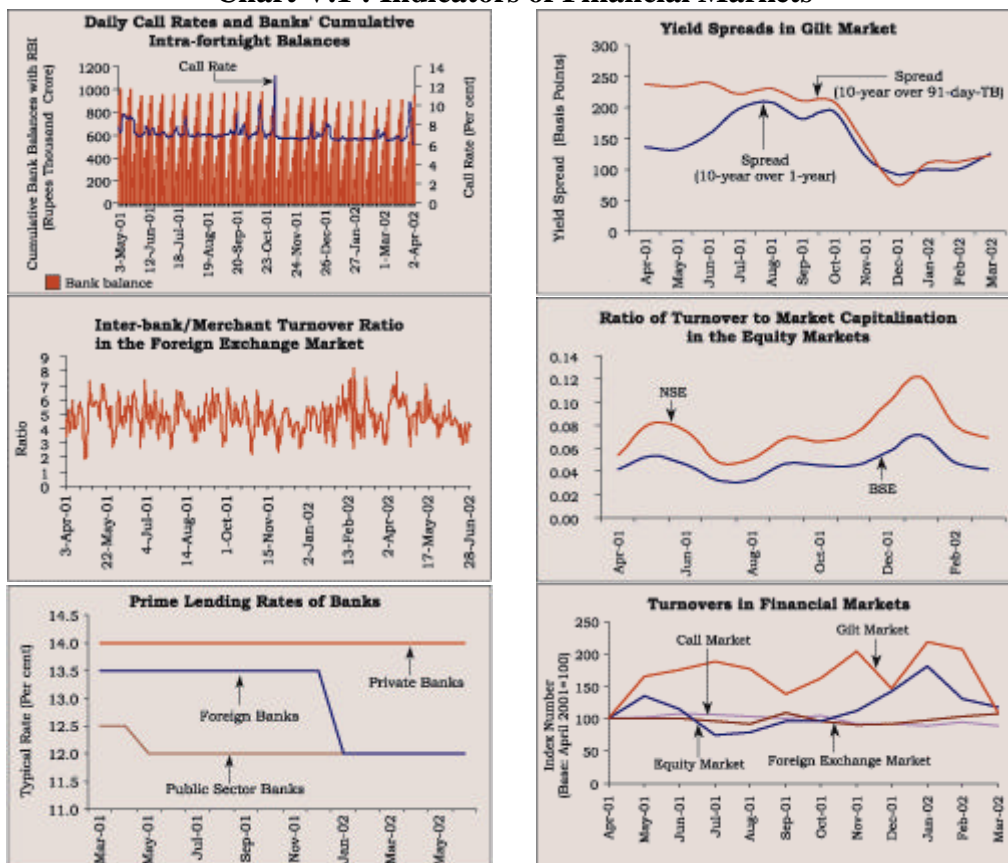


## V Financial Markets

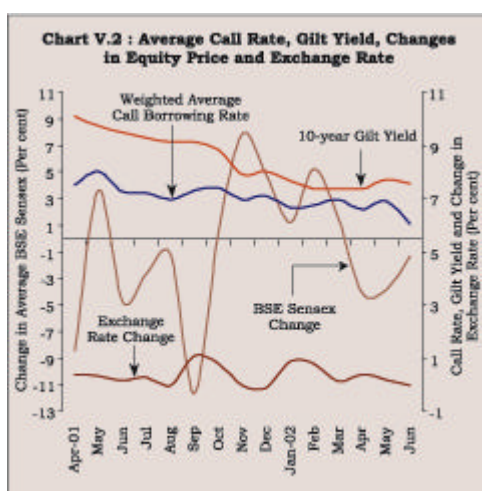
5.1 Financial markets remained liquid and stable during 2001-02 (Chart V.1). Money markets exhibited easy liquidity conditions which were modulated through the operation of Liquidity Adjustment Facility (LAF). Call money rates generally remained stable and within the repo-reverse repo corridor. The government securities market experienced a softening in yields across the maturity spectrum with the 10-year yield declining by 287 basis points during the year to 7.36 per cent at end-March 2002. The foreign exchange market generally remained stable during the year with the exchange rate of the Indian rupee *vis-à-vis* the US dollar remaining range-bound within Rs.46.56-Rs.48.85 per US dollar. There were brief interruptions to the tranquil market conditions in some segments emanating from nervous reactions to the terrorist attack in the United States on September 11, 2001 and again in December 2001 in the wake of border tensions. The Reserve Bank's efforts to assuage market sentiment were, by and large, successful. Strong deposit accretions during the first half of the year coupled with reductions in CRR without any commensurate credit off-take created a situation of comfortable liquidity in the credit market for the greater part of the year. Equity markets remained subdued with the extraordinary events during 2001-02 dampening sentiment.

**Chart V.1 : Indicators of Financial Markets**



## A Quarterly Profile

5.2 Strong deposit accretions, primary liquidity flows from a 50 basis point reduction in the CRR and low credit off-take generated conditions of surplus liquidity in the first quarter of 2001-02. Call money rates remained well within the repo-reverse repo corridor except for a temporary spike during May 2001 marking the transition to the next stage of the LAF (Chart V.2). The range of prime lending rates of the public sector banks decreased by 25 basis points in May 2001. The foreign exchange market was flush with increased supply on account of foreign institutional investment inflows. The gilt market registered an increase in turnover and reduction in the yields across the maturity spectrum. The yield spread between AAA rated 5-year corporate bonds and government securities of equal residual maturity, however, widened. The industrial slowdown and profit warnings issued by various software companies dampened sentiments in the equity markets.



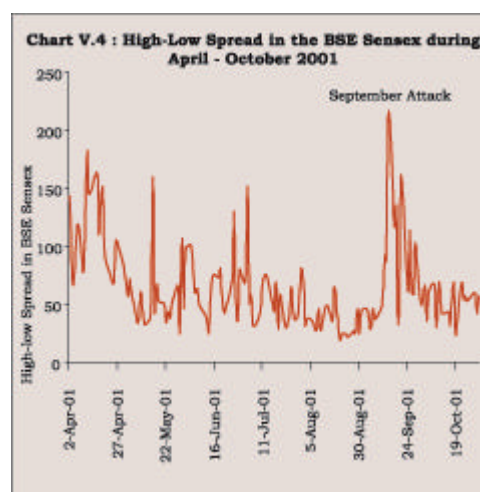
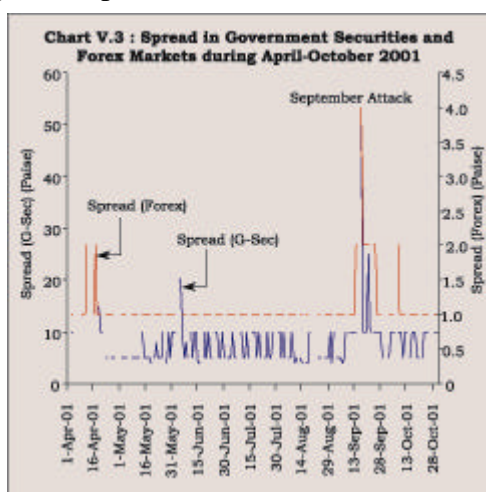
5.3 Redemption payments and coupon inflows further augmented market liquidity during the second quarter of 2001-02. Call money rates moved within the informal repo-reverse repo corridor barring a few days during the last week of July and the second half of September 2001. The rally in gilt prices was briefly halted by open market sales on July 12, 2001. Favourable interest rate expectations and comfortable liquidity revived the appetite for gilts before the September 11, 2001 incident affected market sentiment. A series of open market purchases through auctions without notified amounts by the Reserve Bank across the maturity spectrum stabilised the market and restored confidence. The foreign exchange market was affected by the events of September 11 and bid-ask spreads increased as nervous sentiments were amplified by the deceleration in FII inflows and the export slowdown (Chart V.3). The Reserve Bank's market operations in this segment quickly restored stability.

5.4 In the equity market, bearish sentiments ruled in the wake of the ban on the sale/repurchase of the US-64 units of Unit Trust of India (UTI) in July 2001. In the aftermath of the terrorist attack in the United States, the BSE Sensex declined by 17.5 per cent between September 11-21, 2001 along with the widening of the high-low spreads (Chart V.4).

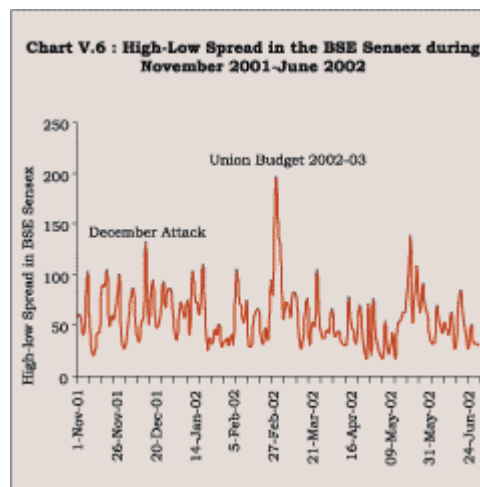
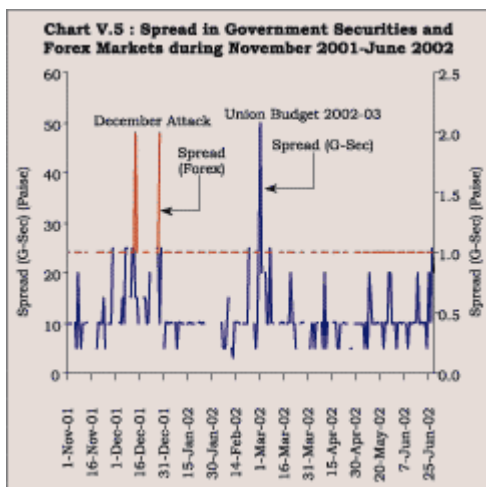
5.5 In the third quarter, monetary conditions were further eased with a CRR cut of 200 basis points and a cut in the Bank Rate by 50 basis points. Call money rates remained

mainly within the repo-reverse repo corridor, with minor episodes of pressure. The rally in the prices of gilts resumed and the yield on 10-year paper touched a low of 7.8 per cent on December 5, 2001. Open market sales checked the rally and kept gilt prices range-bound. In the wake of the December 13, 2001 terrorist attack on the Parliament House, bid-ask spreads widened in the gilt market and turnovers fell (Chart V.5). The corporate bond yields hardened and their spread over the sovereign paper widened since December 2001.

5.6 The foreign exchange market remained stable during the third quarter of 2001-02 on the back of the resumption of FII investments except for some downward pressure during December 11-28, 2001. The capital market showed signs of recovery with the BSE Sensex crossing the 3000 mark on October 17, 2001 but sentiments were adversely affected by border tensions in mid-December 2001, as reflected in the widening of the high-low spreads (Chart V.6).



5.7 The return of comfortable liquidity conditions in the fourth quarter of 2001-02 was reflected in call rates stabilising around 6.5 per cent except for a temporary edging up towards end-February 2002 and end-March 2002. Gilt prices rallied towards end-January 2002 on account of comfortable liquidity and a de-escalation in border tensions. The rally was halted on account of developments in Gujarat and market acclimatisation to the new electronic dealing and settlement system. The yield on 10-year security declined from 7.94 per cent as at end-December 2001 to 7.65 per cent as at end-January 2002. In February 2002, the yields continued to slide on budget expectations and touched a low of 7.18 per cent on February 18, 2002. Immediately after the budget, however, prices fell sharply due to the less than anticipated reduction in small savings rates and the yield on 10-year security temporarily hardened to 7.79 per cent on February 28, 2002. The repo rate reduction of 50 basis points to 6.0 per cent on March 5, 2002, improved sentiment before the usual end-of-the year profit booking drove down gilt prices. The foreign exchange market came under some pressure during January-February 2002 on account of increased corporate demand, inter-bank buying, increased purchases by foreign institutional investors (FIIs) as well as political uncertainties and tensions at the border. The market stabilised in March 2002 as supplies evenly matched demand, which kept the rupee range-bound. The equity market experienced a brief revival, especially following the announcement of disinvestment in public sector undertakings (PSUs).



5.8 The financial year 2002-03 commenced with easy liquidity conditions reflected in sizeable repo bids received under LAF auctions. This led to increased turnovers in money, foreign exchange and gilt markets during April 2002 (Table 5.1). Liquidity conditions tightened during mid-April 2002 to end-May 2002 leading to firming up of call rates. The gilt yields also moved up on account of the tensions at the border as also the irregular transactions of some co-operative banks. With the Reserve Bank taking a series of private placements/devolvments in government securities and following the CRR cut by 50 basis points on June 1, 2002, the market sentiment improved. The call rates eased and eventually led to a decline in the repo rate by 25 basis points to 5.75 per cent on June 27, 2002. This also restored the gilt market sentiment. The yield on AAA rated corporate bonds declined and its spread over gilt yields of comparable maturity narrowed during 2002-03 so far, particularly in July 2002. The foreign exchange market remained orderly with the depreciation in the exchange rate to Rs. 49.0 per US dollar during mid-May 2002 being recouped subsequently. The equity market was subdued following border tensions, weak trends in international stock markets and monsoon uncertainties.

## MONEY MARKETS

### Call/Notice Money Market

5.9 The two-step reductions in the Bank Rate and CRR undertaken during February-March 2001 ensured comfortable liquidity conditions before the financial markets witnessed the usual end-of-the-year tightening. As the March-end liquidity positions were unwound, the money market conditions turned comfortable in April 2001. The reduction in the repo rate - which effectively sets the floor for call market movements - by 25 basis points on April 27, 2001 provided the enabling conditions for a softening of the call rates. The call money rates, however, moved above the reverse repo rate during May 9-21, 2001 reflecting rationalisation of standing liquidity facilities for banks and primary dealers and the first phase restrictions imposed on non-banks for lending in the call money market. Liquidity injections through reverse repos combined with the cut in the CRR during May 2001 countered this temporary spell of tightness in the market as the next stage in the LAF commenced. The repo rate also witnessed a further reduction of 25

basis points on May 28, 2001. The subsequent easing of liquidity conditions was engendered by strong deposit growth, subdued credit demand and redemption/coupon inflows. The weighted average call money borrowing rate, after increasing from 7.5 per cent in April 2001 to 8.0 per cent in May 2001, declined to 6.9 per cent in August 2001.

**Table 5.1: Developments in the Money, Gilt, Foreign Exchange and Equity Markets**

Month	Commercial Bank Borrowings from the RBI* (Rs. crore)	Average Daily Inter-bank Foreign Exchange Turnover (US\$ million)	Turnover in Central Govt. Dated Securities Market (Rs. crore)#	Average Daily Call/Notice Turnover (Rs. crore)	Monthly Average Exchange Rate (Rs. per US Dollar)	RBI's net Foreign Currency Sales (-)/ Purchases(+) (US\$ million)	Net OMO Sales(-) / Purchases(+) (Rs. crore)	Average Daily Repo (LAF) Outstanding (Rs. crore)	Average Daily Reverse Repo (LAF) Outstanding (Rs. crore)	Liquidity Support to PDs as at end of the month (Rs. crore)	Average Call Money Borrowing Rates (Per cent)	Forward premia 3-month (Per cent)	BSI Sense: Average 3-month (Per cent)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>2001</b>													
April	5,843	4,914	1,14,534	35,785	46.78	-18	-5,064	10,968	169	2,533	7.49	4.51	3.48
May	4,772	4,936	1,89,026	36,458	46.92	469	-27	2,132	1,737	167	8.03	4.95	3.61
June	3,616	4,956	2,00,119	38,606	47.00	36	-5,837	2,458	45	2,061	7.24	4.82	3.43
July	6,441	4,742	2,15,157	37,793	47.14	-272	-5,092	2,350	200	622	7.19	4.50	3.34
Aug.	3,448	4,532	2,01,711	36,891	47.13	682	-10,263	3,243	—	45	6.94	4.52	3.30
Sep.	4,152	5,381	1,57,810	36,100	47.64	-894	3,905	1,139	233	1,789	7.3	5.60	2.91
Oct.	4,623	4,742	1,85,392	37,539	48.02	237	83	1,325	866	3,000	7.4	6.02	2.93
Nov.	2,782	4,482	2,34,088	32,836	47.99	1,542	-26	4,553	845	120	6.97	6.16	3.16
Dec.	6,986	4,493	1,67,066	32,681	47.92	1,040	-7,865	2,469	166	3,135	7.08	6.34	3.31
<b>2002</b>													
Jan.	3,971	4,776	2,50,675	31,693	48.33	1,391	-84	4,821	—	1,339	6.63	6.00	3.35
Feb.	4,198	5,081	2,36,526	33,677	48.69	567	-27	3,590	2	2,799	6.73	5.49	3.52
March	3,616	5,269	1,24,906	31,667	48.74	2,283	-37	2,986	370	2,926	6.97	6.46	3.58
April	3,523	6,541	1,93,091	41,240	48.92	477	-3,460	8,119	1,322	1,013	6.58	6.12	3.43
May	826	4,966	1,20,173	39,041	49.00	86	-1,524	1,924	17	121	6.9	6.23	3.30
June	336	4,836	1,16,846	28,594	48.97	241	-190	9,640	—	—	6.04	5.37	3.25
July	22	4,922	2,35,586	32,172	48.76	1,829	-6,537	14,636	—	—	5.75	4.40	3.21

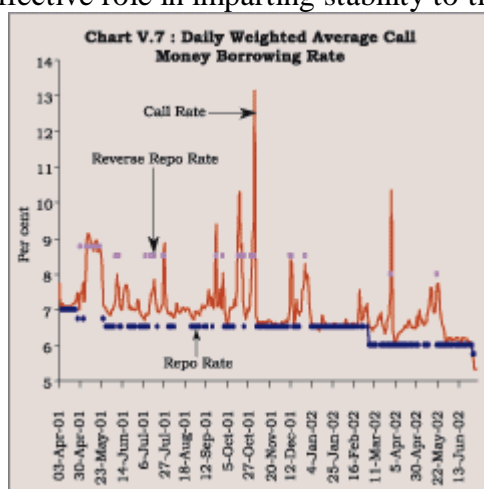
\* Outstanding as on last reporting Friday of the month. # Outright only.

5.10 The second episode of tightness in the call market followed the September 11 events and was accompanied by pressures experienced in foreign exchange and gilt segments as financial markets across the world reflected extreme risk aversion. The opening of a purchase window for select Government securities on an auction basis on September 18, 2001 and foreign exchange sales restored market sentiment. Call rates started easing again in the second half of September 2001 helped by the ebbing of fears about hardening of international oil prices and the withdrawal of US sanctions on India. Another spell of pressures in the call money market was experienced in October 2001 as, contrary to market expectations, the reduction in the Bank Rate by 50 basis points effective October 23, 2001 was not followed up with a commensurate reduction in the repo rates. With increasing demand for funds from banks to fulfill reserve requirements, the weighted average call borrowing rate spurted to touch the year's peak at 13.1 per cent on November 2, 2001. The release of cash balances following reduction in CRR effective fortnight beginning November 3, 2001 smoothed the adjustments in liquidity positions. There was some firmness again in call rates towards end-December 2001 on account of volatility in the foreign exchange market in the aftermath of the December 13, 2001 terrorist attack on the Parliament which spilled over into the beginning of January 2002. Except these episodes, orderly conditions prevailed in the call money market throughout



the year with the call rates remaining well within the informal repo-reverse repo corridor (Chart V.7).

5.11 A cut in CRR by 25 basis points from the fortnight beginning December 29, 2001 brought with it easy liquidity conditions which were reflected in the absorption of large amounts under repo auctions and open market operation sales during January-March 2002. Call rates firmed up in the last part of March 2002 owing to advance tax outflows, bunching of holidays coupled with year-end balance sheet considerations. The Reserve Bank participated actively in the call money market with LAF repo operations conducted throughout the year to modulate the surplus liquidity in the market (Appendix Table V.1). Timely reverse repo operations under LAF ensured the capping of sudden spurts in the call rates and played an effective role in imparting stability to the market.



5.12 On the whole, during 2001-02, the call/notice money market experienced comfortable liquidity conditions with stray episodes of transient tightening, which were quickly eased by monetary policy operations. The weighted average call borrowing rate came down to 7.17 per cent in 2001-02 from that of 9.15 per cent in 2000-01 and the volatility of call money rates reduced markedly in 2001-02 (Table 5.2).

5.13 Interestingly, during the course of 2001-02, while average lending in the call market declined largely reflecting improved liquidity in the banking system, the net supply of funds by non-bank participants (*i.e.*, non-banking financial institutions and mutual funds) in the repo market more than doubled from Rs.16,980 crore in May 2001 to Rs.36,178 crore in March 2002 (Chart V.8). The volume of aggregate repo transactions increased more than four-fold from Rs.11,311 crore in April 2001 to Rs.47,653 crore in March 2002.

**Table 5.2 : Call Money Borrowing Rates (Summary Statistics)**

1	Min	Low	Avg.	CV	Min.	High	Avg.	CV	Weighted Average		CV	
	(%)	Max			(%)	Max			(%)	(%)		(%)
	2	3	4	5	6	7	8	9	10	11	12	13
<b>2000-01</b>	<b>0.20</b>	<b>13.80</b>	<b>7.55</b>	<b>0.21</b>	<b>7.00</b>	<b>35.00</b>	<b>10.35</b>	<b>0.32</b>	<b>3.15</b>	<b>20.34</b>	<b>9.15</b>	<b>0.24</b>
<b>2001-02</b>	<b>3.61</b>	<b>8.00</b>	<b>5.70</b>	<b>0.12</b>	<b>6.66</b>	<b>22.00</b>	<b>8.09</b>	<b>0.25</b>	<b>6.34</b>	<b>13.13</b>	<b>7.17</b>	<b>0.11</b>
<b>2001</b>												
April	6.00	7.00	6.35	0.05	7.30	19.00	8.93	0.32	7.01	11.91	7.49	0.16

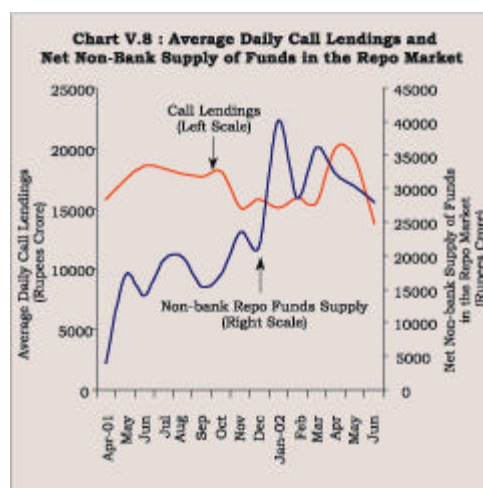
May	5.42	8.00	6.66	0.09	7.15	9.75	8.72	0.09	6.85	9.13	8.03	0.10
June	4.70	6.75	6.05	0.09	7.20	8.60	7.84	0.06	6.87	7.98	7.24	0.04
July	4.70	7.00	5.95	0.08	7.05	11.00	7.97	0.14	6.70	8.88	7.19	0.07
August	3.90	6.15	5.69	0.07	7.05	8.30	7.34	0.04	6.73	7.18	6.94	0.02
September	5.06	6.29	5.74	0.07	7.00	15.00	8.24	0.20	6.85	9.40	7.30	0.07
October	4.68	7.97	5.58	0.13	7.10	12.50	8.26	0.18	6.55	10.31	7.40	0.12
November	3.73	8.00	5.15	0.15	6.80	22.00	8.56	0.42	6.51	13.13	6.97	0.19
December	4.64	6.50	5.41	0.10	6.70	12.00	7.92	0.14	6.53	8.40	7.08	0.08
<b>2002</b>												
January	4.50	5.75	4.91	0.09	6.66	8.25	7.00	0.06	6.39	7.88	6.63	0.04
February	3.61	6.00	5.43	0.08	6.70	11.00	7.33	0.14	6.51	7.56	6.73	0.05
March	4.00	6.00	5.50	0.08	6.75	20.00	8.96	0.46	6.34	10.35	6.97	0.14
<b>2002-03 so far</b>												
April	3.54	5.75	5.19	0.12	6.45	20.00	7.43	0.32	5.99	10.35	6.58	0.11
May	3.54	6.50	5.62	0.10	6.55	9.25	7.55	0.08	6.04	7.73	6.90	0.06
June	3.00	5.30	4.82	0.13	6.25	7.00	6.51	0.03	5.32	6.22	6.04	0.04
July	2.71	4.95	4.46	0.15	5.80	6.70	5.99	0.22	5.66	5.97	5.75	0.08

Min Minimum

Max Maximum

Avg. Average

CV Co-efficient of Variation



5.14 The year 2002-03 began with further easing of liquidity conditions. There was heavy repo bidding particularly during April 2-10, 2002 with outstanding amounts averaging Rs.16,134 crore, including a peak bid of Rs.30,055 crore received on April 4, 2002. The call rates softened below the repo rate of 6.0 per cent. The launching of the government borrowing programme on April 4, 2002, OMO sales on April 8 and 9 and daily absorptions of liquidity through repos under LAF balanced the money market liquidity and stabilised the call rates a shade above the Bank Rate during April 2002. The average daily turnover in the call/notice money market rose sharply to Rs.41,240 crore during April 2002 from Rs.31,667 crore during March 2002 due to increased supply of funds mainly from public sector banks on account of reimbursement of claims on the Central and State governments, temporary float pending distribution of food credit subsidy amongst eligible banks and other transient factors. Liquidity conditions tightened in May 2002 and the weighted average call money borrowing rates crossed 7.5 per cent around mid-May, 2002 prompting the Reserve Bank to undertake devolvments and private placements of government primary issuances and as also to advance the CRR cut of 50 basis points by one fortnight, from the fortnight beginning June 1, 2002. The call money rates softened thereafter to eventually drop below the repo rate and the repo rate declined by 25 basis points to 5.75 per cent on June 27, 2002. The turnover in the call/notice

money market fell from Rs.39,041 crore in May 2002 to Rs.28,594 crore in June 2002, reflecting improved liquidity conditions. Following a reduction in the repo rate, the average call money rate declined further to 5.75 per cent during July 2002 and even further to 5.70 per cent during August 1-12, 2002. The turnover in the call/notice money market which had increased to Rs. 32,172 crore during July 2002 declined, on an average, to Rs. 31,670 crore during August 1-12, 2002 due to improved liquidity conditions. The volume of aggregate repo transactions declined from Rs. 47,020 crore in April 2002 to Rs. 37,848 crore in June 2002.

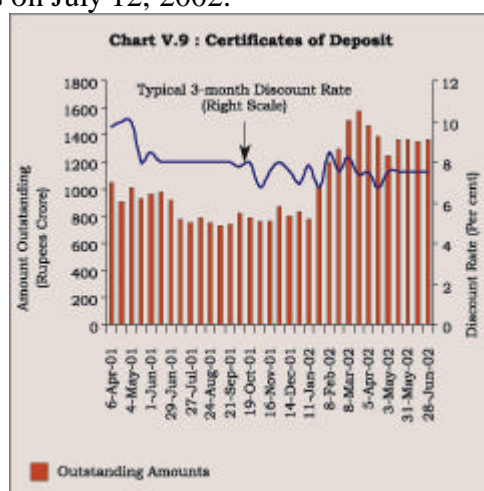
## Other Money Market Segments

### *Term Money Market*

5.15 The outstanding transactions in the term segment of the market declined during 2001-02 and the volumes continued to remain small. During March 2002, the daily volume of transactions (outstanding) ranged Rs.6-349 crore as compared with that of Rs. 1,216 - 2,560 crore in March 2001. The turnovers in the term money market remained mostly below Rs. 200 crore. During the year 2002-03 (up to July 2002), the daily volume of transactions (outstanding) ranged from Rs.11 crore to Rs.1,070 crore as compared with Rs.2 crore to Rs.2,556 crore during April-July 2001. A number of measures have been taken to develop the term money market (see Section IX).

### *Certificates of Deposit (CDs) Issued by Banks*

5.16 The outstanding amount of CDs issued by scheduled commercial banks increased from Rs.771 crore in March 2001 to Rs.935 crore in May 2001 but dropped thereafter to Rs.729 crore by September 2001, reflecting comfortable liquidity conditions (Chart V.9). By March 22, 2002 the outstanding amount recovered, with intermittent fluctuations, to Rs.1,576 crore (Appendix Table V.2). During 2002-03 so far, the outstanding amount of CDs issued by scheduled commercial banks declined from Rs.1,474 crore as on April 5, 2002 to Rs.1,303 crore as on July 12, 2002.

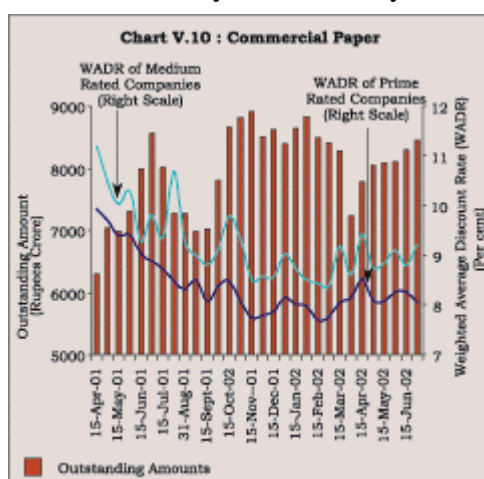


5.17 The typical discount rate (for three-month maturity) on CDs declined from 10.00 per cent in mid-April 2001 to 6.88 per cent by mid-December 2001 before recovering to 7.38 per cent by March 22, 2002 and further to 6.9 per cent by July 12, 2002.

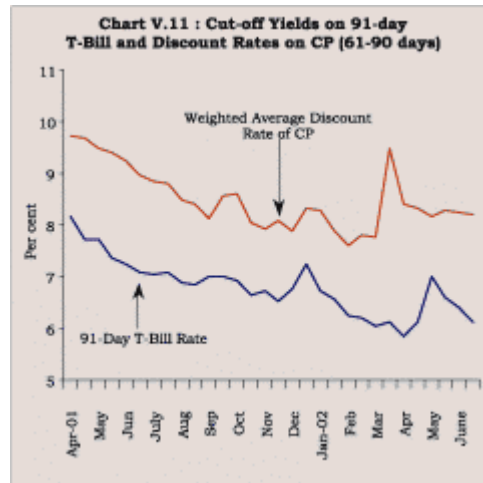
### *Commercial Paper*



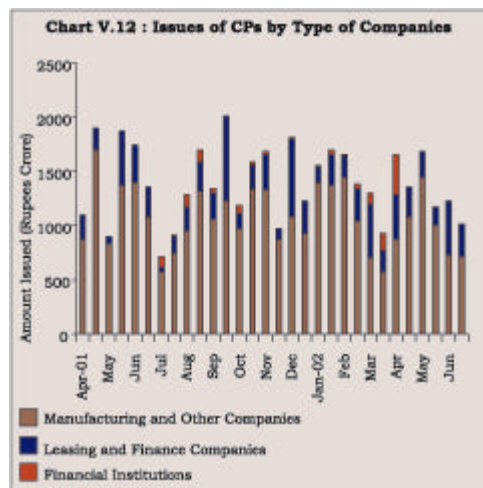
5.18 The behaviour of the commercial paper (CP) market reflected the prevalent comfortable liquidity conditions as also market adjustment to the institution of new norms (see Section IX). The outstanding amount of CPs increased from Rs.6,295 crore in mid-April 2001 to Rs.8,566 crore in end-June 2001 (Chart V.10). Transition to the new dematerialised investment norms was reflected in some decline in the outstanding amount of CPs to Rs.6,982 crore by end-August 2001. It increased thereafter and peaked at Rs.8,913 crore at mid-November 2001 before declining to Rs.7,224 crore by March 31, 2002. The weighted average discount rate (WADR) decreased from 9.98 per cent to 8.12 per cent as on March 31, 2002. The easy liquidity conditions at the commencement of 2002-03 led to some increase in the outstanding amount of CPs to Rs.7,783 crore during the first fortnight of April 2002. It increased further to Rs. 8,520 crore by end-July 2002. The discount rates on CP fell from a range of 9.30-12.00 per cent in mid-April 2001 to 7.60-11.10 per cent by mid-April 2002 and further to 6.55-9.30 per cent in end-July 2002 (Appendix Table V.3). The WADR also declined from 9.98 per cent in mid-April 2001 to 7.32 per cent by end-July 2002. The spread of WADR between the prime-rated and medium-rated companies which had widened to 221 basis points by July 2001 from 124 basis points in mid-April 2001, narrowed to 45 basis points by mid-March 2002. Thereafter, it widened to 89 basis points in mid-April 2002 and further to 135 basis points in mid-July 2002 before narrowing to 85 basis points in end-July 2002. The most preferred maturity of CP is between 91 days and 180 days.



5.19 The risk premium on CPs, measured by the differential between the 91-day Treasury Bill rate and the weighted average effective rate of discount on CPs (60-90 days), widened from the fourth quarter of 2001-02 (Chart V.11). The average differential between the average discount rate on CPs (60-90 days) and 91-day Treasury Bill rate rose from 1.6 percentage points during April-December 2001 to 1.9 percentage points during January-June 2002.



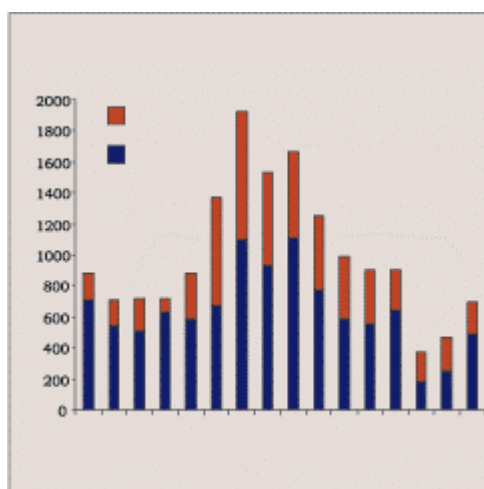
5.20 The CPs were predominantly issued by manufacturing companies (Chart V.12). The share of manufacturing and other companies in the amount of CP outstanding stood at 67.4 per cent while that for finance/leasing companies accounted for 21.5 per cent in end-July 2002. The outstanding amount of CPs issued by FIs were Rs.948 crore and accounted for only 11.1 per cent.



### *Commercial Bill Market*

5.21 The outstanding amount of commercial bills rediscounted by commercial banks with various financial institutions (FIs) was Rs.711 crore at the end of April 2001, nearly double that of Rs.370 crore a year ago. It increased to Rs.1,921 crore in September 2001 before declining to Rs.906 crore at the end of March 2002 and further to Rs. 701 crore in June 2002 (Chart V.13). The total monthly average amount of bills rediscounted by commercial banks with non-bank financial institutions worked out to Rs. 1,131 crore during 2001-02 with SIDBI accounting for a major share of 63.7 per cent. During the first quarter of 2002-03, the total monthly average amount of bills rediscounted by commercial banks with non-bank financial institutions was Rs. 512 crore with SIDBI accounting for a major share of 59 per cent.

**Chart V.13 : Commercial Bills Rediscounted  
by Banks with FIs**



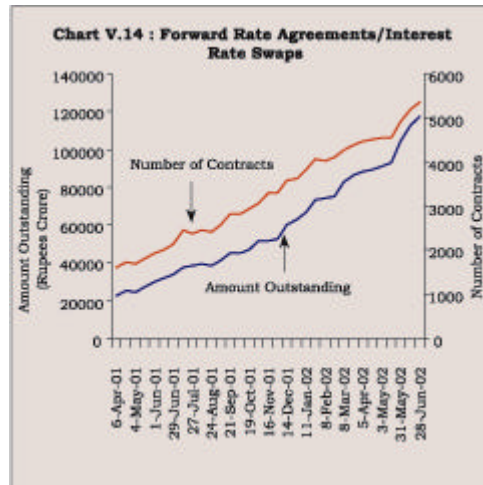
*Repurchase Agreements (Other than LAF)*

5.22 During 2001-02, the weekly transaction volume (first leg only) in the market repo segment ranged between Rs.1,350 crore and Rs.13,578 crore. While the volume of repo transactions was mostly in the range of Rs.3,000 crore to Rs.9,000 crore except during some occasions, it touched the lowest level during the week ended April 13, 2001 and reached the peak during the week ended March 22, 2002. Repo rates generally ranged between 4.00 per cent and 10.25 per cent during the year except for occasional spikes.

5.23 During the year 2002-03 (up to August 9) the weekly volume (first leg only) in the repo market ranged between Rs.6,429 crore and Rs.14,579 crore and rates ranged between 4.00 per cent and 9.20 per cent.

*Forward Rate Agreements (FRAs)/Interest Rate Swaps (IRS)*

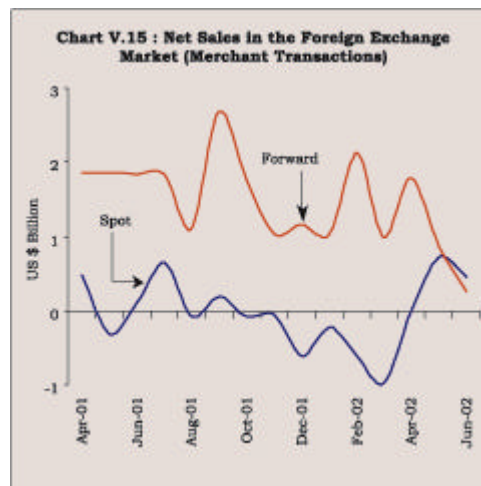
5.24 There was a sharp increase in the volume in FRAs/IRS market during 2001-02. The number of contracts of FRAs/IRS transactions rose from 1,615 as on April 6, 2001 to 4,379 by end-March 2002 while the outstanding notional principal amount increased from Rs.22,865 crore to Rs.86,749 crore (Chart V.14). During 2002-03 so far, transactions in this segment have gone up to 5,421 contracts for Rs.1,22,421 crore as on July 26, 2002. In spite of the significant increase in the number and amount of contracts, participation in the market continues to be restricted mainly to select foreign and private sector banks, PDs and all-India financial institutions.



## FOREIGN EXCHANGE MARKET

5.25 Orderly conditions prevailed in the foreign exchange market during the first five months of 2001-02. In the aftermath of the September 11 incident, some pressures were built up in the Indian foreign exchange market and the rupee depreciated against the US dollar during September 11-20, 2001. The excess demand in the forward segment of merchant transactions doubled from US \$ 1.1 billion during August 2001 to US \$ 2.7 billion during September 2001 (Chart V.15 and Appendix Table V.4). In response to a package of measures by the Reserve Bank and liquidity operations during September 15-25, 2001, stability returned to the foreign exchange market. These measures were also supported by net foreign currency sales of US \$ 0.9 billion during September 2001. The excess demand in the forward segment in merchant transactions declined to US\$ 1.0 billion during November 2001.

5.26 The exchange rate came under some pressure again following the attack on the Indian Parliament on December 13, 2001. The rupee traded in a narrow range of Rs.48.24-48.85 per US dollar during the last three months of 2001-02. Excess supply conditions in the market were reflected in net purchases of US \$ 6,823 million by the Reserve Bank during November 2001 to March 2002 (Table 5.3 and Chart V.16). As on August 16, 2002, the exchange rate of the Indian rupee was Rs.48.58 per US dollar.



5.27 The US dollar remained strong against currencies of most of the developing as well as developed countries during January 2001 to March 2002. The movement of the Indian rupee was in line with the movement in other currencies during that period. For instance, during the period January 2001 to March 2002, the US dollar appreciated by 4.7 per cent against the Indian rupee, while the appreciation of US dollar against other select emerging market currencies ranged between 0.4 per cent for Philippines peso and 5.3 per cent for the Singapore dollar. Similarly, during the same period, the US dollar appreciated by 3.9 per cent, 7.1 per cent and 12.0 per cent against the pound sterling, euro and Japanese yen, respectively (Charts V.17). The US dollar has depreciated against most of these currencies during the recent months. While the US dollar appreciated against the Indian Rupee by 0.5 per cent, it has depreciated against the Indonesian Rupiah, Korean Won, Philippines Peso, Singapore Dollar and Thai Baht by 8.0 per cent, 4.6 per cent, 2.3 per cent, 1.6 per cent and 1.4 per cent respectively. The US dollar has also depreciated against the pound sterling, the euro and the Japanes Yen by 2.3 per cent, 4.5 per cent and 3.6 per cent, respectively, during the same period.

**Table 5.3 : Purchases and Sales of US Dollars by the Reserve Bank**

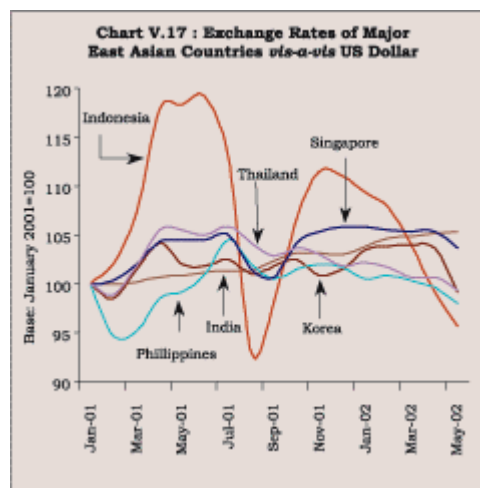
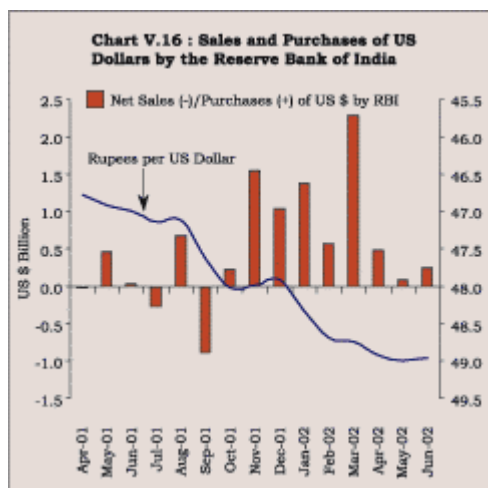
Month	Net Sales(-)/ Purchases *	Cumulative over end- March	Outstanding Forward Sales (-)/ Purchases #
1	2	3	4
<b>2001-02</b>			
April	-18	-18	-1,160
May	469	451	-980
June	36	487	-800
July	-272	215	-620
August	682	897	-475
September	-894	3	-800
October	237	240	-740
November	1,542	1,782	-450
December	1,040	2,823	-400
January	1,391	4,214	-200
February	567	4,781	-200
March	2,283	7,063	-400
<b>2002-03 (so far)</b>			
April	477	477	-400



May	86	563	-400
June	241	804	-400
July	1,829	2,633	-400

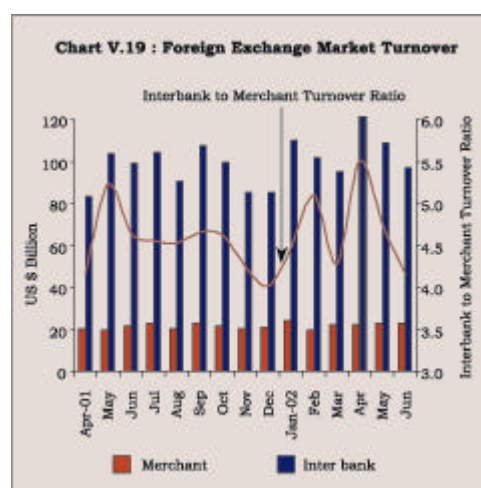
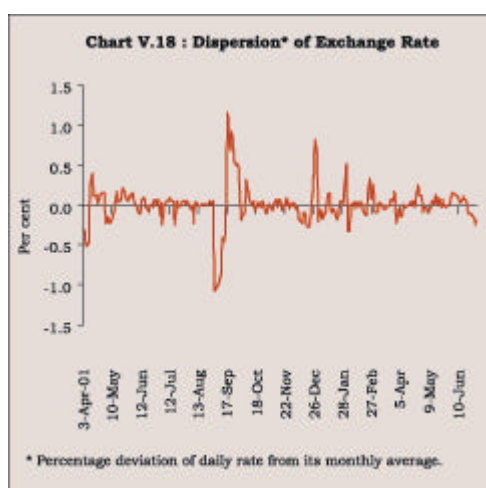
\* Include spot, swap and forward transactions.

# Outstanding at the end of the month.



5.28 The dispersion in the movement in the exchange rate of the Indian rupee remained uniform for most of the period in 2001-02, except for brief spells during September and December 2001 (Chart V.18).

5.29 The Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in 2001 by the Bank for International Settlements indicates a substantial decline in the turnover in the global foreign exchange market and a slowdown in the growth of activity in the derivatives market. According to the survey, the average daily turnover in traditional foreign exchange markets was US \$ 1.2 trillion in April 2001 showing a decline of 19 per cent from US \$ 1.5 trillion in April 1998. Furthermore, the trading volumes fell sharply in spot markets, while volumes fell to a lesser extent in the foreign exchange swaps segment. Trading in outright forwards increased slightly. The currency pair US dollar/euro was the most traded currency pair in 2001 and captured 30 per cent of global turnover, followed by US dollar/yen with 20 per cent and dollar/sterling with 11 per cent. Trading in local currencies in emerging markets captured about 4.5 per cent of foreign exchange activity in 2001, compared with 3.1 per cent in 1998. The survey stated that the share of India in the total global daily turnover of the foreign exchange market was comparatively low at 0.2 per cent, *albeit*, almost the same as other emerging markets (Table 5.4).



5.30 In the Indian foreign exchange market, the average monthly turnover in the merchant segment declined from US\$ 23 billion in 2000-01 to US \$ 21 billion during 2001-02 (Chart V.19). In the inter-bank segment, the average turnover increased to US \$ 97 billion. The total turnover (inter-bank *plus* merchant turnover) in the forex market increased from an average of US\$ 116 billion per month in 2000-01 to US \$119 billion per month in 2001-02.

**Table 5.4: Features of Select Emerging Foreign Exchange Markets During April 2001**

1	No. of Participants	Number of Trading Days	Daily Turn-over (US \$-billion)	% Share of Total Global Turn-over
1	2	3	4	5
Chile	28	20	2	0.1
Czech Republic	19	20	2	0.1
India	23	17	3	0.2
Korea	71	20	10	0.6
Malaysia	9	24	1	0.1
Mexico	5	19	9	0.5
Philippines	42	18	1	0.1
Poland	17	20	8	0.5
Russia	78	21	10	0.6
South Africa	30	18	10	0.6
Thailand	35	18	2	0.1
Turkey	23	20	1	0.1

**Source :** Foreign Exchange and Derivatives Market Activity in 2001, *Triennial Central Bank Survey*, March 2002, Bank for International Settlements (BIS).

5.31 The forward market remained stable during the first half of the year until September 11, 2001 when forward premia increased by 150-200 basis points during September-

October 2002 and remained stable thereafter, within a range of 5-7 per cent till March 2002 (Table 5.5).

**Table 5.5 : Forward Premia (Monthly Average)**

Month	(Per cent per annum)		
	1-month	3-month	6-month
1	2	3	4
<b>2001</b>			
April	3.95	4.51	4.84
May	5.02	4.95	5.06
June	4.43	4.82	4.95
July	4.22	4.50	4.73
August	4.19	4.52	4.71
September	5.57	5.60	5.50
October	5.91	6.02	6.03
November	5.72	6.16	6.21
December	6.44	6.34	6.36
<b>2002</b>			
January	5.70	6.00	5.99
February	5.05	5.49	5.46
March	6.91	6.46	5.93
April	5.84	6.12	6.06
May	6.04	6.23	6.19
June	4.74	5.37	5.54
July	4.08	4.40	4.56



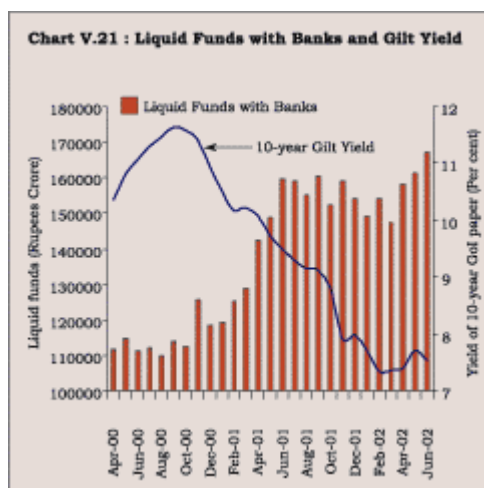
5.32 During March 2002, the forward premia for the long end of the market (3 and 6 months) were lower than the one month premia (Chart V.20). Average 3- month and 6-month forward premia declined to 4.4 per cent and 4.6 per cent, respectively during July 2002.

### **GOVERNMENT SECURITIES MARKET**

5.33 The government securities market experienced increased activity during 2001-02. With credit and equity markets remaining subdued, investor preferences underwent a

change in favour of gilts. The gross borrowings of the Central Government through dated securities moved up to Rs.1,14,213 crore during

2001-02 from Rs.1,00,183 crore during 2000-01 (Appendix Table V.5). The aggregate volume of secondary market transactions in Central and State Government dated securities and Treasury Bills (outright as well as repos) more than doubled to Rs. 15,73,893 crore during 2001-02 from Rs. 6,98,121 crore during 2000-01 (Appendix Table V.6). Surplus liquidity conditions (surplus of net demand and time liabilities available over statutory pre-emptions and credit off-take) drove down yields by an unprecedented 298 basis points (average across the 1- to 20-year segment) during 2001-02 as against a moderate decline of 57 basis points during 2000-01(Chart V.21). The decline in yields was more pronounced at the short end during the first half of the year, shifting to longer-term securities during the second half of the year.



## Primary Market Developments

### *Dated Securities*

5.34 The Central Government's market borrowing programme for the year 2001-02 began amidst ample liquidity and an easing of monetary policy. The Central Government raised a total amount of Rs.86,000 crore through auctions of dated securities during 2001-02, out of which an amount of Rs.679 crore and Rs.735 crore devolved on the Reserve Bank and PDs, respectively. Half of the total auction issuances of dated securities for the year were made during April-July 2001 itself. The month-wise ratio of bid amount received to notified amount (BR/NA) ranged between 1.5 and 3.8 during the year (Table 5.6). The market appetite for sovereign paper at the auctions remained strong for the rest of the year as well, particularly during November 2001-January 2002 when the monetary conditions were eased further (Appendix Table V.7).

**Table 5.6 : Major Indicators of Primary Auctions of Central Government Dated Securities\***

Month	Notified amount (Rupees crore)	Number of bids received	Amount of bids received (Rupees crore)	BR/NA**	Devolvement on PDs (Rupees crore)	Devolvement on RBI (Rupees crore)	Weighted Average Yield (Per cent)
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1	2	3	4	5	6	7	8
<b>2001</b>							
April	16,000	1184	47,733	3	–	–	10.4
May	9,000	759	25,763	2.9	–	–	11.1
June	6,000	526	16,317	2.7	–	–	9.5
July	12,000	661	21,309	1.8	–	–	9.4
August	6,000	292	8,748	1.5	735	679	9.7
September	7,000	411	11,735	1.7	–	–	9.6
October	8,000	430	15,313	1.9	–	–	9.9
November	6,000	596	22,508	3.8	–	–	8.3
December	6,000	364	14,175	2.4	–	–	7.5
<b>2002</b>							
January	5,000	435	16,057	3.2	–	–	8.1
February	5,000	328	8,494	1.7	–	–	7.2
March	–	–	–	–	–	–	–
April	13,000	733	28,893	2.2	–	–	7.1
May	12,000	520	18,885	1.6	–	2,018	7.7
June	6,000	321	8,117	1.4	1,322	2,000	8.1
July	14,000	676	22,563	1.6	1,400	1,157	7.2

\* Excluding private placement and tap issuance.

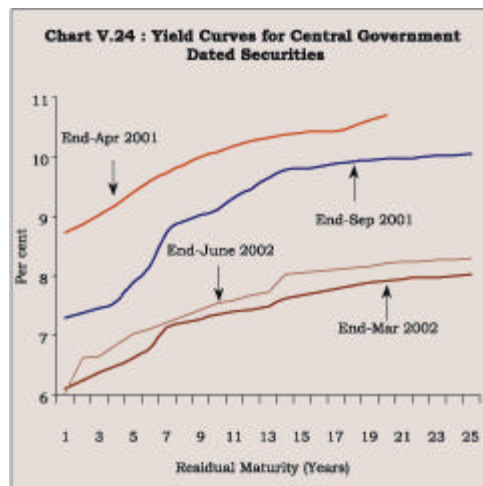
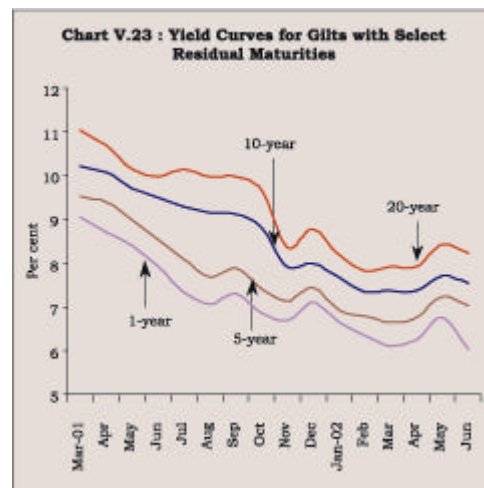
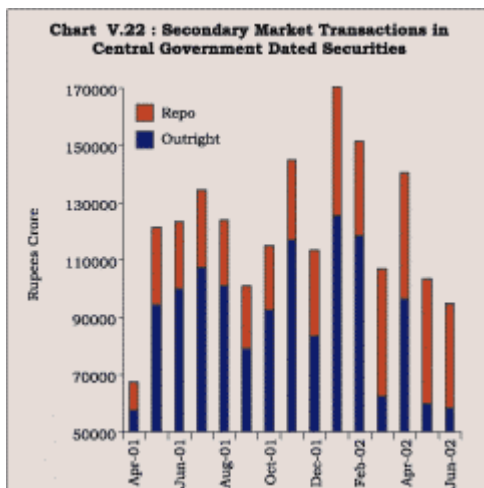
\*\* Ratio of amount of competitive bids received to notified amount.

5.35 Other primary market developments include issue of Floating Rate Bonds (FRBs) and the scheme of retailing of Government securities through non-competitive bidding.

#### *Secondary Market*

5.36 The secondary market recorded a sharp increase in activity as yields declined. The overall preference for gilts across the financial market spectrum also reflected build up of the SLR portfolio on account of mergers since May 3, 2002 and fresh demand from co-operative banks. The total turnover in the secondary market (calculated as twice the volume of outright transactions and four times the volume of repos transactions) during 2001-02 was Rs.38,71,640 crore compared to Rs. 16,48,195 crore in 2000-01. The turnover in Central Government dated securities more than doubled to Rs.36,20,451 crore during 2001-02 from Rs.14,54,513 crore in 2000-01. The outright turnover increased to Rs.24,23,933 crore during 2001-02 from Rs.11,44,291 crore in 2000-01, temporarily disrupted by the September 11, 2001 event and the border tensions in December, 2001 (Chart V.22). There was some decline in the turnover in the last two months of 2001-02 due to market uncertainty before the Union Budget and the usual end-of-the-year profit bookings. The turnover to stock ratio in Central Government securities moved up to 5 during 2001-02 from 3 during 2000-01 for outright transactions. The turnover in State Government securities during 2001-02 amounted to Rs.14,229 crore as against Rs.6,005 crore during 2000-01. The turnover in the repo transactions remained sizeable and stable except for a spike during January 2002.



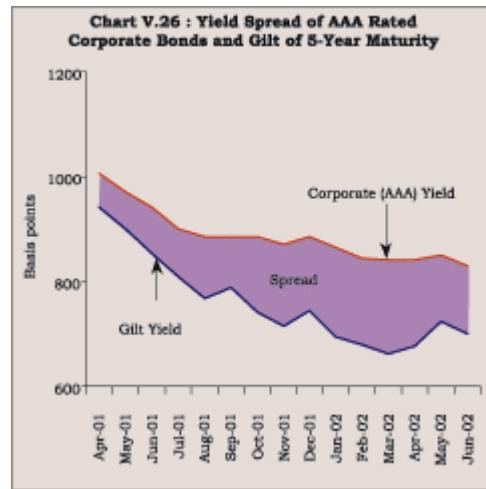
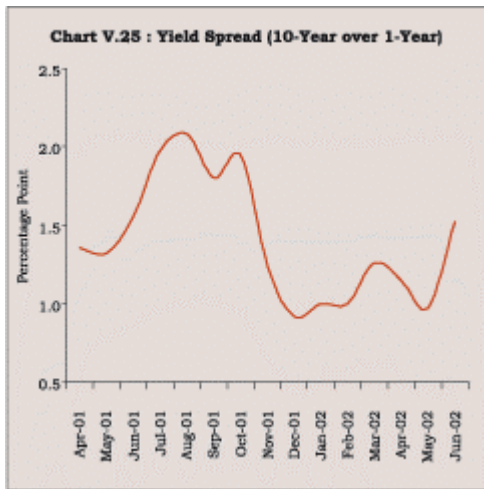


5.37 Secondary market yields showed a perceptible downward shift across the maturity spectrum during 2001-02. The yields of 5-year, 10-year and 20-year securities fell by 291 basis points, 287 basis points and 311 basis points, respectively, between March 2001 and March 2002 (Chart V.23). These were among the sharpest reductions in interest rates during the course of a year in the last three decades. The easing of yields was more pronounced for the short-term securities during the first half of 2001-02 and for long-term securities during the second half of 2001-02 (Chart V.24).

5.38 The yield spreads between 10-year and 1-year gilts widened during August-October 2001 before narrowing subsequently. The behaviour of yield spreads indicated the moderation of inflation expectations. Narrowing of yield spreads occurred throughout 2001-02 barring few episodic aberrations when market preference was for shorter tenor securities during July 2001 and when there was hardening of long-term yields during March 2002 (Chart V.25).

5.39 During 2001-02, the yield spread between 5-year AAA rated corporate bonds and the secondary market yield of comparable maturity widened reflecting investor preference for sovereign paper (Chart V.26).

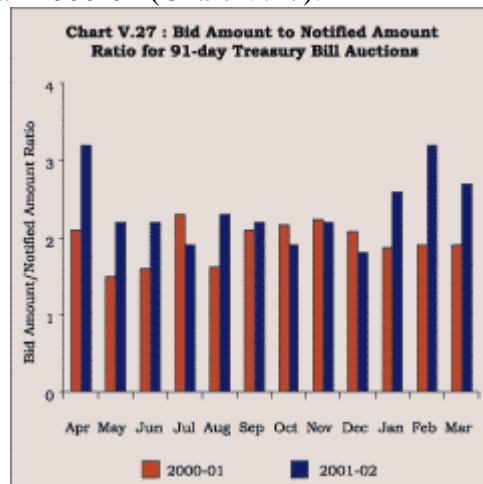
5.40 The secondary gilt market remained bullish during the first week of April 2002. Thereafter, sentiments turned cautious in the run-up to the annual monetary and credit policy announcement but turned bearish in the absence of a cut in the Bank Rate. The monetary easing and the repo rate cut in June 2002 eventually activated the gilt market with the yield curve as at end-June 2002 shifting down from its position at end-May 2002. During the first quarter of 2002-03 as a whole, the gilt yields hardened with the yield of the 10-year security firming up by 18 basis points to 7.54 per cent. The improved market sentiment in July 2002 softened the yields with the yield on the 10-year security falling to 7.32 per cent. The gilt market was further buoyed during the first week of August 2002 by announcement of a 7 per cent government Relief Bond of 6-year tenor.



### Treasury Bills

5.41 The market response to all the auctions of the Treasury Bills was enthusiastic with the month-wise ratio of competitive bid amount received to notified amount (BR/NA) exceeding 1.78 in case of all the auctions of the 91-day Treasury Bills and more than 1.88 for each of the auctions of 364-day Treasury Bills (Table 5.7).

5.42 The competitive bid amount received to notified amount ratio was considerably higher during 2001-02 than 2000-01 (Chart V.27).



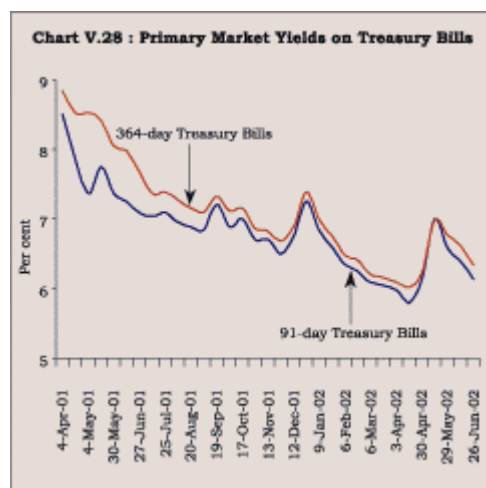
**Table 5.7: Treasury Bills - Response in Primary Market @**

Months	14-day#		91-day		182-day#		364-day	
	No. of bids received	BR/NA*	No. of bids received	BR/NA*	No. of bids received	BR/NA*	No. of bids received	BR/NA*
1	2	3	4	5	6	7	8	9
<b>2001</b>								
April	71	2.80	83	3.22	54	2.43	105	2.26
May	40	2.84	127	2.17	34	2.46	193	2.58
June	–	–	105	2.17	–	–	120	2.49
July	–	–	93	1.91	–	–	121	2.96
August	–	–	117	2.34	–	–	96	2.41
September	–	–	94	2.18	–	–	95	2.97
October	–	–	146	1.89	–	–	134	1.95
November	–	–	109	2.22	–	–	72	2.54
December	–	–	90	1.78	–	–	91	1.88
<b>2002</b>								
January	–	–	130	2.57	–	–	126	2.58
February	–	–	112	3.24	–	–	134	3.60
March	–	–	101	2.74	–	–	93	3.37
April	–	–	140	2.91	–	–	180	2.52
May	–	–	113	2.69	–	–	134	2.54
June	–	–	95	2.28	–	–	132	3.02
July	–	–	135	2.65	–	–	120	2.52

\* Ratio of competitive bid amount received to Notified amount.

@ As per dates of auction.

# Auctions of 14-day and 182-day Treasury Bills were discontinued from the week beginning May 14, 2001.



5.43 There was a gradual softening of cut-off yields in 91-day and 364-day Treasury Bills during 2001-02 (Chart V.28). The uncertainty in the market due to September 11 developments, however, hardened the yields marginally. Comfortable liquidity conditions and improved sentiment brought down the yields of 91-day and 364-day Treasury Bills to 6.13 per cent and 6.16 per cent, respectively, by the end of March 2002 from 8.75 per cent and 8.96 per cent at the end of March 2001.

5.44 The total gross issues of 14-day auction Treasury Bills and 182-day Treasury Bills before their discontinuance amounted to Rs.1,100 crore (inclusive of non-competitive bids) and Rs. 300 crore, respectively, during 2001-02. The gross amounts mobilised by

the 91-day Treasury Bills and 364-day Treasury Bills were Rs.20,216 crore and Rs.19,588 crore (inclusive of non-competitive bids), respectively, during 2001-02 as against Rs.7,255 crore and Rs.15,000 crore during the preceding year (Table 5.8 and Appendix Table V.8).

5.45 With effect from April 3, 2002, the notified amount of the 364-day Treasury Bill was increased to Rs.1,000 crore from Rs. 750 crore to improve the supply in the market. The easy liquidity conditions at the commencement of 2002-03 drove down the 91-day Treasury Bill yield below the one-day repo rate in April, 2002 before it moved up by the end of the month to 6.13 per cent. The yield on the 364-day Treasury Bill hovered at the repo rate before moving up to 6.22 per cent by end-April 2002. Subsequently, the cut-off yields of 91-day Treasury Bills and 364-day Treasury Bills reached highs of 7.00 per cent and 6.99 per cent, respectively, on May 15, 2002 but declined thereafter to 5.80 per cent and 5.99 per cent on August 7, 2002.

### Credit Markets

5.46 The market for bank credit remained bound by the intensification of the industrial slowdown. Despite the downward rigidities in the lending rate structure in India, interest rates in the banking system declined in all categories and across maturities, *albeit* with differing degrees of sensitivity to monetary policy signals (Table 5.9).

5.47 Domestic deposit rates decreased across all maturities with the degree of moderation being higher for longer-term deposits. For public sector banks, deposit rates in all maturities softened to 4.25 - 8.75 per cent by March 2002 and further to 4.25-8.25 per cent by July 2002 from 4.00-10.50 per cent in March 2001, except for a marginal increase of 25 basis points at the short end for 15-day deposits. Long-term domestic deposit rates (over 3 year) of public sector banks declined from 9.5-10.5 per cent in March 2001 to 8.0-8.75 per cent by March 2002 and further to 7.5-8.25 per cent in July 2002. The term structure of domestic deposit rates offered by public sector banks exhibited a sharp fall in interest rates for the longer tenor over the year 2001-02 (Chart V.29).

**Table 5.8 : A Profile of Treasury Bills**

Type of T-Bill	Weighted average cut-off yield (%)		Gross amount		Net amount		Outstanding amount	
	2001-02	2000-01	2001-02	2000-01	2001-02	2000-01	2001-02	2000-01
	1	2	3	4	5	6	7	8
14 day	7.13	8.23	1,100	10,480	(-)300	-25	-	300
91 day	6.88	8.98	20,216	7,255	3,171	310	5,001	1,830
182 day	8.44	9.43	300	2,600	(-)1,300	-	-	1,300
364 day	7.30	9.76	19,588	15,000	4,588	2,000	19,588	15,000

**Table 5.9 : Movements in Deposit and Lending Rates**

Interest Rate	(Per cent)			
	July 2002	March 2002	October 2001	March 2001
1	2	3	4	5

**Domestic Deposit Rates**  
Public Sector Banks

a) Up to 1 Year	4.25 – 7.00	4.25 – 7.50	4.25 – 7.50	4.00 – 8.00
b) 1 Year up to 3 years	7.00 – 7.75	7.25 – 8.50	7.75 – 9.00	8.00 – 9.50
c) Over 3 years	7.50 – 8.25	8.00 – 8.75	8.50 – 9.25	9.50 – 10.50

#### Private Sector Banks

a) Up to 1 year	4.00 – 8.75	5.00 – 9.00	5.00 – 9.50	5.00 – 10.25
b) 1 year up to 3 years	7.25 – 9.50	8.00 – 9.50	8.00 – 10.50	9.00 – 11.00
c) Over 3 years	7.75 – 9.50	8.25 – 10.0	8.25 – 10.50	9.25 – 11.50

#### Foreign Banks

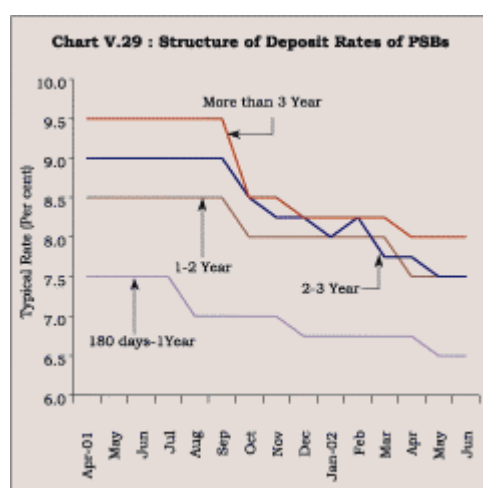
a) Up to 1 year	4.25 – 9.75	4.25 – 9.75	4.25 – 10.00	4.25 – 10.00
b) 1 year up to 3 years	5.50 – 10.00	6.25 – 10.0	5.75 – 10.50	7.25 – 10.75
c) Over 3 years	5.50 – 10.00	6.25 – 10.0	7.25 – 10.50	7.25 – 10.50

#### Prime Lending Rates

Public Sector Banks	10.00 – 12.50	10.00 – 12.50	10.00 – 12.50	10.00 – 13.00
Private Sector Banks	9.50 – 15.50	10.00 – 15.50	10.50 – 15.50	10.25 – 15.50
Foreign Banks	7.90 – 17.50	9.00 – 17.50	8.80 – 17.50	9.00 – 17.50

**Prescribed Pre-shipment Rupee Export Credit up to 180 days** < PLR-2.5 PP < PLR-2.5 PP < PLR-2.5 PP 10.00

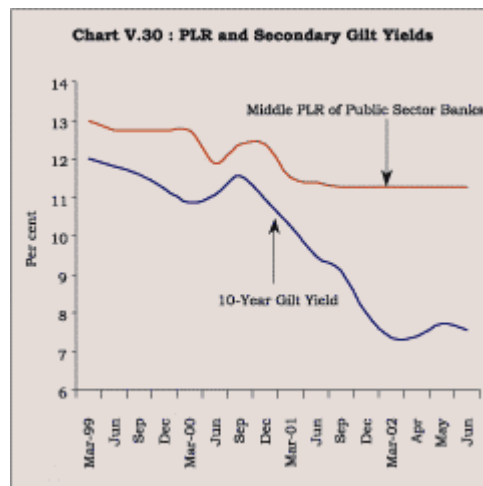
PP Percentage Points



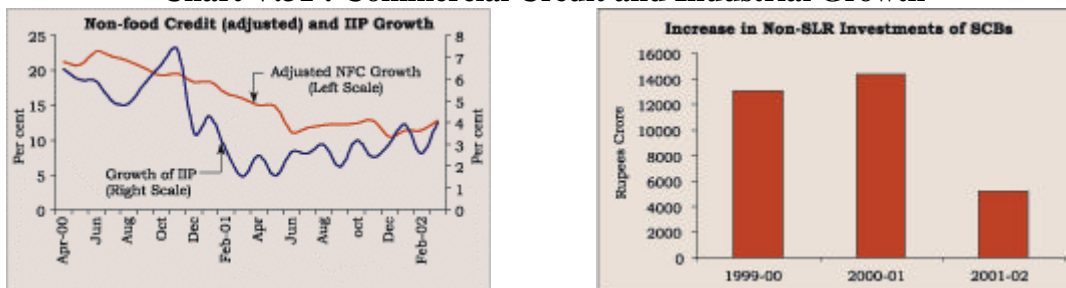
5.48 By contrast, there was only a marginal decline in the prime lending rate (PLR) of commercial banks. The PLRs of public sector banks declined by 50 basis points only as compared with the softening of the long-term deposit rate by 150-175 basis points during 2001-02. As at the end of March 2002, the PLRs of public sector banks ranged between 10.0 - 12.5 per cent as against 10.0 - 13.0 per cent in March 2001. During the first quarter of 2002-03, the PLR of public sector banks remained steady.

5.49 While sub-PLR lending forms a part of pricing strategy of commercial banks, rigidities in lending rates still persist. This resulted in a growing wedge between PLRs and secondary market gilt yields (Chart V.30).





**Chart V.31 : Commercial Credit and Industrial Growth**

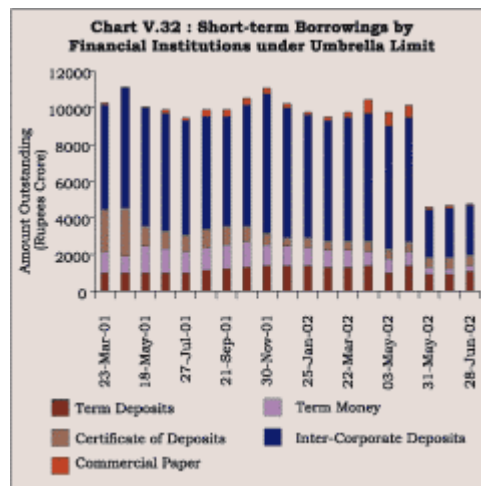


5.50 Commercial bank credit (including scheduled commercial banks' non-SLR investments) decelerated to 14.2 per cent during 2001-02 from 18.1 per cent during the previous year. Adjusted non-food credit off-take recorded an increase of 12.7 per cent during 2001-02 as against 16.0 per cent in 2000-01 reflecting the deepening of the industrial slowdown (Chart V.31). Food credit increased by 35.0 per cent (Rs.13,987 crore) during 2001-02 as against 55.7 per cent (Rs.14,300 crore) during the previous year. Scheduled commercial banks' investments in the non-SLR instruments increased by Rs.5,156 crore in 2001-02 as against Rs.14,366 crore recorded during the previous year.

## **Mobilisation of Resources by Non-Bank Financial Sector**

### *Financial Institutions*

5.51 The outstanding aggregate amount of short-term resources raised by the financial institutions<sup>1</sup> under the umbrella limit by way of term money, CDs, CPs<sup>2</sup>, term deposits and inter-corporate deposits (ICDs) decreased to Rs.9,738 crore (32.27 per cent of limits) as on March 22, 2002 from Rs.11,159 crore (36.48 per cent of limits) as on April 6, 2001. It further decreased to Rs. 5,070 crore (22.8 per cent of the limits) as on July 12, 2002. On an average basis, ICDs continued to remain the most preferred instrument (with average outstanding at Rs.6,526 crore) followed by term money (average outstanding at Rs.1,205 crore), term deposits (Rs.1,166 crore), CDs (Rs.981 crore) and CPs (Rs.234 crore) (Chart V.32).



5.52 The interest rate offered on term money borrowings by financial institutions declined to 8.25-9.50 per cent in March 2002 from 9.95-11.00 per cent in April 2001. It remained in the range of 9.50-10.25 per cent as on July 12, 2002. Similarly, interest rates on CDs issued by financial institutions declined to 8.25-11.10 per cent in March 2002 from a range of 9.25-14.00 per cent in April 2001. They remained in the range of 8.75-11.10 per cent as on July 12, 2002. The interest rate on term deposits also softened to 8.40-10.00 per cent from a range of 9.00-12.00 per cent over this period and remained range bound till the early part of July 2002. In case of ICDs, the rates dropped sharply to 7.00-9.90 per cent in March 2002 from 9.75 -11.60 per cent in April 2001. They further declined to 6.30-9.50 per cent as on July 12, 2002. For CPs, the rates declined to 8.51-8.91 per cent in March 2002 from the level of 9.10-10.70 per cent in April 2001 and further declined to 7.75 per cent as on July 12, 2002.

5.53 The total resources mobilised by select all-India FIs during 2001-02 aggregated Rs.28,453 crore as against Rs. 26,070 crore in the preceding year (Table 5.10). The total outstanding borrowings of select all-India FIs as at the end of March 2002 stood at Rs. 1,67,462 crore as compared with Rs. 1,67,004 crore as at end-March 2001. The weighted average maturity of the borrowings across these FIs during the year ranged between 2.8 years and 9.6 years as against 2.5 years and 9 years in the previous year. The weighted average interest rate of the borrowings was 7.5-10.6 per cent as against 9.5 -11.9 per cent in the previous year.

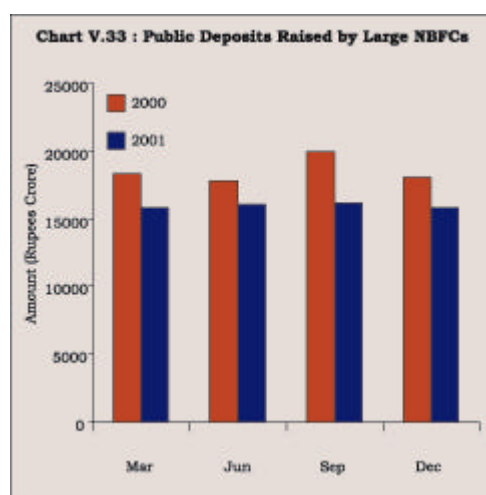
5.54 Financial assistance sanctioned and disbursed by all-India financial institutions (AIFIs) during 2001-02 at Rs.72,878 crore and Rs.56,985 crore, declined by 36.9 per cent and 20.6 per cent, respectively, in contrast to the increase of 18.1 per cent and 10.3 per cent, respectively, during the previous year (Appendix Table V.9). During April-June 2002, sanctions and disbursements by AIFIs (excluding ICICI<sup>3</sup>), at Rs.3,081 crore and Rs.5,288 crore, respectively, declined by 63.0 per cent and 22.8 per cent.

#### *Non-Bank Financial Companies*

5.55 Aggregate public deposits of non-banking financial companies (NBFCs) holding public deposits<sup>4</sup> (including residuary non-banking financial companies (RNBCs)) stood at Rs.18,085 crore as on March 31, 2001. Deposits with NBFCs as a proportion to those of commercial banks worked out to 1.9 per cent as at end-March 2001. The deposits with

interest rates ranging between 12 per cent and 14 per cent formed around 42.7 per cent of the total public deposits and those with interest rates of 14 to 16 per cent formed 23.7 per cent of the public deposits mobilised by NBFCs (excluding RNBCs) as at March 2001.

5.56 According to the quarterly information pertaining to large NBFCs with a deposit base of Rs.20 crore and above public deposits of these companies were Rs.16,608 crore as at end-December 2001 as against Rs.16,519 crore as at end-September 2001 (Chart V.33). In consonance with the general easing of interest rates, the ceiling rate of interest for public deposits accepted by NBFCs was reduced from 14 per cent to 12.5 per cent per annum effective from November 1, 2001.



**Table 5.10 : Resources Raised by Select All-India Financial Institutions**

Financial Institution	(Amount in Rupees crore)							
	Resources Raised		Total Borrowings Outstanding		Weighted Average Maturity (Years)		Weighted Average Interest Rate (Per cent)	
	2001-02	2000-01	end-March 2002	end-March 2001	2001-02	2000-01	2001-02	2000-01
1	2	3	4	5	6	7	8	9
IDBI	8,493	8,746	54,027	56,420	2.8	3.3	9.7	10.6
ICICI	11,817	10,755	48,502	49,734	5.9	4.7	9.9	11.2
IFCI	3,000	2,709	16,459	16,593	4.9	4.3	10.4	11.9
IIBI	210	408	3,196	3,419	9.6	3.9	10.6	10.2
EXIM BANK	625	300	5,319	4,597	5.0	2.5	8.7	11.1
NABARD	2,548	1,472	23,495	18,960	4.4	3.0	8.0	9.5
NHB	238	499	4,119	4,785	7.4	5.8	8.7	10.2
SIDBI	1,224	822	10,006	10,420	3.0	3.0	7.5	9.8
TFCI	48	109	689	676	7.0	9.0	10.5	11.8
IDFC	250	250	1,650	1,400	5.0	5.0	9.0	11.3
<b>Total</b>	<b>28,453</b>	<b>26,070</b>	<b>1,67,462</b>	<b>1,67,004</b>				

**Notes :** 1. Data are provisional.

2. The resources raised by select all-India financial institutions (FIs) includes borrowings by way of bonds and debentures and fixed deposits, certificates of deposit, inter-corporate deposits, term money borrowings, commercial paper and foreign currency borrowings in case of some FIs.

## **EQUITY AND DEBT MARKETS**

5.57 The capital market remained depressed during 2001-02 in an environment of sluggish economic activity both in India and abroad, and a general risk aversion characterising financial markets. Global equity markets tracked the slowdown in real activity. Market sentiments turned sporadically volatile in response to global disturbances. For a major part of the year, the primary market remained dormant with floatation of very few public issues, even as corporates continued to mobilise substantial resources from the private placement market. The Euro issues market witnessed lower activity with only a few companies tapping the overseas market for raising capital.

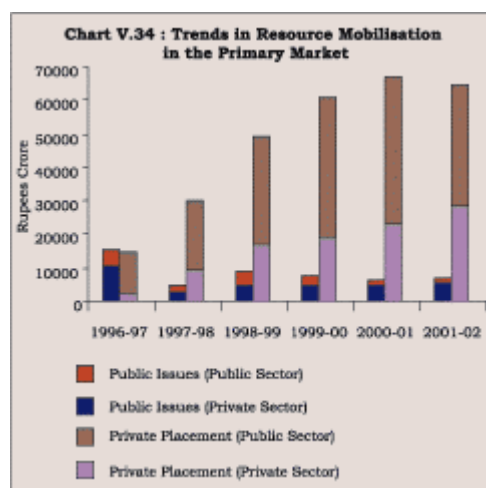
5.58 In the secondary market, stock prices continued to decline, with the BSE Sensex falling by 3.7 per cent during 2001-02 on top of a 27.9 per cent decrease in the previous year, mainly as a result of the impact of irregularities in the domestic stock markets and international disturbances in the first half of the year and border tensions in the second half of the year. A short-lived recovery in the last quarter of 2001-02, mainly on account of the disinvestment drive and continued support from foreign institutional investors, lost momentum in the ensuing months.

5.59 The institutional development of the capital market was carried forward by the reforms undertaken by the SEBI in risk management practices, expansion of equity derivatives markets and refinement of settlement systems in conjunction with measures undertaken by the Reserve Bank to ensure speedy transfer of funds.

### **Primary Market Developments**

5.60 The primary market remained largely subdued during the first three quarters of 2001-02, recovering somewhat through a few mega issues in the last quarter of the year. Aggregate resource mobilisation in the public issues market stood at Rs.7,112 crore (through 24 issues), registering an increase of 11.8 per cent over Rs.6,362 crore (through 144 issues) mobilised during the previous year (Chart V.34 and Table 5.11).

5.61 The resource mobilisation by the non-Government public limited companies (private sector) through public issues increased by 16.4 per cent to Rs.5,692 crore as compared with Rs.4,890 crore during the previous year. The number of issues floated, however, markedly declined to 19 from 139 mainly due to drying up of small sized issuances from the information technology (IT) companies. There were only two issues by IT companies during 2001-02 as compared with 80 issues in the previous year.



**Table 5.11: Mobilisation of Resources from the Primary Market\***

Item	2001-02 P		2000-01	
	No. of Issues	Amount (Rupees crore)	No. of Issues	Amount (Rupees crore)
1	2	3	4	5
<b>A. Prospectus and Rights</b>				
1. Private Sector (a+b)	19	5,692.2 (16.4)	139	4,890.0 (-5.1)
a) Financial	10	4,090.8	17	2,491.6
b) Non-financial	9	1,601.4	122	2,398.4
2. Public Sector (a+b+c)	5	1,419.5 (-3.6)	5	1,472.2 (-42.3)
a) Public Sector Undertakings	—	—	—	—
b) Government Companies	1	350.0	—	—
c) Banks/Financial Institutions	4	1,069.5	5	1,472.2
3. Sub Total (1+2)	24	7,111.7 (11.8)	144	6,362.2 (-17.4)
<b>B. Private Placement+</b>				
1. Private Sector	663	28,483.3 (23.3)	379	23,105.6 (19.0)
a) Financial	353	15,801.7	208	13,262.6
b) Non-financial	310	12,681.6	171	9,843.0
2. Public Sector	288	36,466.2 (-18.5)	208	44,730.8 (6.9)
a) Financial	170	17,391.7	112	26,201.1
b) Non-financial	118	19,074.5	96	18,529.6
3. Sub-Total (1+2)	951	64,949.5 (-4.3)	587	67,836.4 (10.7)
<b>C. Total (A+B)</b>	<b>975</b>	<b>72,061.2</b> <b>(-2.9)</b>	<b>731</b>	<b>74,198.6</b> <b>(7.6)</b>

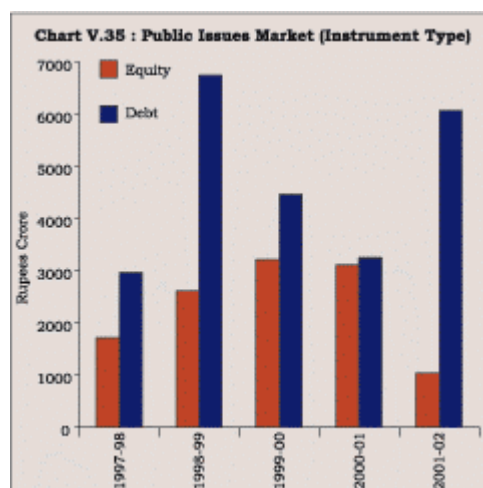
\* Including both debt and equity. P Provisional. - Nil/Negligible.

+ Estimates based on information gathered from arrangers, FIs and press reports.

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

5.62 The public issues market was dominated by debt issues both in the private and public sectors (Chart V.35). In the private sector, debt instruments constituted 84.9 per cent of the total resource mobilisation (13 issues aggregating Rs.4,832 crore) as

compared with a share of 43.8 per cent (9 issues aggregating Rs.2,140 crore) during 2000-01 (Appendix Table V.10). Only 6 equity issues aggregating Rs.860 crore were floated by the private sector companies during 2001-02 as against 130 equity issues aggregating Rs.2,750 crore during 2000-01. Mega issues (Rs.100 crore and above) accounted for nearly 98 per cent (Rs.5,564 crore from 12 issues) of total resource mobilisation in the private sector as compared with 70 per cent (Rs.3,419 crore from 13 issues) during 2000-01. As a result, the average size of issues increased sharply to Rs.300 crore during 2001-02 from Rs.35 crore in 2000-01.



5.63 Resource mobilisation by the public sector companies underwent a marginal decline to Rs.1,420 crore from Rs.1,472 crore in the previous year, with the number of issues remaining at five for both the years. After a gap of three years, a Government company floated a public issue while public sector undertakings (PSUs), in general, continued to tap the private placement market for their capital requirements. Resource mobilisation by banks and financial institutions in the public sector declined by 27.4 per cent to Rs.1,070 crore (through 4 issues) from Rs.1,472 crore (through 5 issues) during the previous year. The debt instruments constituted 88.4 per cent of the total resource mobilisation in the public sector (4 issues aggregating Rs.1,255 crore) as compared with 75.5 per cent (2 issues aggregating Rs.1,111 crore) during 2000-01.

5.64 During April-June 2002, there were three issues in the private sector aggregating Rs.613 crore as compared with Rs.210 crore through four issues during the corresponding quarter of the previous year. There was no issue in the public sector during April-June 2002 as well as during April-June 2001.

5.65 Resource mobilisation through private placements continued to dominate the primary market, although the pace of growth of the private placement market has slackened during the last few years. During 2001-02, the aggregate resource mobilisation through the private placement market declined by 4.3 per cent to Rs.64,950 crore as against an increase of 10.7 per cent during 2000-01. In contrast to the public issues market, the public sector companies were the dominant issuers in the private placement market, accounting for 56.1 per cent of total resource mobilisation (Rs.36,466 crore). The major all-India development financial institutions (IDBI, IFCI, ICICI, IIBI) were the largest mobilisers of funds from the private placement market (Rs.14,266 crore). The

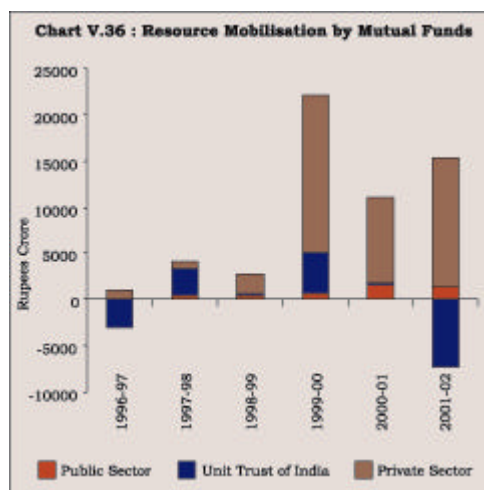
state-level undertakings mobilised Rs.10,338 crore, accounting for 15.9 per cent of the total private placements.

### Euro Issues

5.66 Resource mobilisation by Indian corporates through Euro issues by way of Foreign Currency Convertible Bonds (FCCBs), Global Depository Receipts (GDRs) and American Depository Receipts (ADRs) registered a decline of 44.2 per cent during 2001-02. There were five issues floated for an aggregate amount of Rs.2,342 crore (US\$ 497 million) during 2001-02 as against 13 issues aggregating Rs.4,197 crore (US\$ 932 million) during 2000-01. During April-June 2002, there was one Euro issue of Rs.100 crore as against four issues aggregating Rs.1,850 crore during the corresponding quarter of 2001-02.

### Resource Mobilisation by Mutual Funds

5.67 Net resource mobilisation by mutual funds declined by 27.9 per cent to Rs.8,024 crore during 2001-02 from Rs.11,135 crore during the previous year. The private sector mutual funds mobilised resources to the tune of Rs.13,977 crore, an increase of 50.4 per cent over the previous year (Chart V.36). The Unit Trust of India (UTI) witnessed a sharp outflow of Rs.7,284 crore during 2001-02 as compared with an inflow of Rs.322 crore during the previous year. The resource mobilisation by the public sector mutual funds declined to Rs.1,330 crore from Rs.1,521 crore during the previous year (Table 5.12). During April-June 2002, mutual funds registered a net outflow of Rs.832 crore as against an inflow of Rs.6,936 crore during the corresponding quarter of previous year.



**Table 5.12: Net Mobilisation of Resources by Mutual Funds#**

Item	2001-02 P		2000-01 P	
	No. of Schemes	Amount (Rupees crore)	No. of Schemes	Amount (Rupees crore)
1	2	3	4	5
1. Unit Trust of India @	71	-7,284.0	87	322.0



2.Public Sector Mutual Funds	73	1,330.4	57	1,520.6
3. Private Sector Mutual Funds	244	13,977.1	163	9,292.1
<b>Total (1 to 3)</b>	<b>388</b>	<b>8,023.5</b>	<b>307</b>	<b>11,134.7</b>

# Net of repurchases/redemptions.

P Provisional.

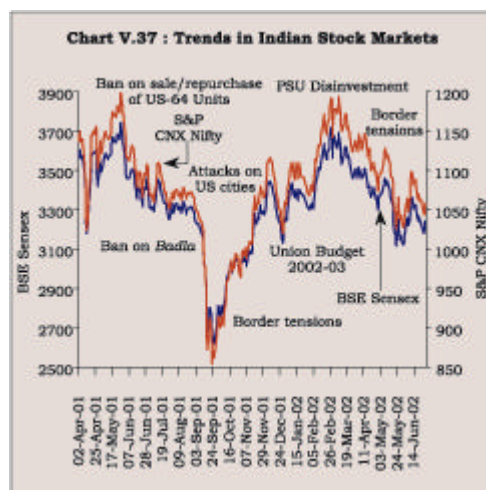
@ Net sales value with premium under all domestic schemes Including re-investment sales.

**Source :** UTI and respective mutual funds.

5.68 According to the SEBI, outstanding net assets of all mutual funds stood at Rs.1,00,594 crore as at end-March 2002, which was higher by 11.0 per cent as compared with Rs.90,587 crore as at end-March 2001.

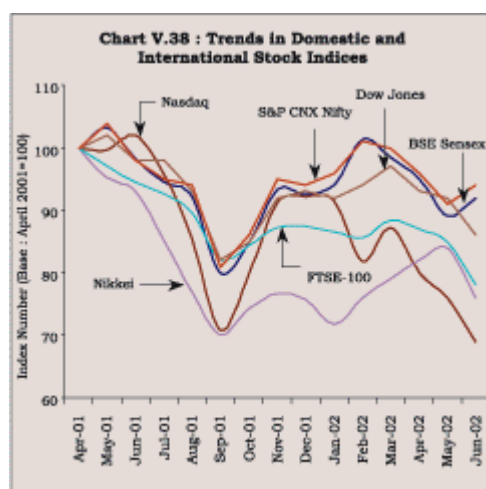
### Secondary Market Developments

5.69 Global recessionary conditions, international disturbances and the domestic industrial slowdown impacted on the secondary market during 2001-02. The year began on a subdued note with market sentiments dampened by adverse domestic developments including payment difficulties arising out of market irregularities, ban on the sale and repurchase of US-64 units of the UTI (in July 2001) and a decline in IT scrip prices worldwide. The BSE Sensex slipped below the 3500 mark by June 2001 and dipped to 3245 by end-August 2001 (Chart V.37 and Appendix Table V.11).



5.70 The stock markets suffered a major setback after the September 11, 2001 terrorist attack on US cities reverberated through financial markets worldwide (Chart V.38). The BSE Sensex touched the 2600 mark on September 21 - the lowest level since September 8, 1993. Thereafter, it revived briefly in October and November to touch 3323 by November 26, 2001, partly reflecting stronger-than-expected second quarter corporate results, especially that of software companies, and favourable policy developments, such as the permission to banks to extend finance to stockbrokers for margin trading,

enhancement in FII investment limits, monetary easing and the introduction of stock futures.



5.71 The markets reacted adversely to border tensions following the December 13, 2001 terrorist attack on the Indian Parliament, pulling the BSE Sensex down from 3443 on December 10, the peak since July, to 3132 on December 27, 2001. Sentiments improved in January 2002, with easing of border tensions and favourable third-quarter corporate results. The markets witnessed a brief rally in February 2002, following a package of reforms by the Central Government, including PSU disinvestment, which pushed up PSU scrip valuations. The BSE Sensex crossed the 3500 mark on February 11 and climbed to 3713 on February 26, 2002, spurred by incentives in the Railway Budget 2002-03. The BSE Sensex fell sharply after the presentation of the Union Budget 2002-03 on February 28 but recovered on March 1, 2002. The markets turned sluggish thereafter to close the year at 3469 on March 28, 2002.

5.72 Key indicators of the equity markets reflect the developments of 2001-02 (Table 5.13). During 2001-02, the average BSE Sensex declined by 22.0 per cent to 3332 from 4270 during the previous year. The turnover at the BSE and NSE declined sharply during 2001-02. The market capitalisation of the BSE, however, increased to Rs.6,12,224 crore as at end-March 2002 from Rs.5,71,553 crore as at end-March 2001. The volatility in share prices, measured by the co-efficient of variation (CV) in respect of the BSE Sensex and S&P CNX Nifty, declined along with the average price-earning (P/E) ratio and the average price-book value ratio.

**Table 5.13 : Indian Equity Markets – Key Indicators**

Indicator	(Amount in Rupees crore)			
	BSE		NSE	
1	2001-02	2000-01	2001-02	2000-01
	2	3	4	5
1. BSE Sensex/ S&P CNX Nifty				
(i) Average	3332	4270	1077	1335
(ii) End of the year	3469	3604	1130	1148
2. CV (%)	7.2	8.8	6.8	7.5

3.Price Earning ratio@	16.6	23.9	15.7	20.4
4.Price-Book Value Ratio@	2.4	3.6	2.6	4.2
5.Yield @ (per cent)	2.0	1.3	1.3	1.2
6.Listed Companies#	5,782	5,869	793	785
7.Turnover	3,07,292	10,00,032	5,13,167	13,39,510
8. Market Capitalisation #	6,12,224	5,71,553	6,36,861	6,57,847

@ Based on scrips included in the BSE Sensex and the S&P CNX Nifty and are averages for the year.

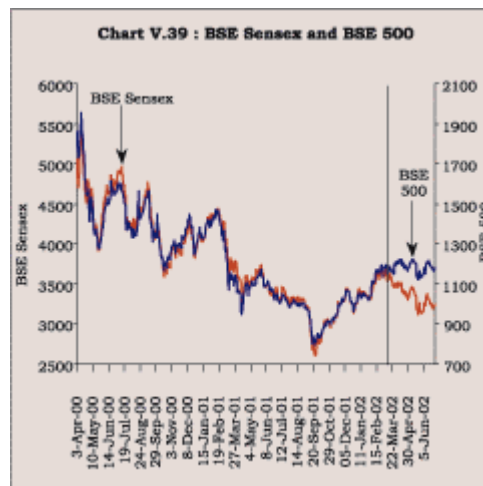
# As at end of the year.

**Source:** The Stock Exchange, Mumbai and the National Stock Exchange of India Limited.

5.73 The turnover on the BSE and NSE accounted for 91.6 per cent of the all-India turnover during 2001-02. Of the 23 stock exchanges, six exchanges, *viz.*, BSE, NSE, Kolkata, Delhi, Ahmedabad and Uttar Pradesh, accounted for as much as 99.7 per cent of the all-India turnover. The rest of the stock exchanges reported miniscule turnover.

5.74 In the current fiscal year, the equity markets started on a positive note, with the BSE Sensex touching 3513 on April 4, 2002 but turned sluggish by end-April 2002, mainly as certain corporate quarterly results did not meet expectations and in view of domestic uncertainties. After a brief spurt in early May, mainly driven by sector-specific buying, the markets weakened on account of continued border tensions pulling the BSE Sensex down to 3114 on May 23, 2002. The markets recovered in early June 2002, but turned bearish again, falling below the 3000 mark by end-July mainly on account of monsoon uncertainties and subdued trends in international stock markets. The BSE Sensex closed at 3066 on August 16, 2002, registering a decline of 11.6 per cent in the current fiscal year so far. On an average basis, the BSE Sensex declined by 4.8 per cent to 3303 during April-July 2002 from 3472 during the corresponding period of the previous year.

5.75 There has been a strong buying interest in mid-cap stocks (as opposed to costlier blue chips) partly reflecting a defensive and diversified portfolio strategy in the face of market uncertainties. This has been facilitated, *inter alia*, by the availability at attractive valuations of i) stable mid-cap technology stocks, ii) PSU scrips, following the acceleration of the disinvestment programme, and iii) banking scrips, which spurred after the relaxation in FDI limits and improved financial performance. As a result, broader indices such as the BSE-500 increased by 1.4 per cent in the first quarter of 2002-03 in sharp contrast to a decline of 6.5 per cent in the BSE Sensex (Chart V.39). Reflective of this trend, the share of the market capitalisation of BSE Sensex scrips in the market capitalisation of all scrips listed on the BSE declined to 40.9 per cent as on June 26, 2002 from 44.9 per cent as at end-March 2002 and 46.9 per cent as at end-March 2001.



### Equity Derivatives Market

5.76 Derivatives have increasingly gained popularity as instruments of risk management as the scope of derivative trading in equities was considerably enlarged during 2001-02 (Box V.1). During 2001-02, the turnover in index futures and stock futures on the BSE and NSE taken together amounted to Rs.22,758 crore and Rs.51,968 crore (November-March) respectively. The turnover in index options and stock options amounted to Rs.3,844 crore (June-March) and Rs.25,279 crore (July-March) respectively, during 2001-02 (Appendix Table V.12 and Chart V.40).

#### Box V.1

#### Equity Derivatives Trading in India

Trading in equity derivatives in India began in June 2000 after the SEBI granted permission to the derivative segments of two stock exchanges, viz., NSE and BSE, and their clearing house/corporation to commence trading and settlement in approved derivative contracts. Various equity-based derivative products have been introduced in stages since June 2000. Initially, SEBI approved trading in index futures contracts based on two indices, viz., S&P CNX Nifty Index and BSE-Sensitive Index (Sensex). The range of derivative products was extended further by commencement of trading in index options based on S&P CNX Nifty and Sensex in June 2001, trading in options on individual securities in July 2001 and trading in futures on individual securities in November 2001. Stock options and stock futures are currently available for 31 securities. All contracts have a maximum of 3-month expiration cycle and are available with 1 month, 2 months and 3 months to expiry. All contracts expire on the last Thursday of the expiry month and a new contract is introduced on the next trading day following the expiry of the near month contract. The index options are European style (*i.e.*, automatic exercise on the expiration day), while stock options are American style (*i.e.*, automatic exercise on the expiration day and voluntary exercise prior to the expiration day). At any point of time, the exchanges provide contracts at different strike prices (*i.e.*, in the money, near the money and out of the money) and option types (*i.e.*, call and put) for each month. The 'strike price' is the price at which the buyer has a right to purchase or sell the underlying.

*Trading framework*

The trading framework for derivatives is similar to that for the cash market. The exchanges provide screen-based trading for derivative products on a national platform, which supports an anonymous order driven market. The SEBI has prescribed a two-tier membership structure to enable wider participation in the derivatives market. All trades have to be routed through a SEBI-registered trading member, who performs functions like order entry, order matching, *etc.* The other category of members, *i.e.*, clearing members, clear and settle trades of all their trading members and undertake risk management. They can also enter and set limits to positions which a trading member can take. On the derivatives segment, a clearing member can also be a trading member; in this case, the member can clear and settle own proprietary trades and clients' trades as well as clear and settle for other trading members. The exchanges are also allowed to admit banks or custodians as professional clearing members. A new category of self-clearing members has also been created by SEBI, who clear and settle their own/clients' trades. The different types of members have to meet the eligibility norms, net worth and deposit requirements stipulated by the exchanges for each of these categories.

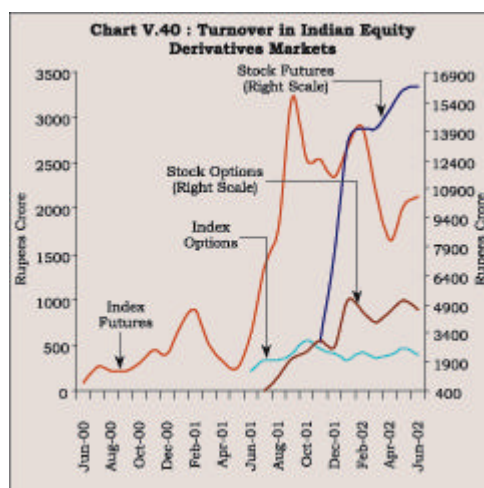
#### *Clearing and Settlement*

The clearing and settlement process integrates three activities - clearing, settlement and risk management. The clearing process involves arriving at open positions and obligations of clearing members, which are arrived at by aggregating the open positions of all the trading members. The trading members' open positions are in turn determined by aggregating his proprietary and clients' open positions.

All futures and options contracts are cash settled, *i.e.*, through exchange of cash. All futures contracts for each member are marked-to-market (MTM) to the daily settlement price of the relevant futures contract at the end of each day. Daily MTM settlement of profits/losses based on the closing price of the futures contract is done on T+1 day. The final settlement is effected for expiring futures contracts and the process is similar to the daily MTM settlement. The final settlement price is the closing value of the index/underlying security on the expiry day. In case of index/stock options, the buyer/seller of an option is obligated to pay/receive the premium towards the options purchased/sold by him. The premium payable amount and the premium receivable amount are netted to compute the net premium payable or receivable amount for each client for each option contract.

A comprehensive risk containment mechanism has been designed for the derivatives segment. The risk containment mechanism for the derivatives segment essentially comprises the margining system and system of on-line position monitoring. The SEBI has stipulated a portfolio-based margining system, which takes an integrated view of overall risk in a portfolio of all futures and options contracts for each client. Initial margins (based on 99% Value at Risk) are applicable on gross basis at the level of trading/clearing member and on net basis at the level of individual client and proprietary positions of trading/clearing member. In addition to initial margin, the calendar spread margin is charged. The exposure limits on gross open positions are determined on the basis of liquid net worth of members and the positions are monitored on real-time basis by the exchanges. A separate Settlement Guarantee Fund is required to be created out of the base capital of members for the derivative segments.

Some ambiguities relating to derivatives markets remain such as specific provisions regarding taxability of income arising from trading in derivatives. The tax treatment would differ if such transactions were treated as speculative transactions or as normal business transactions. While the Institute of Chartered Accountants of India has issued the guidance notes on accounting for index futures, index options and stock options, the accounting norms relating to stock futures are yet to be finalised.



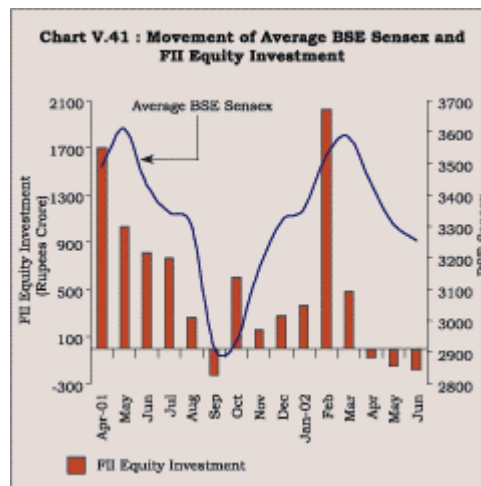
## Major Institutional Investors

### *Mutual Funds*

5.77 Mutual funds were net sellers in equities to the extent of Rs.3,796 crore during 2001-02 as compared with net sales of Rs. 2,767 crore in the previous year. There has been a shift in portfolio allocations towards debt instruments (Rs.10,959 crore during 2001-02 as compared with Rs.5,023 crore during 2000-01). Mutual funds were net sellers in equities by Rs.917 crore in the first quarter of 2002-03 as compared with net sales of Rs.884 crore during the comparable quarter of 2001-02.

### *Foreign Institutional Investors*

5.78 The net inflows from foreign institutional investors (FIIs) into equity markets amounted to Rs.8,273 crore during 2001-02 as compared with Rs.9,683 crore during the previous year (Chart V.41). The net FII investment was positive for all the months of the year except for September 2001. During the first quarter of 2002-03, FIIs were net sellers in the equity market to the tune of Rs.419 crore as compared with net purchases of Rs.3,534 crore during the corresponding quarter of 2001-02. Cumulative investments by FIIs which stood at Rs.48,765 crore (US\$ 13.1 billion) as at end-March 2001 increased to Rs.57,038 crore (US\$ 14.9 billion) as at end-March 2002 but declined to Rs.56,619 crore (US\$ 14.8 billion) as at end-June 2002. As on June 30, 2002, the number of FIIs registered with the SEBI stood at 489.



### *Scheduled Commercial Banks*

5.79 The scheduled commercial banks' investments in equity markets (in bonds/debentures and equity of public sector undertakings and the private corporate sector) declined to Rs.4,708 crore during 2001-02 from Rs.11,354 crore during the previous year. This was mainly driven by lower investment of Rs.4,484 crore in bonds/debentures during 2001-02 as compared with Rs.10,449 crore during 2000-01. During the first quarter of 2002-03, banks' investments in the equity market amounted to Rs.7,117 crore, largely reflecting the impact of mergers since May 3, 2002, as compared with Rs.1,582 crore during the comparable quarter of the previous year.

### *Financial Institutions*

5.80 Investments in equity markets by financial institutions (including IDBI, IFCI, ICICI, SIDBI, IIBI, TFCI, NHB, Exim Bank, NABARD and IDFC) in the form of shares/debentures of banks and corporate bodies declined to around Rs.700 crore during 2001-02 as compared with around Rs.2,000 crore during the previous year.

## **Debt Market**

### *Wholesale Debt Market - NSE*

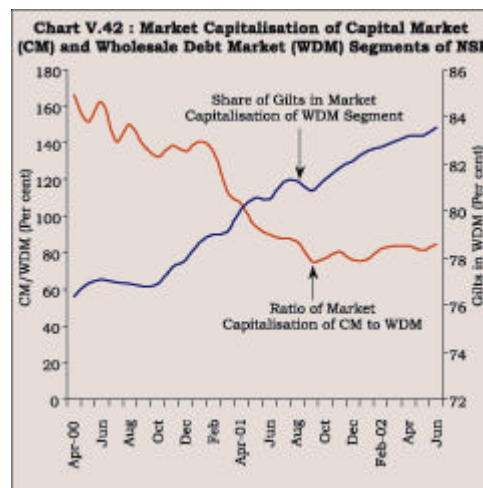
5.81 The number of securities listed on wholesale debt market (WDM) segment of the NSE increased to 1,159 as at end-March 2002 from 937 as at end-March 2001, while the total number of securities available for trading on this segment increased to 1,790 as at end-March 2002 from 1,534 as at end-March 2001. The turnover in the WDM segment of NSE increased by 121 per cent to Rs.9,47,191 crore in 2001-02 from Rs.4,28,582 crore in 2000-01, partly reflecting the softening of interest rates on account of easy liquidity conditions (Chart V.42). The market capitalisation of the securities available for trading in the WDM segment amounted to Rs.7,56,794 crore as at end-March 2002 as compared to Rs.5,80,835 crore as at end-March 2001, reflecting the increase in gilt prices. Government securities, accounting for 95.2 per cent of transactions during 2001-02, continued to dominate the WDM segment. The repo trade volume worked out to Rs.609 crore during 2001-02 as compared with Rs.1,600 crore during 2000-01. The volume of corporate debt traded increased to Rs.2,192 crore in 2001-02 as compared with Rs.709



crore in 2000-01. Banks (49.8 per cent), brokers (23.5 per cent) and PDs (22.5 per cent) accounted for the bulk of the volume on the WDM segment in 2001-02.

### Insurance Market

5.82 The process of liberalisation gathered momentum in the Indian insurance market during 2001-02 with the entry of a number of private life and general insurers (Box V.2). The Insurance Regulatory and Development Authority (IRDA) registered four new life insurance companies and two new general insurance companies during 2001-02 and one life insurance company in April-June 2002 taking the total number of life insurers to 13 and general insurers to 10. According to the IRDA, the life insurance business at force (in terms of premium) expanded by 37.4 per cent to Rs.36,070 crore during 2000-01. The general insurance business (in terms of gross direct premium income) increased by 5.9 per cent to Rs.10,087 crore during 2000-01. The insurance market witnessed the introduction of a number of investment-linked products in debt and equity markets.



### Box V. 2

#### The Emerging Indian Insurance Market

The Indian insurance sector was opened up in August 2000 pursuant to the recommendations of the Committee on Reforms in the Insurance Sector (Chairman: Shri R. N. Malhotra). The Insurance Regulatory and Development Authority (IRDA), constituted in April 2000 under the IRDA Act, 1999, is vested with the power to regulate and develop the insurance and re-insurance business.

The IRDA has prescribed stringent licensing criteria and solvency margins, with guidelines for investment of the larger part of resources in government securities and other approved investments (including infrastructure) and exposure norms for other investments. The Advisory Group on Insurance Regulation (Chairman: Shri R. Ramakrishnan), appointed by the Standing Committee on International Financial Standards and Codes (Chairman: Dr. Y.V. Reddy), stated that the Indian insurance regulations are, by and large, in consonance with international standards.

The liberalisation of the insurance sector is expected to enhance consumer choice through

product innovation. The life insurance sector now offers money-back options, pension plans and unit-linked insurance, often with health insurance riders, with premium collected through either lump sum payments or in multiple instalments. The general insurance industry introduced longer-term contracts such as deferred health insurance and project insurance, including contractor's all-risk cover and the marine-cum-erection risk cover and credit insurance. The IRDA is mandated to prefer applicants proposing health insurance cover at the time of registration. It stipulated that insurers should offer an opportunity to other Indian insurers to participate in facultative and treaty surpluses before placement of such cessions outside India, (apart from mandatorily ceding 20 per cent of the gross premium to the Indian Reinsurer (*viz.*, General Insurance Corporation of India)) to develop domestic reinsurance market capacity.

The liberalisation of the insurance sector impacts the functioning of the financial system through the inter linkages with the existing financial institutions and financial products. First, most of the foreign insurers, have preferred to form joint ventures with domestic entities, with a large branch/dealer network to minimise establishment costs. The Reserve Bank has issued guidelines regulating the degree of participation of banks, financial institutions and non-banking financial companies in the insurance business depending on balance sheet strength. Of the 39 applications received from commercial banks, the Reserve Bank has accorded approval to three banks for joint ventures on risk participation basis. Two banks which were given approval for strategic investment in insurance joint ventures and investment in a distribution and services company have submitted revised applications for joint ventures on risk participation basis while 18 banks and a subsidiary of a bank were conveyed 'in principle' approval for agency business. The Reserve Bank has given permission to five NBFCs to undertake insurance business as joint venture participants in insurance companies. While an NBFC was permitted to both engage in insurance agency business as well as to make strategic investment in equity of an insurance company, two companies were permitted to make only strategic investments and two companies were granted approval to undertake only insurance agency business. Secondly, the emerging unit-linked assurances/pensions in the life insurance business bear close resemblance to the business transacted by mutual funds. Thirdly, the expansion in life insurance creates a demand for long-dated paper, especially government securities. Finally, private funded voluntary (Pillar 3) pension reforms often entail minimum mandatory contemporaneous annuitisation with life insurers.

A critical issue is to increase the insurance penetration which is comparable to most emerging market economies but much lower than that of OECD countries. The IRDA requires insurers to gradually increase their coverage of the rural sector to 15.0 per cent of total policies written direct by the fifth year in respect of a life insurer and 5 per cent of total gross premium income written direct by the third year in respect of a general insurer besides covering 20,000 lives in the economically vulnerable social sector by the fifth year in the case of all insurers. The Insurance (Amendment) Act, 2002, *inter alia*, allowed co-operative societies to carry on insurance business with a view to enhancing coverage in rural areas. Besides stipulations, the pressure of competition has also pushed life insurers to adopt innovative marketing strategies to target lower income groups.

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1 The data pertain to ten all-India financial institutions, *viz.*, IDBI, ICICI, IFCI, NABARD, Exim Bank, NHB, SIDBI, TFCI, IIBI and IDFC. ICICI merged with the ICICI bank and hence ceased to be a financial institution effective March 30, 2002.

2 The all-India financial institutions, with effect from October 10, 2000, have been permitted to issue CPs within the ceiling of their overall umbrella limit.

3 Subsequent to the merger of ICICI Ltd. and two of its subsidiaries with ICICI Bank Ltd., data from April 2002 onwards exclude sanctions and disbursements by ICICI.

4 As reported in the survey of 981 non-banking financial companies.