

IV. Domestic Financial Markets

Short-term Interest Rates

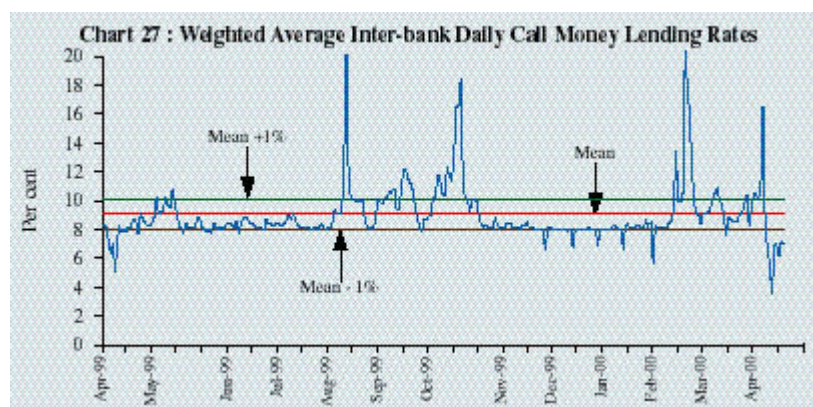
While generally manageable liquidity conditions characterised a majority of the financial market segments, the position at the shorter end of the market, viz., the call money market and primary auctions of Treasury Bills seemed to be somewhat tight. The marked appetite for government securities and increased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

Call Money Market

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

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

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



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

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

Table 7 : Inter-bank Monthly Call Money Lending Rates

	Average (%)	SD (%)	CV
1	2	3	4

1999			
April	7.87	0.93	0.12
May	8.91	0.80	0.09
June	8.25	0.30	0.04
July	8.36	0.31	0.04
August	9.72	2.48	0.26
September	9.97	1.19	0.12
October	11.20	2.62	0.23
November	8.20	0.19	0.02
December	7.86	0.43	0.05
2000			
January	7.99	0.61	0.08
February	10.37	3.31	0.32
March	9.77	1.69	0.17
<u>April (up to 17th)</u>	<u>6.44</u>	<u>1.31</u>	<u>0.20</u>

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

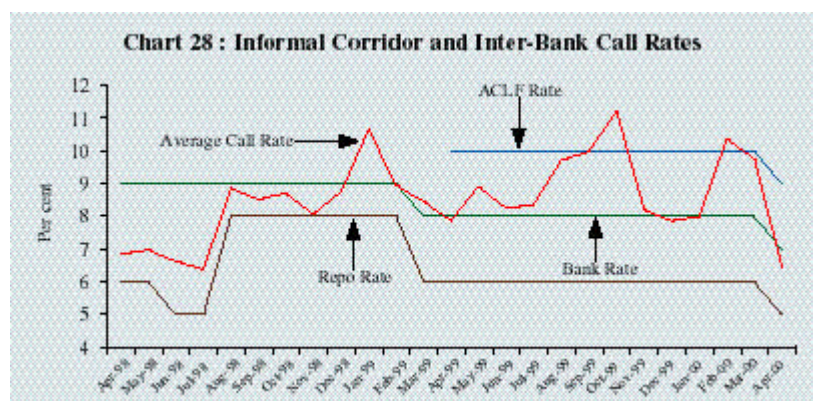
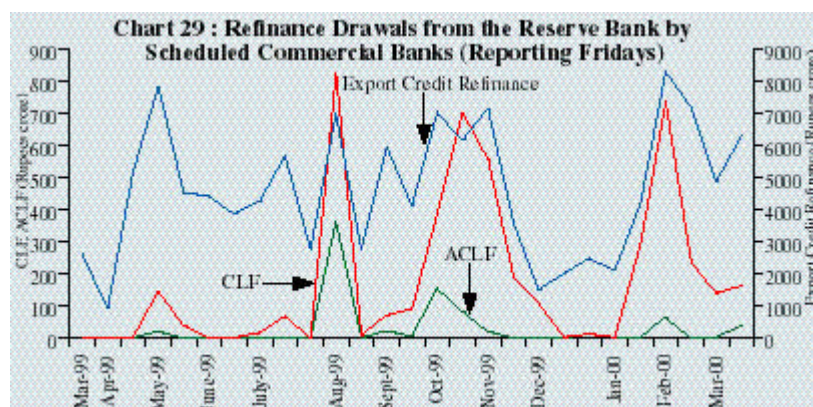


Chart 29 shows the refinance drawals by scheduled commercial banks from the Reserve Bank (on reporting Fridays) through i) export credit refinance facility (ECRF), ii) collateralised lending facility (CLF) and iii) additional collateralised lending facility (ACLF). While refinance at the first two facilities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

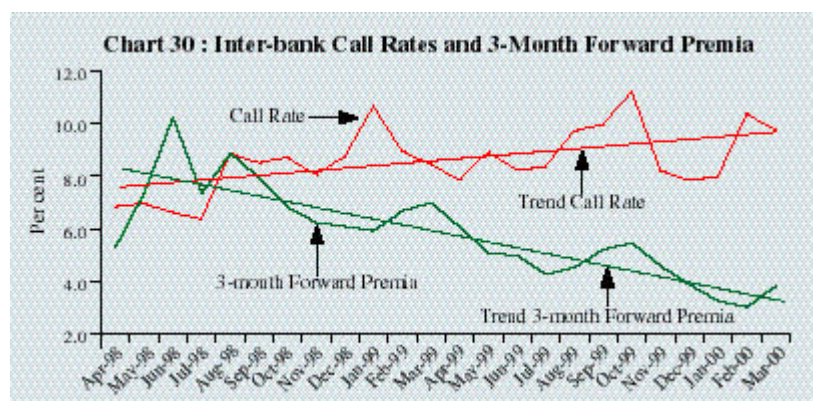
While domestic money market rates ruled higher during 1999-2000 than those during the previous year, the average 3-month forward premia ruled sharply lower at around 4.5 per cent during 1999-2000 than 7.2 per cent during 1998-99. With the forex market characterised by excess supply conditions on account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



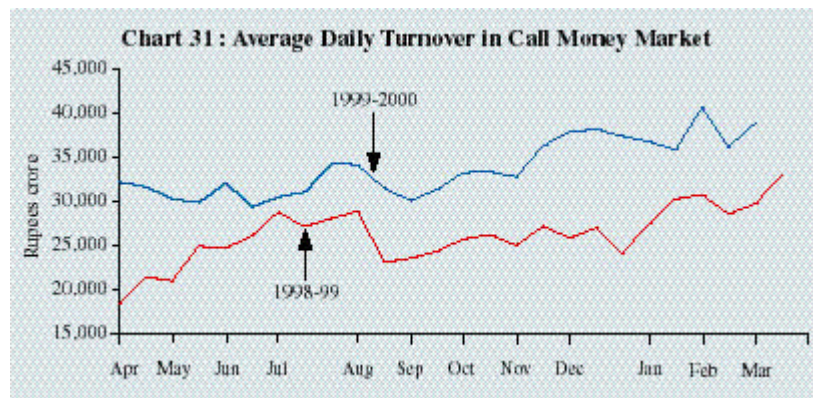
Reflecting the relatively stable call rate, as well as the acceleration in credit demand and growth of banks' investment portfolio, the average daily turnover in the money market increased to Rs.38,902 crore during the fortnight ended March 10, 2000 from Rs.33,009 crore during the fortnight ended March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

Treasury Bills

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



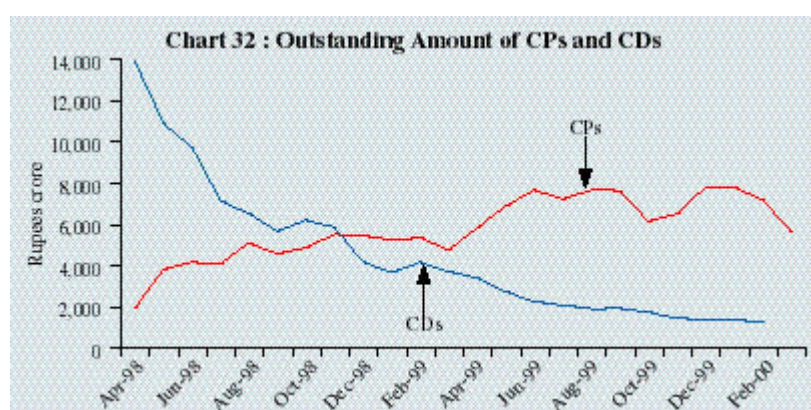
The cut-off yield of 182-day Treasury Bills was largely driven by demand conditions. Between May 1999 (since its re-introduction) and August 1999, the cut-off yield of 182-day Treasury Bills varied within the range of 9.31 to 9.97 per cent. With the relative hardening of the cut-off yields, the Reserve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



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

Deposit Rates

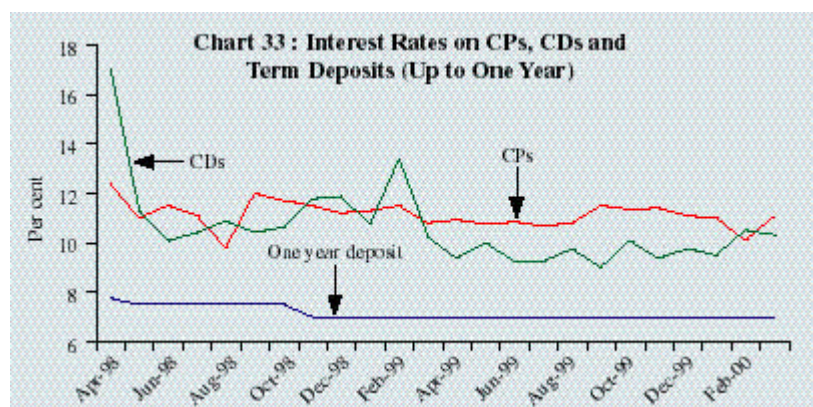
Deposit rates across all bank groups and across all maturities exhibited a declining trend during 1999-2000. While public sector banks reduced interest rates only on deposits above three year maturities - in June 1999 by 50 basis points and in November 1999 by 25 basis points to a range of 9.75 to 11.0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



Other Money Market Instruments

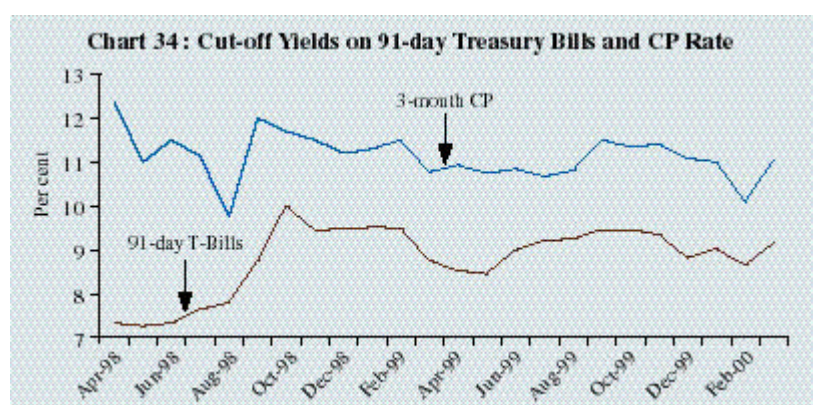
The underlying comfortable liquidity condition was manifested in the form of a substantial pick-up in the commercial paper market and the declining importance of the certificates of deposits (CDs) as an instrument of resource mobilisation during 1999-2000 (Chart 32).

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



Continuing the trend since 1998-99, the primary commercial paper market remained active during 1999-2000. Easy liquidity conditions facilitated top rated corporates to raise funds at rates lower than the prime lending rates (PLRs) of banks. The outstanding amount of CPs which stood at Rs.4,770 crore as on March 31, 1999 increased to Rs.5,663 crore as on March 31, 2000, with the peak at Rs.7,814 crore as on January 31, 2000. The outstanding amount of CPs averaged Rs.6,936 crore during 1999-2000 as compared with Rs.4,169 crore during 1998-99. The discount rate on CPs (up to one year maturity) stayed within the range of 10.0-12.0 per cent during the fortnight ended March 31, 2000 as compared with 9.1-13.3 per cent in the corresponding fortnight of the previous year. Most of the CP issues were at rates lower than the PLRs of 12.0-13.5 per cent of public sector banks. The movement of interest rates on CDs, CPs and one year deposit rate of banks indicated that while deposit rates remained relatively inflexible, the interest rates for wholesale deposits by way of CDs generally moved in line with the market condition (Chart 33).

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



Long-term Interest Rates

Government Bond Yields

The long-term interest rates in the economy moved downward during 1999-2000. This trend was

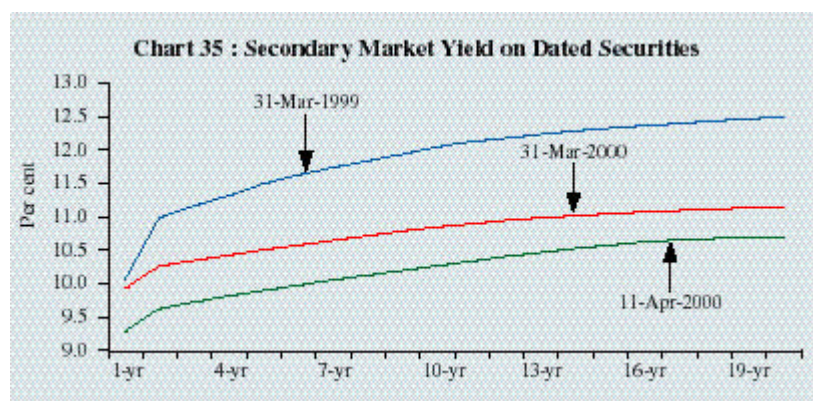
evident in all segments of the financial market viz., the government securities market, credit market and private bond market. In the government securities market investors' preference strengthened for medium and longer maturity papers, as clearly evident from the sharp increase in liquidity and demand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

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

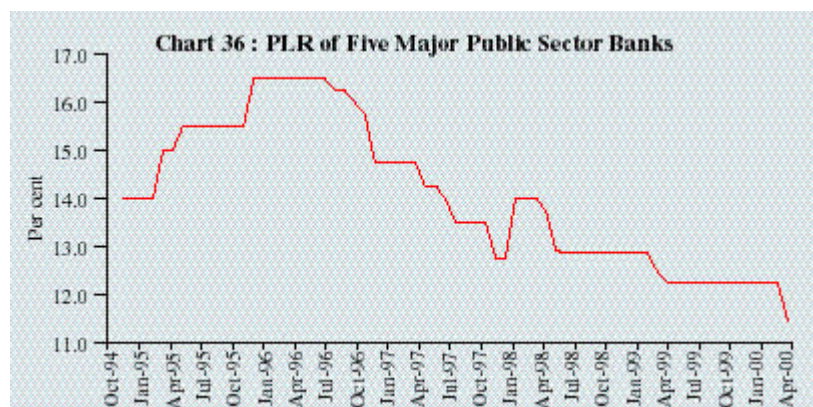
Table 8 : Yield Spread of Central Government Dated Securities

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

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



The yield curve moved successively downward during the year with the slope becoming flatter along the higher maturity axis (Chart 35). The yield curve once again moved down following the monetary policy changes announced effective April 1, 2000. The typical yield in the secondary market for 10-year paper declined from 10.85 per cent as at end - March 2000 to 10.47 per cent as on April 4, 2000 and further to 10.27 per cent as on April 11, 2000. Similarly, the yield on 18-year maturity declined from 11.12 per cent as at end-March 2000 to 10.68 per cent as on April 11, 2000. At the short to medium end, 1-year and 5-year security rates declined from 9.93 per cent and 10.51 per cent as at end-March 2000 to 9.29 and 9.90 per cent, respectively, as on April 11, 2000.



Bank Lending Rates

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

the second week of April 2000.

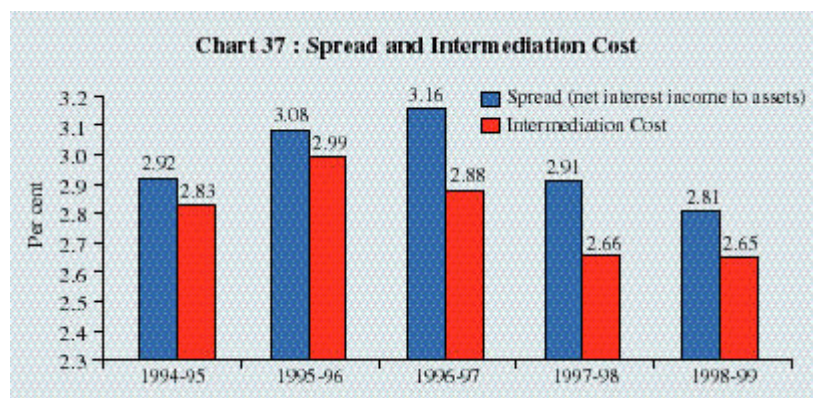
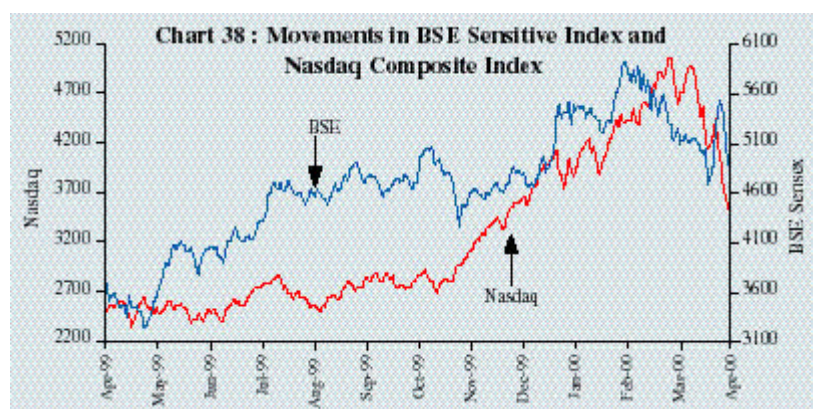


Chart 37 shows trends in the intermediation cost (operating expenses to total assets) and spread (net interest income as a percentage of total assets) of public sector banks since 1994-95. Intermediation cost declined by 1 basis point during 1998-99 as against a decline of 22 basis points during 1997-98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

Equity Market

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



The BSE Sensitive Index (Base: 1978-79 = 100), which was at 3739.96 as on March 31, 1999

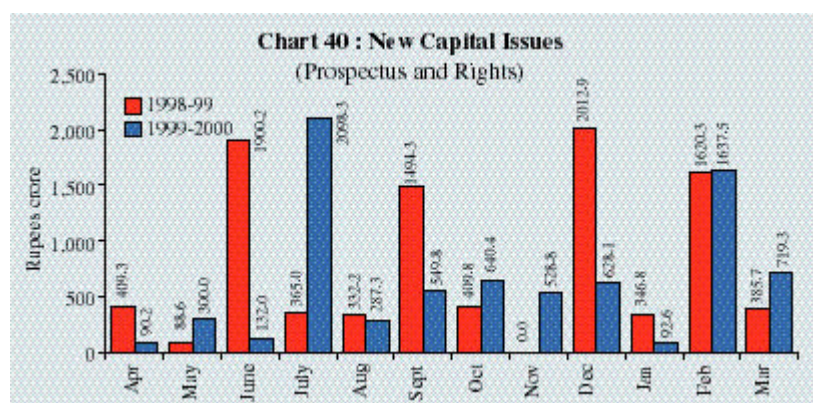
breached the 5000-mark on October 8, 1999 and the 6000-mark during intra-day trading on February 11, 2000 contributed, inter alia, by smooth rollover to the year 2000, increased buying by FIIs and passage of important economic bills like Insurance Regulatory Authority Bill, FEMA and Securities Laws (Amendment)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

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



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

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



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

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