Bills	7.33	7.96	12.97	-0.63	-5.01
II. 364-day Treasury Bills	7.98	10.10	13.12	-2.14	-3.02
III. 3-Year Paper	12.14	13.40	13.65	-1.26	-0.25
IV. 5-Year Paper	11.15	13.55	13.85	-2.40	-0.30
V. 10-Year Paper	12.15	13.65	14.00	-1.50	-0.35
Memo Items					
Spread : a) 91-day and 364-day Treasury Bills	0.65	2.14	0.15	- -	- -
b) 91-day Treasury Bills and 5-Year Government Paper	3.82	5.59	0.88	- -	- -
c) 91-day Treasury Bills and 10-Year Government Paper	4.82	5.69	1.03	- -	- -

* Based on primary yields. @ Over the previous year. - - Not Applicable.

1997), the cut-off yield on 91-day Treasury Bills increased to 7.33 per cent in end-March 1998. The cut-off yield on 14-day Treasury Bills and the interest rate on (fixed rate) repo also depicted a rising trend during the last quarter of 1997-98. The relationship between economic activity and the term spread of interest rates has been examined in Box V.2.

5.50 Empirical exercises on interlinkages showed that interest rates on major money market instruments (91-day and 364-day Treasury Bills, CP and CDs) in recent period have exhibited cointegrating movements with a high speed of adjustment, reflecting convergence of money market rates. The results showed that movements in the yield rates of 91-day Treasury Bills reflected the movements in other money market interest rates during

Box V.2

Yield Spread and Real Activity

In recent years, the term structure of interest rates has emerged as an indicator of market conditions for purposes of monetary policy making. This is in line with the findings of a number of studies that the slope of an yield curve contains significant information about the future path of macroeconomic variables in a number of countries. Bernake (1990), Estrella and Hardouvelis (1991), Plosser and Rouwenhorst (1994) and Zulu Hu (1993) concluded that domestic term spreads are useful in predicting real growth of advanced economies. Estrella and Mishkin (1995) provided further evidence that term spreads can predict recessions in the US as much as eight quarters in advance. Interestingly enough, they concluded that term spread would dominate many other leading indicators as predictors of real growth. Bernard and Gerlach (1996) undertook a rigorous study for predicting recession in as many as eight countries including Belgium, Canada, France, Germany, Japan, Netherlands, the UK and the US. By using probit model, it was shown that the probability of recession increases as spread becomes negative. Except in the case of Japan, the probability of recession for negative spread of about 4.0 per cent was estimated to be within a range of 0.72 for UK and 0.99 for Germany. On the other hand, the probability of recession at positive spread at about 4 per cent could be nearly zero. Thus, they concluded that movements in term spread are procyclical in nature.

At the theoretical level, there are, broadly, two competing hypotheses about the relationship between the term structure and real growth. According to the first hypothesis, the relationship stems from the effects of monetary policy. Suppose, the central bank tightens monetary policy by raising short term interest rates, agents would, in the event, raise their expectations of future short-term interest rates by less than the change in the current short rate. Consequently, long rates also rise but by less than the change in the current short rate, leading to a downward sloping term structure. As monetary policy affects output with a lag, the tightening of policy is associated with a reduction of future growth rate, and an increased probability of a recession.

According to the second hypothesis, the relationship between the term structure and output growth emanates from expectations of financial market participants. When anticipation of recession starts to take hold, inflation rate tends to fall in a period of low economic activity. Such expectations are likely to lead to a fall in long rates and thus to downward sloping term structure. If expectations are correct on average, downward sloping term structure is likely to be associated with future recession.

The distinction between the two alternative hypotheses thus lies in the fact that the relationship between spread and growth arises from two competing interest rate channels, one emphasising policy induced short term rates and the other through the long term rates. However, the two channels would be similar under certain conditions, when for example (a) there is a perfect co-movement between the short-term rate and the long-term rate, (b) the difference between the two rates is an increasing function of maturity, and (c) the liquidity position does not alter preference pattern for maturity and interest rates. The difference in the adjustment of two rates is likely to cause negative spreads occasionally.

Usually, a rise (fall) in spread on an enduring basis is considered necessary for establishing its linkage with real growth. There is no study in this area with reference to India, owing to absence of high frequency data on national income and prevalence of structural rigidities in the financial markets.

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Box V.3
Announcement Effect

The financial markets in emerging market economies are increasingly becoming forward looking, following financial reforms. Consequently, prices of financial assets would be less a reflection of the past achievements of the issuer than of the market's confidence that such achievements would persist in future. Moreover, prices would indicate market expectations, in particular, of inflation, monetary policy and interest rates, thus de-emphasising the role of past events in expectation formation. In such a milieu, proactive policy pronouncements are essential to scotch off any diverse market expectation.

The announcement effect of the changes in the discount rate of the central bank has been the focal point of many monetary policy debates. In this regard there are two main competing hypotheses. Cook and Hahn (1988) hypothesise that market interest rates respond to changes in the discount rate as it signals a change in the target federal fund rate (*i.e.* overnight rates) and other rates on the longer end are expected to respond accordingly. The other hypothesis (Roley and Troll 1984) analyses the effect of the changes in the discount rate via the direct effect on the demand for borrowed reserves. While the second hypothesis stands only in the presence of an empirically significant direct effect, the first hypothesis emphasises the signalling effect *i.e.*, the announcement effect holds good even when the direct effect is absent. Empirical evidence show that asset prices respond only to non-technical discount rate changes *i.e.* changes that are made for reasons other than to solely bring discount rates into alignment with market rates. Moreover, Thorton (1986) showed that the market responds to discount rate changes even when the discount rate is above other market rates. Such evidence points to the conclusion that changes in discount rate influence other interest rates mainly via the announcement effect, though the presence of the direct effect cannot be totally negated.

References

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the period 1993-94 to 1996-97. However, with the activisation of the Bank Rate, interest rates at the shorter-end of the market have generally followed the direction of the Bank Rate. The announcement effects of the Bank Rate changes were most pronounced on the prime lending rates (Box V.3). In an important sense, the Bank Rate has been seen as signalling the stance of monetary policy. On their part, the market participants would increasingly reckon the Bank Rate in forming expectations of future asset prices and level of activity.