Secondary Market Developments

4.8 Recent months have witnessed significant changes in the market design of the equity market. All scrips have been brought under the rolling settlement mode, replacing " account period settlement" by "T+5 rolling settlement". This was preceded by abolition of deferred settlement through badla and equivalent products. The equity derivatives market has taken root, with a full range of derivative products: both options and futures on both equity index and on individual stocks.

Rolling Settlement

4.9 Rolling settlement is an important measure to enhance the efficiency and integrity of the securities market. The shift from the traditional account period settlement marks an important change in the market design and age old practices. In January 1998, SEBI had introduced rolling settlement on a voluntary basis on the stock exchanges for securities, which were eligible for dematerialised trading. However, as there was hardly any response to the voluntary scheme, SEBI introduced compulsory rolling settlement initially for 10 scrips in January 2000 and then increased the number of scrips in a phased manner to 163 by May 2000. The announcement made by the Finance Minister in March 2001 to introduce rolling settlement in 200 scrips, which were then eligible for trading under MCFS or ALBM, or BLESS, gave rolling settlement a further boost. SEBI thereafter announced a list of 251 scrips for compulsory rolling settlement from July 2, 2001 on all exchanges. With effect from December 31,2001, rolling settlement was extended to the remaining scrips on all exchanges. In December 2001, SEBI announced that from April 1, 2002 the settlement cycle for all securities would be shortened to T+3 basis. With this the Indian securities market would be complying with the standard for clearing and settlement laid down by the Joint Committee of Clearing and Payment System of the Bank for International Settlements and the International Organisation of Securities Commissions.

Investor Protection

4.10 The Central Government notified the establishment of the Investor Education and Protection Fund (IEPF) with effect from October 1, 2001. The IEPF shall be credited with amounts in unpaid dividend accounts of companies, application moneys received by companies for allotment of any securities and due for refund, matured deposits and debentures with companies, and interest accrued thereon, if they have remained unclaimed and unpaid for a period of seven years from the due date of

BOX 4.3
Committee on Investor Protection

The Committee under the Chairmanship of Dr. N.L. Mitra submitted its study report on Investor Protection to SEBI and Government. Its main recommendations are the following:—

- A judicial forum is required to redress investors' grievance concerning award of compensation.
- Provisions relating to investor education and protection fund (IEPF) be removed from the Companies Act and included in the SEBI Act, 1992; IEPF should be administered by SEBI.
- SEBI should be the only regulator of capital market; it should be an on-and-off –the- field regulator, and it should be given powers for investigation; it must also have powers to attach public funds and all converted assets to prevent misappropriation; but it cannot have powers to award compensation, which is the job of the judicial forum.
- All IPOs be insured on the principle of third party insurance with differential premium based on the risk study by insurance companies.
- SEBI Act be amended to provide for statutory standing committees on investors' protection, market operation and standard setting.
- The SCRA be amended to facilitate corporatisation of exchanges and to ensure good governance of stock exchanges.

payment. The IEPF will be utilised for promotion of awareness amongst investors and protection of their interests . The recommendations of the Mitra Committee on Investor Protection may be seen from Box 4.3.

Derivatives Trading

4.11 The product spectrum for trading in equity derivatives was widened in the current financial year. The introduction of derivatives trading based on index futures contracts in the Indian stock market in June 2000 was followed after a year by the introduction of trading in index options and trading in options on individual securities in June 2001 and July 2001 respectively.

TABLE 4.2
Trade Trends in Index Futures Market

Year/Month	Number of Contracts Traded		Turnover (Rs.crore)	
2000-01	**NSE**	**BSE**	**NSE**	**BSE**
June 2000 to March 2001	90,580	77,743	2,365	1,673
2001-02				
April	13,274	1,617	292	28
May	10,048	656	230	12
June	26,805	2,261	590	39
July	60,644	2,417	1,309	41
August	60,979	29,717	1,305	492
September	1,54,298	24,361	2,857	359
October	1,31,467	3,604	2,485	52
November	1,21,697	3,360	2,484	52
December	1,09,303	817	2,339	14
April- December	6,88,515	68,810	13,891	1,089

Source: NSE & BSE

This was followed by the introduction of futures trading in individual stocks in November 2001.The salient statistics of the first product, viz. index futures, which has been in existence at both NSE and BSE for nearly two years now are given in Table 4.2.

4.12 As may be seen from Table 4.2, there has been a significant increase in the trade turnover in the index futures market. However, the increase in number of trades as well as turnover was much more remarkable at the NSE, where the number of contracts traded rose from 1,191 in June 2000 to 1,54,298 in September 2001. The increase in trades at the BSE was relatively modest from 2,349 to 24,361 during the same period. With the introduction of stock futures in November 2001, there are now four equity derivative products in the Indian market.

4.13 The combined turnover in the four derivative products traded at the NSE in November 2001 amounted to Rs. 8,760 crore, which rose to Rs. 12,919 crore in December 2001. In November, stock options accounted for the maximum share of 34.4 per cent, closely followed by stock futures with 32.1 per cent, and index futures with 28.4 per cent. Index options accounted for the lowest share of 5.2 per cent. However, the composition changed significantly in December 2001, with stock futures accounting for the maximum share of 58.2 per cent, followed far behind by stock options with 20.6 per cent, index futures with 18.1 per cent and index options with 3.1 per cent.

Share Prices

4.14. Figure 4.1 summarises the recent experience with the level of stock prices. Nifty fell from 1358 on March 1, 2001, to 1025 on April 12, 2001, a fall of 24.5 per cent, owing to the episode of market misconduct which surfaced shortly after the budget announcement. As of September 11, 2001, Nifty was at about the same level (1023) as on April 12, 2001. It then fell by another 16.5 per cent to the level of 854 on September 21, 2001, in the aftermath of the WTC attack. The total percentage change between these two time points – from 1358 (March 1, 2001) to 854 (September 21, 2001) was -37.1

Fig. 4.1 **Recent Experience with the Stock Market Index**

Fig. 4.2 **Percentage Change in Month-end Closing (April-January, 2001-02)**

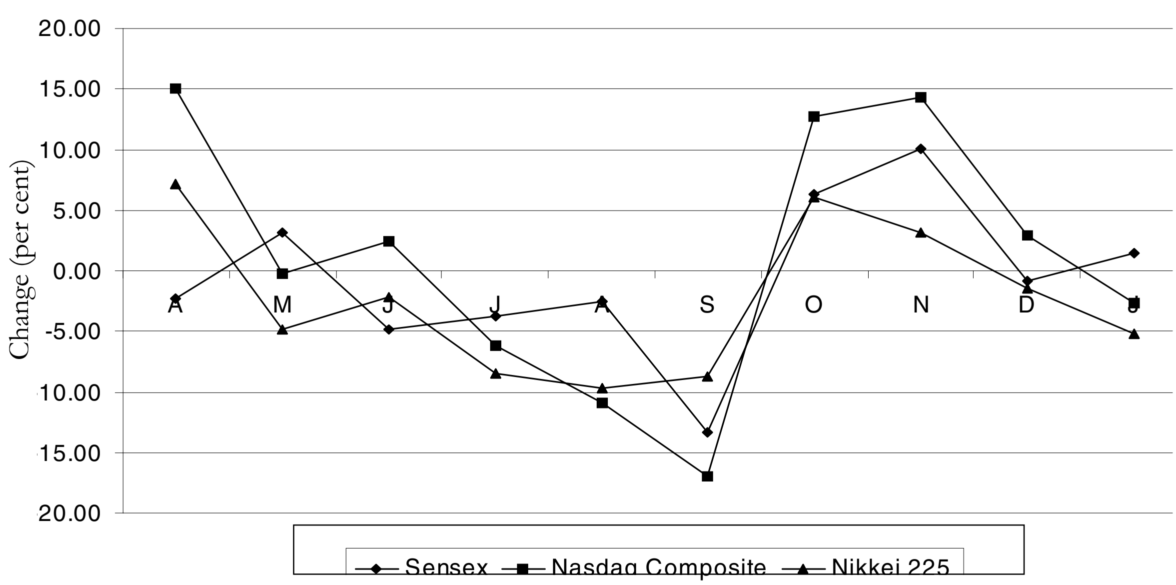


TABLE 4.3
Stock Market Indicators

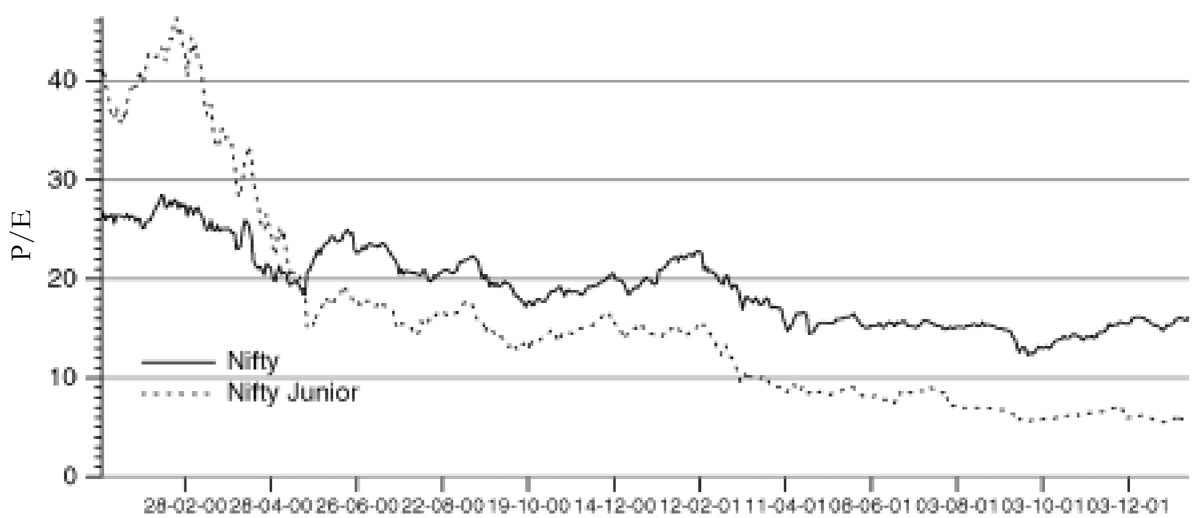
Year/Month	ADC		P/E Ratio (per cent)		ADT (Rs. crore)		MC (Rs.billion)	
	Sensex	Nifty	BSE	NSE	BSE	NSE	BSE	NSE
2000-2001								
April	4905	1469	27.79	22.81	2,478	3,179	7,559	8,464
May	4253	1313	27.68	20.33	2,631	3,593	7,028	7,905
June	4675	1452	29.39	23.68	3,922	5,426	7,932	8,526
July	4647	1445	28.51	22.33	3,826	5,241	7,209	7,464
August	4330	1351	25.27	20.54	4,207	5,698	7,666	7,945
September	4417	1371	24.47	20.84	5,721	7,124	6,927	7,304
October	3820	1202	19.57	18.22	3,633	5,088	6,534	7,071
November	3928	1241	19.90	18.77	3,953	5,579	6,992	7,642
December	4081	1291	20.84	19.60	4,960	6,571	6,912	7,604
January	4169	1317	21.53	20.75	5,220	6,765	7,366	8,076
February	4310	1372	22.30	21.32	5,071	6,797	7,162	7,896
March	3808	1214	19.72	18.20	2,151	2,868	5,716	6,578
2001-02								
April	3481	1116	18.06	16.09	1,257	1,875	5,677	6,537
May	3614	1159	18.86	15.74	1,449	2,197	5,959	5,924
June	3439	1107	17.49	15.36	1,212	2,037	5,532	5,698
July	3347	1078	16.28	15.32	784	1,238	5,316	5,743
August	3305	1069	16.69	15.25	831	1,401	5,230	5,752
September	2918	949	15.20	13.65	1,080	1,766	4,563	5,091
October	2934	954	14.29	13.75	1,044	1,682	4,819	5,358
November	3164	1032	14.89	14.86	1,220	2,107	5,357	5,814
December	3315	1034	15.59	15.59	1,581	2,867	5,669	5,529

ADC: Average Daily Closing worked out as the simple average of daily closing values in a month; ADT: Average Daily Turnover; MC : Market Capitalisation

per cent. Figure 4.2 shows that the movement in share prices in the Indian stock market in the current financial year has been broadly similar to the movements in the international stock markets.

4.15 Improved prospects for the domestic macro-economy, the sharp rebound in liquidity on the Indian equity market, and the global recovery of equities, helped Nifty come back to

Fig. 4.3 **Recent Experience with the P/E of the Market Index**



1124 as of February 8, 2002, a strong recovery of 32 per cent. Select stock market indicators are given in Table 4.3.

4.16 During the first six months of the current financial year, the average daily closing value of the Sensex was lower than that of each preceding month, except in May. This trend was reversed in the third quarter (October –December).

Valuation

4.17 Figure 4.3 shows the recent experience with valuation on the equity market in terms of Price/Earnings (P/E) ratio of equity index. The P/E ratio has fallen from around 27 to around 15 between March 2000 and December 2001. In recent months, the P/E ratio of Nifty has been around 15, which suggests that markets expect relatively weak earnings growth in the corporate sector. The P/E ratio of the second-rung stocks in the country, the members of Nifty junior, have had a much sharper drop in valuation, going from the region of 45 to the present level of 6. This is partly a reflection of the sharp change in valuation of "new economy" stocks, which have a prominent position in Nifty Junior. The fact that the P/E of Nifty is 2.5 times higher than that of Nifty Junior suggests that there is a sharp increase in the cost of capital as one moves from the largest stocks in the country to the second-tier of large, liquid stocks.

4.18 Figure 4.4 shows the time series of volatility in respect of Nifty (portraying behaviour of large, liquid stocks) and Nifty Junior (portraying behaviour of second-tier, smaller companies). As may be seen from the figure, prices of the shares of smaller companies are more volatile than those of the larger companies. The figure also shows that the present levels of volatility (1.2 per cent) are relatively low, when compared with those seen over the period October 1997 to April 4, 2000.

Liquidity

4.19 Table 4.4 presents the trends in liquidity in terms of "market impact cost" suffered when executing program trades for Rs. 50 lakh of the

Fig. 4.4 **Volatility of Equity Indexes**

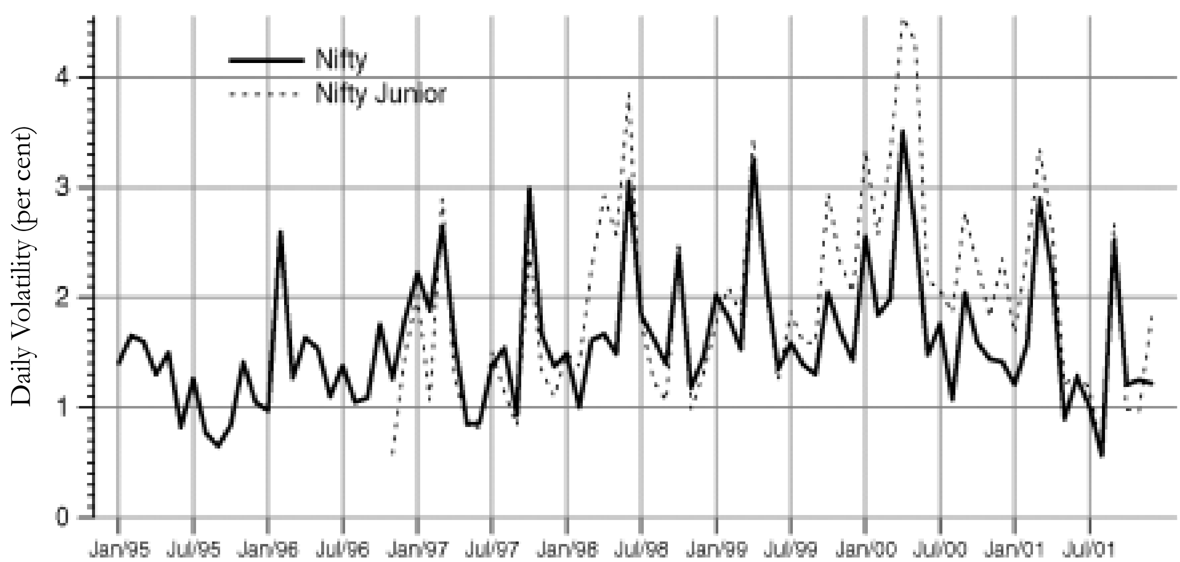


TABLE 4.4
Liquidity on the Equity Market in 2001
Monthly Trends in Nifty Impact Cost (Per cent)

January	February	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0.18	0.18	0.28	0.27	0.20	0.15	0.99	0.13	0.25	0.17	0.25	0.17

Source : NSE

entire Nifty index on NSE. This reflects the weighted average of the transaction costs involved in doing trades on each of the 50 stocks that make up the Nifty index. In March-April 2001, impact cost rose sharply to around 0.28 per cent in response to higher volatility and regulatory actions. Again, it rose steeply in July following the transition to rolling settlement. However, this was only a transitional problem of economic agents adapting themselves to the new system, for liquidity in August was the best seen in the entire 2001.This may reflect the impact of equity derivatives, which are likely to prove favoured instruments of highly informed traders. Apart from the episodic increases in volatility which adversely impact on liquidity, the liquidity in the post-rolling settlement period seems to be strong.

Turnover

4.20 Turnover is often used as a proxy for liquidity; however, it does not measure transactions costs. Turnover is directly relevant to financial intermediaries who have transaction-based revenue models. Figure 4.5 shows the aggregate turnover of NSE and BSE on the equity spot and derivatives markets (in log scale). The interpretation of turnover (measured in rupees) is somewhat suspect in so far as a fall in stock prices innately leads to a fall in turnover. However, it accurately reflects the base of transactions from which financial intermediaries derive revenues. There was extremely strong growth in turnover in 1995 and 1996, in the aftermath of electronic trading and the increasing reach of the market. The recent reforms in the equity market, which have led to improvement in liquidity, have resulted in a fall in turnover, which is now at levels seen in September 1999.

Market Capitalisation

4.21 As in the previous year, there was an erosion in market capitalisation both at BSE and NSE during the current financial year. At the NSE, market capitalisation declined by 15.4 per cent during April-December 2001 compared with 0.1 per cent at the BSE. During the corresponding period last year, the loss in market capitalisation was 10.2 per cent at NSE compared with 8.6 per cent at the BSE .

Fig. 4.5 **Turnover on NSE and BSE, Combining Equity Spot and Derivatives**