### PART TWO: REVIEW OF TRENDS AND OPERATIONS

#### 1. PRIMARY SECURITIES MARKET

The primary segment of the capital market was characterised by heightened activities during 2004-05. Strong fundamentals of the economy, encouraging corporate results, buoyant secondary market, revival of structural reforms by the government and an investor friendly regulatory framework provided by SEBI attracted the investors to the primary market. Several mega issues apart, a number of small issues entered the market. There has been overwhelming response to most of the public issues from FIIs, other institutional investors and the retail investors. Large number of the issues was over-subscribed indicating the quality of issues and the appetite for public issues by the investors. The post-listing performance of most of the IPOs was encouraging. Unlike the previous year, the private sector dominated the primary market during 2004-05 and mobilised sizeable amount of resources through public and rights issues.

#### I. Capital Raised during 2004-05

The total amount of capital raised during 2004-05 through public and rights issues (including offer for sale) stood at Rs. 28,256 crore as compared to Rs. 23,272 crore in 2003-04, an increase of Rs. 4,984 crore or 21.42 per cent over the year (Table 2.1).

Excluding offer for sale, the total amount mobilised in 2004-05 was Rs. 25,056 crore, which was more than three times higher than that of Rs. 8,023 crore in the previous year. This indicates the revival of investors' interest in the primary market. The number of issues was also higher at 60 in 2004-05 than that of 57 in 2003-04. Out of 60 issues, 34 were public issues (consisting of 23 IPOs and 11 listed issues) and the remaining 26 were rights issues.

The public issues continued to remain as the dominant mode of resource mobilisation through which Rs. 24,640 crore was mobilised in 2004-05 as compared with Rs. 22, 265 crore in 2003-04, an increase of 10.7 per cent over the year. However, the share of public issues in the total amount mobilised declined to 87.2 per cent in 2004-05 from 95.7 per cent in 2003-04. Of the total public issues in 2004-05, Rs.13,749 crore was mobilised through the IPO route and Rs.10,891 crore through subsequent issues by the listed companies (Chart 2.1). There was a quantum jump in the amount mobilised through IPOs in 2004-05 with its share in total capital moblised rising from 14.7 per cent to 48.7 per cent. All the public issues through IPOs were equity issues while the listed companies mobilised Rs. 7,023 crore through equities and Rs. 3,867 crore through debt instruments.

Table 2.1: Resource Mobilisation through Public and Rights Issues

(Rs. crore)

Particulars	2003-04		200	4-05	Percentage Share in Total Amount	
	No.	Amount	No.	Amount	2003-04	2004-05
1	2	3	4	5	6	7
Public Issues, of which	35	22,265	34	24,640	95.67	87.20
IPOs	21	3,433	23	13,749	14.75	48.66
Listed	14	18,832	11	10,891	80.92	38.54
Rights Issues	22	1,007	26	3,616	4.33	12.80
Total	57	23,272	60	28,256	100.00	100.00
Memo Item: Offer for Sale	8	15,249	3	3,200	65.50	11.32

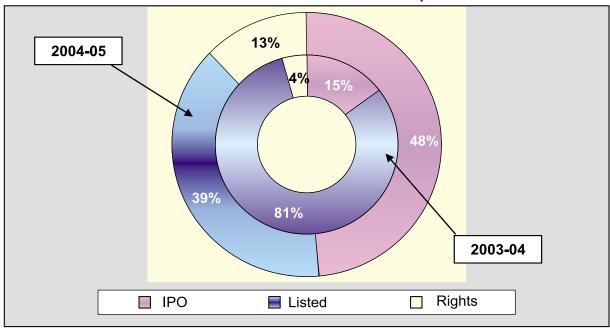


Chart 2.1: Share of Various Issues in the Amount of Capital Raised

During 2004-05, resource mobilisation through rights issues was Rs.3,616 crore which was three and half times higher than that of Rs.1,007 crore in 2003-04. As there was an exponential growth in the amount mobilised through rights issues, their share in the total amount mobilised jumped from 4.3 per cent in 2003-04 to 12.8 per cent in 2004-05.

The sector-wise classification shows that the private sector dominated the resource mobilisation efforts in 2004-05 with 60.7 per cent share in the total resource mobilisation, followed by the public sector with 39.3 per cent (Table 2.2). The share of joint sector in 2004-05 was nil. In 2003-04, the shares of private, public and joint sectors were 15.5 per cent, 80.2 per cent and 4.3 per cent, respectively. Dominance of private sector in the mobilisation of resources from the primary market could be attributed to several factors which include, inter alia, resurgence of industrial activities, buoyancy in the secondary market, downward rigidity in the lending rates of the commercial banks and investors' confidence in the regulatory system (Chart 2.2).

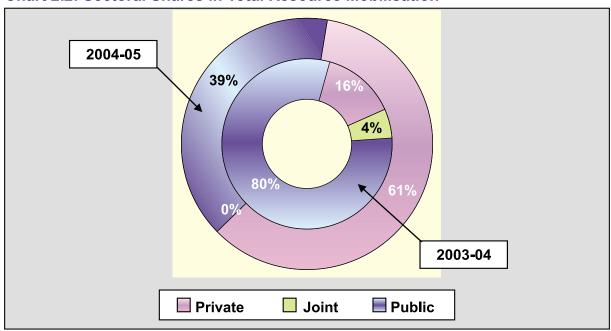
# II. Size and Composition of the Issues

The size-wise distribution of capital raised is presented in Table 2.3. While the number of issues were more for issue sizes up to Rs. 100 crore, the amount mobilised continued to remain high in the cluster between Rs. 100 crore and Rs. 500 crore. During 2004-05, there were 2 issues worth Rs.3 crore in the issue category of less than Rs.5 crore compared to 6 issues worth Rs.16 crore in 2003-04. In the issue size category of between Rs.10 crore and Rs.50 crore, there were 16 issues worth Rs.330 crore in 2003-04 which improved to 17 issues worth Rs.461 crore in 2004-05, an increase of 39.7 per cent. The highest increase was in the range of Rs.50 crore to Rs.100 crore, within which 11 issues worth Rs.723 crore was raised in 2004-05 compared to 5 issues worth Rs.351 crore in 2003-04, an increase of 106.0 per cent. The amount mobilised in the issue size category between Rs.100 crore and Rs.500 crore declined by 21.4 per cent to Rs.3,594 crore in 2004-05 as compared with Rs.4,571 crore in 2003-04. The amount mobilised in the above Rs.500 crore

Table 2.2: Sector-wise Mobilisation of Resources

Sector	2003-04		200	4-05	Percentage Share in the Total Amount	
	No.	Amount	No.	Amount	2003-04	2004-05
1	2	3	4	5	6	7
Private	38	3,619	55	17,162	15.55	60.74
Joint	1	993	0	0	4.27	0.00
Public	18	18,660	5	11,094	80.18	39.26
Total	57	23,272	60	28,256	100.00	100.00

**Chart 2.2: Sectoral Shares in Total Resource Mobilisation** 



category increased by 30 per cent to Rs.23,431 crore in 2004-05 as against Rs.17,968 crore in 2003-04. The share of above Rs.500 crore category in the total resource mobilisation rose from 77.2 per cent in 2003-04 to 82.9 per cent in 2004-05.

There were 11 large issues of Rs. 300 crore and above, accounting for 87 per cent of the total resources mobilised in 2004-05 (Table 2.4). The highest amount mobilised by a single public issue was that of NTPC at Rs. 5,368 crore, accounting for 22 per cent of large issue mobilisation and 19 per cent of the total resource mobilisation during the

year under review. There were seven mega issues above Rs.1,000 crore which together constituted 80 per cent of the total resource mobilisation.

# III. Industry-wise Resource Mobilisation

Industry-wise, banking/financial institution sector mobilised the largest amount of resources in 2004-05, both in terms of number of issues and amount mobilised (Table 2.5). There were 12 issues worth Rs.11,311 crore in 2004-05 by the banking/financial institution sector compared to 11 issues worth Rs.5,428 crore in 2003-04, an

Table 2.3: Size-wise Distribution of Resource Mobilisation

Issue Size	2003-04		200	4-05	Percentage Share in the Total Amount	
10000 0.20	No.	Amount	No.	Amount	2003-04	2004-05
1	2	3	4	5	6	7
< Rs. 5 cr.	6	16	2	3	0.07	0.01
=> Rs. 5 cr. & <rs. 10="" cr.<="" td=""><td>5</td><td>36</td><td>5</td><td>44</td><td>0.15</td><td>0.15</td></rs.>	5	36	5	44	0.15	0.15
=> Rs. 10 cr. & <rs. 50="" cr.<="" td=""><td>16</td><td>330</td><td>17</td><td>461</td><td>1.42</td><td>1.63</td></rs.>	16	330	17	461	1.42	1.63
=>Rs. 50 cr. & <rs. 100="" cr.<="" td=""><td>5</td><td>351</td><td>11</td><td>723</td><td>1.51</td><td>2.56</td></rs.>	5	351	11	723	1.51	2.56
=>Rs. 100 cr. & <rs. 500="" cr.<="" td=""><td>17</td><td>4,571</td><td>17</td><td>3,594</td><td>19.64</td><td>12.72</td></rs.>	17	4,571	17	3,594	19.64	12.72
=>500 cr.	8	17,968	8	23,431	77.21	82.93
Total	57	23,272	60	28,256	100.00	100.00

Table 2.4: Large Issues during 2004-05\*

(Rs. crore)

Name of the Company	Type of Issue	Type of Instrument	Date of Opening of Issue	Offer Size	Percentage Share in the Total Amount
1	2	3	4	5	6
ICICI Bank Ltd.	Public	Equity	2-Apr-04	3,500	14.18
TCS Ltd.	Public	Equity	29-Jul-04	4,713	19.10
Sterlite Industries (India) Ltd.	Rights	Equity	12-Aug-04	1,972	7.99
National Thermal Power Corporation Ltd.	Public	Equity	7-Oct-04	5,368	21.76
IDBI Ltd.	Public	Bond	14-Jan-05	2,118	8.58
ICICI Bank Ltd.	Public	Bond	27-Jan-05	740	3.00
Jet Airways (India) Ltd.	Public	Equity	18-Feb-05	1,899	7.70
ICICI Bank Ltd.	Public	Bond	28-Feb-05	451	1.83
Punjab National Bank	Public	Equity	7-Mar-05	3,120	12.64
Jaiprakash Hydro-Power Ltd.	Public	Equity	22-Mar-05	486	1.97
ING Vysya Bank Ltd.	Rights	Equity	30-Mar-05	307	1.24
Total				24,674	100.00

<sup>\*</sup> Large issues relate to issue size of Rs. 300 crore and above.

increase of 108.4 per cent over the previous year. This constitutes 40.0 per cent of the total resources mobilised in 2004-05 as compared with 23.3 per cent in 2003-04. The banking/financial institutions, which mobilised large amount of resources through equities and debt issues were ICICI Bank (Rs. 4,978).

crore), PNB (Rs.3,120 crore) and IDBI (Rs.2,390 crore) (Table 2.6).

There were 2 issues worth Rs.5,854 crore by the power sector in 2004-05 constituting 20.7 per cent in the total amount mobilised. The information technology sector garnered 18.0 per cent of the total resources

**Table 2.5: Industry-wise Resource Mobilisation** 

		2003-04			2004-05	
Industry	No.	Amount	Percentage Share in the Total Amount	No.	Amount	Percentage Share in the Total Amount
1	2	3	4	5	6	7
Banking/ Fls	11	5,428	23.32	12	11,311	40.03
Cement & Const.	1	8	0.03	2	169	0.60
Chemical	7	522	2.24	4	128	0.45
Electronics	4	247	1.06	2	61	0.22
Engineering	1	993	4.27	3	133	0.47
Entertainment	2	153	0.66	3	154	0.54
Finance	2	71	0.31	3	116	0.41
Food Processing	1	8	0.03	6	317	1.12
Health Care	1	14	0.06	2	109	0.38
Info. Tech.	9	804	3.45	5	5,095	18.03
Paper & Pulp	0	0	0.00	1	60	0.21
Power	0	0	0.00	2	5,854	20.72
Printing	0	0	0.00	1	130	0.46
Telecom	0	0	0.00	2	25	0.09
Textile	4	61	0.26	0	0	0.00
Miscellaneous	14	14,964	64.30	12	4,595	16.26
Total	57	23,272	100.00	60	28,256	100.00

Table 2.6: Resource Mobilisation by Banks and Financial Institutions in 2004-05

(Rs. crore)

Name of the Bank / FI	Instrument	Type of Issue	Date of Opening	Issue Size	Percentage Share in the Total Amount
1	2	3	4	5	6
ICICI Bank Ltd.	Equity	Public	2-Apr-04	3,500	30.94
The South Indian Bank Ltd.	Equity	Rights	12-Aug-04	48	0.42
Centurion Bank Ltd.	Equity	Rights	24-Aug-04	91	0.80
IDBI Ltd.	Debt	Public	14-Jan-05	2,118	18.72
Dena Bank	Equity	Public	24-Jan-05	216	1.91
ICICI Bank Ltd.	Debt	Public	27-Jan-05	740	6.54
The Karnataka Bank Ltd.	Equity	Rights	4-Feb-05	162	1.43
ICICI Bank Ltd.	Debt	Public	28-Feb-05	451	3.99
Punjab National Bank	Equity	Public	7-Mar-05	3,120	27.58
IDBI Ltd.	Debt	Public	21-Mar-05	272	2.40
ICICI Bank Ltd.	Debt	Public	26-Mar-05	287	2.54
ING Vysya Bank Ltd.	Equity	Rights	30-Mar-05	307	2.71
Total				11,312	100.00

mobilised through 5 issues worth Rs.5,095 crore in 2004-05 as compared with Rs.804 crore through 9 issues in 2003-04. Though there was a decline in the number of issues by the IT sector, the amount mobilised rose sharply by more than six times. Other sectors that witnessed relatively larger increase in the amount mobilised in 2004-05 over 2003-04 were cement and construction industry, food processing, healthcare etc. There were no issues in the textile sector in 2004-05 as against 4 issues worth Rs.61 crore in 2003-04. The amount mobilised by the engineering sector, electronics sector and chemical sector declined considerably in 2004-05 by 86.6 per cent, 75.3 per cent and 75.4 per cent, respectively over the previous year.

#### 2. SECONDARY SECURITIES **MARKET**

#### Ι. **Equity Market : An Overview**

The Indian stock market, which witnessed a strong rally in 2003-04, continued to maintain its momentum during 2004-05 except subdued condition witnessed in the first quarter of the year. Barring a temporary phase of turbulent condition around the middle of May 2004, the stock market in India gradually gathered momentum benchmark BSE Sensex crossing 6000-mark on November 17, 2004 and reached an alltime high of 6915.05 on March 8, 2005 before closing at 6492.82 on March 31, 2005 (Table 2.7 and Chart 2.3). On a point to point basis, the BSE Sensex posted a return of 16.1 per cent in 2004-05 on top of 83.4 per cent in 2003-04. The S&P CNX Nifty also recorded a gain of 14.9 per cent in 2004-05 over and above the gain of 81.2 per cent in 2003-04. On an average basis, the returns in 2004-05 were at 27.8 per cent and 26.5 per cent for BSE Sensex and S&P CNX Nifty, respectively. The buoyancy in the stock market was broad based. The price appreciation in terms of S&P CNX 500 was still higher at 21.6 per cent on a point to point basis and 34.2 per cent on an average basis. The highest price appreciation was witnessed in S&P CNX Midcap (73.5 per cent). Strong macroeconomic outlook, encouraging corporate results, high and sustained portfolio investments by the

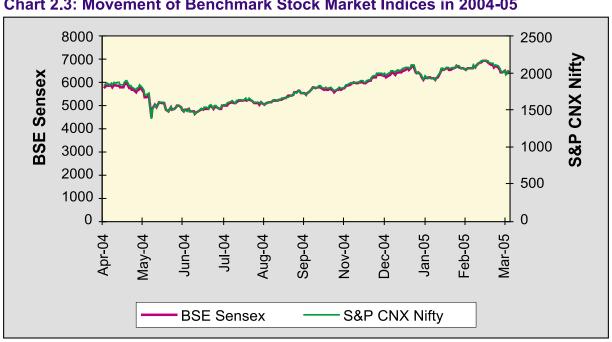


Chart 2.3: Movement of Benchmark Stock Market Indices in 2004-05

Table 2.7: Major Indicators of Indian Stock Markets

	ltem	2003-04	2004-05	Percentage Variation 2003-04	Percentage Variation 2004-05
	1	2	3	4	5
A.	Indices				
	BSE Sensex				
	Year-end	5591	6493	83.37	16.13
	Average	4492	5741	40.10	27.80
	S&P CNX Nifty				
	Year-end	1772	2036	81.18	14.88
	Average	1428	1806	37.60	26.47
	S&P CNX 500				
	Year-end	1458	1773	107.88	21.63
	Average	1140	1530	52.76	34.21
В.	Volatility *(per cent)				
	BSE Sensex	21.51	23.83	_	_
	S&P CNX Nifty	22.84	26.13	_	_
C.	Total Turnover (Rs. cr.)				
	Cash Segment (All-India)	16,20,497	16,66,896	67.25	2.86
	of which		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	BSE	5,02,618	5,18,716	60.03	3.20
	NSE	10,99,534	11,40,071	77.92	3.68
	Dérivative Segment	21,43,101	25,63,165	384.50	19.60
	BSE	12,452	16,112	402.50	29.39
	NSE	21,30,649	25,47,053	384.40	19.54
D.	Market Capitalisation (Rs. cr.) @				
	BSE	12,01,207	16,98,428	109.92	41.39
	NSE	11,20,976	15,85,585	108.70	41.44
E.	P/E Ratio @	, ,	, ,		
€.	BSE Sensex	18.57	15.90		
		20.70		_	_
	S&P CNX Nifty S&P CNX 500		14.80	_	_
	SAF CINA DUU	17.12	14.20	_	_

<sup>\*</sup> Volatility is measured in terms of standard deviation of returns on index.

foreign institutional investors (FIIs) and sectorspecific developments contributed to the sustained rally in the stock market. However, intermittent profit booking was observed particularly towards the end of 2004-05, mostly influenced by acceleration in the international prices of crude oil and rise in the US interest rates. Trends in international markets as well as domestic inflation rate also adversely affected the market sentiment.

In consonance with buoyancy in the stock market, the turnover as well as market capitalisation rose significantly. Increase in turnover was more pronounced in case of

<sup>@</sup> As on March 31 of the respective year.

derivatives. The BSE market capitalisation as a percentage to GDP rose from 43.5 per cent at the end of March 2004 to 54.6 per cent at the end of March 2005. Despite sharp increase in share prices, the price-earning (P/E) ratio declined modestly which can be partly attributed to improved profitability by the corporate sector. With effect from December 20, 2004, the P/E ratio of BSE has been computed on the basis of four-quarter moving average of profitability of the company instead of year-end (balance sheet) profit used earlier. This is in conformity with the international best practices. At the current level of P/E ratio, the Indian stocks appear to be attractive, although India's P/E ratio was one of the highest in the emerging markets. The volatility measured in terms of annualised standard deviation was modestly higher in 2004-05 than that in the previous year.

The movement of major stock indices and the monthly returns indicate that stock

market was highly turbulent in May 2004 mainly due to politically uncertainty (Table 2.8). On May 17, 2004, the BSE Sensex crashed by 564 points or 11.13 per cent over its previous close. The intra-day fall on that day was as high as 842 points, the highest in the history of BSE. The nation-wide circuit breaker was triggered suspending trading twice on the day. The subdued conditions in the international market also weakened the market sentiment further. SEBI responded quickly to contain volatility and impart orderly condition to the capital market. Despite severe setback to the market, there was no payment default. As the fundamentals were strong, stock markets recovered quickly and normalcy was restored within a short period. The recovery in the stock market was sustained except for periodic consolidation. The monthly returns were positive consecutively for the next seven months. The benchmark stock indices closed at a historic high on March 8,

Table 2.8: Major Stock Indices and their Returns

Year/ Month	BSE Sensex	Percent- age Variation	BSE 100 Index	Percent- age Variation	S&P CNX Nifty	Percent- age Variation	CNX Mid Cap	Percent- age Variation	S&P CNX 500	Percent- age Variation
1	2	3	4	5	6	7	8	9	10	11
2003-04	5591	83.37	2966	97.60	1772	81.18	1603	140.32	1458	107.98
2004-05	6493	16.13	3482	17.39	2036	14.88	2782	73.54	1773	21.60
Apr. 04	5655	1.10	3025	2.00	1796	1.40	1739	4.90	1508	3.40
May 04	4760	-15.83	2525	-16.53	1484	-17.37	1506	-13.40	1227	-18.63
Jun. 04	4795	0.74	2561	1.43	1506	1.48	1524	1.20	1248	1.71
Jul. 04	5170	7.82	2755	7.58	1632	8.37	1698	11.42	1351	8.25
Aug. 04	5192	0.43	2789	1.23	1632	0.00	1864	9.78	1377	1.92
Sep. 04	5584	7.55	2998	7.49	1746	6.99	1993	6.92	1479	7.41
Oct. 04	5672	1.58	3028	1.00	1787	2.35	2017	1.20	1502	1.56
Nov. 04	6234	9.91	3340	10.30	1959	9.63	2272	12.64	1653	10.05
Dec. 04	6603	5.92	3580	7.19	2081	6.23	2595	14.22	1805	9.20
Jan. 05	6556	-0.71	3522	-1.62	2058	-1.11	2609	0.54	1768	-2.05
Feb. 05	6714	2.41	3612	2.56	2103	2.19	2758	5.71	1827	3.34
Mar. 05	6493	-3.29	3482	-3.60	2036	-3.19	2782	0.87	1773	-2.96

Note: Indices relate to closing values as on the last trading day of the respective year/month.

Source: NSE, BSE.

2005. The BSE Sensex was close to 7000 mark in the intra-day trade on March 9, 2005. Market was volatile during the last quarter of the year mainly due to year-end consideration, rise in international crude oil prices and apprehension about acceleration in the interest rates in the developed countries, particularly in the US.

The movement of the major international indices (normalised to 100 as on March 31, 2004) indicate that BSE Sensex outperformed most of the indices such as Dow Jones Industrial of USA, the DJ Stoxx of Europe and Shanghai Composite of China (Chart 2.4). The volatility as measured by standard deviation was higher in India than that in major international markets. The Indian stock markets witnessed high volatility due to exceptional events.

#### II. **Performance of Sectoral Indices**

Different sectors of the economy grew at varied pace. Depending upon the macro economic policies and the current business environment, certain sectors led the real economic growth. The services sector has been leading the overall GDP growth during the post-liberalisation period. If stock markets are to reflect the economic fundamentals in the long-run, returns generated by sectoral stock indices should trace the growth rates of the respective sectors. The S&P CNX IT index grew by 50.9 per cent on a point-topoint basis in 2004-05, much higher than that of 29.4 per cent in 2003-04 (Table 2.9). This is corroborated by 8.6 per cent growth recorded by services sector during the same period. The BSE capital goods index gained by 39.9 per cent in 2004-05 on top of 147.2 per cent in the previous year. Performance of PSU and FMCG was lower than that of BSE Sensex (Chart 2.5).

Monthly returns of sectoral indices present a mixed picture. The highest gain in sectoral indices (on a 1-month horizon) was noticed in case of CNX Bank (21.5 per cent in November 2004). The losses were maximum in CNX PSE, CNX Bank, and BSE capital goods in the month of May 2004. The banking sector was among the top gainers

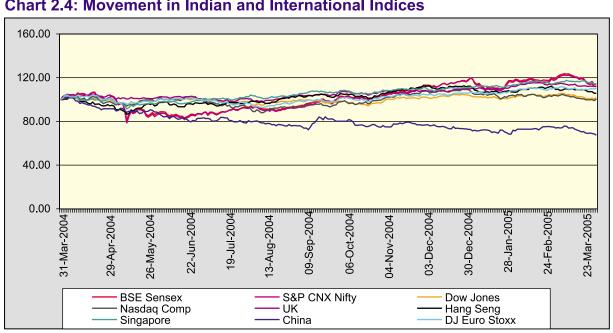
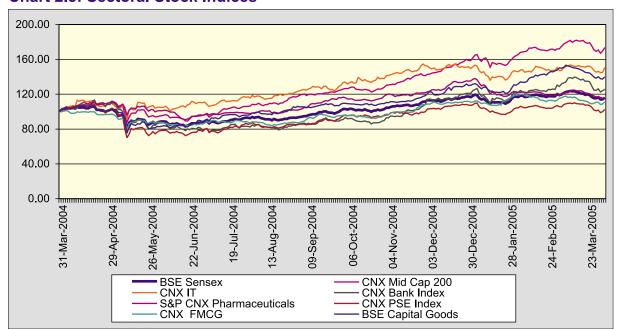


Chart 2.4: Movement in Indian and International Indices



**Chart 2.5: Sectoral Stock Indices** 

Table 2.9: Sectoral Stock Indices and Returns

Year/ Month	CNX IT	Percent- age Variation	CNX Bank	Percent- age Variation	CNX PSE	Percent- age Variation	BSE FMCG	Percent- age Variation	BSE Capital Goods	Percent- age Variation
1	2	3	4	5	6	7	8	9	10	11
2003-04	1937	29.39	2814	NA	1684	147.65	944	31.29	2282	147.24
2004-05	2923	50.90	3537	25.69	1726	2.49	1053	11.55	3192	39.88
Apr. 04	2069	4.30	3060	6.40	1706	-0.30	935	-2.90	2335	-1.20
May 04	2042	-1.30	2244	-26.67	1219	-28.55	844	-9.73	1841	-21.16
Jun. 04	2115	3.57	2256	0.53	1282	5.17	825	-2.25	1997	8.47
Jul. 04	2269	7.28	2332	3.37	1433	11.78	847	2.67	2189	9.61
Aug. 04	2340	3.13	2345	0.56	1439	0.42	849	0.24	2342	6.99
Sep. 04	2496	6.67	2506	6.87	1541	7.09	921	8.48	2441	4.23
Oct. 04	2667	6.85	2467	-1.56	1588	3.05	898	-2.50	2485	1.80
Nov. 04	2997	12.37	2998	21.52	1671	5.23	1039	15.70	2681	7.89
Dec. 04	2937	-2.00	3497	16.64	1815	8.62	1059	1.92	3001	11.94
Jan. 05	2849	-3.00	3430	-1.92	1735	-4.41	1122	5.95	2985	-0.53
Feb. 05	2919	2.46	3676	7.17	1804	3.98	1065	-5.08	3372	12.96
Mar. 05	2923	0.14	3537	-3.78	1726	-4.32	1053	-1.13	3192	-5.34

Note: Indices relate to closing values as on the last trading day of the respective year/month.

Source: NSE, BSE.

as well as losers, exhibiting a highly volatile behaviour throughout the year. Returns in CNX Mid-cap and CNX IT have recorded monthly highs of 13.0 per cent and 12.4 per cent, respectively. This stands in contrast to the yearly returns of 73 per cent and 50 per cent posted by these indices. Although short term volatile gains were observed in different sectors, CNX Mid-cap and CNX IT have amply rewarded the medium term investors with a 1-year horizon.

## III. Turnover in the Indian Stock Market

The total turnover in all stock exchanges rose modestly by 2.86 per cent in 2004-05 as compared with 67.25 per cent in the previous year (Table 2.10). The NSE and BSE combine accounted for more than 99 per cent of the total turnover in 2004-05. The turnover at BSE and NSE rose by 3.2 per cent and

3.7 per cent, respectively in 2004-05 on top of 60.0 per cent and 77.9 per cent in the previous year (Table 2.11). Month-wise, the BSE recorded the highest turnover in March 2005 (Rs. 59,528 crore) followed by December 2004 (Rs.50,226 crore) while the NSE recorded the highest turnover in December 2004 (Rs. 1,15,593 crore) followed by March 2005 (Rs.1,13,055 crore). In percentage term, the highest increase in turnover over the previous month was observed in December 2004 in case of both the major exchanges.

Table 2.10: Turnover in the Stock Exchanges in India

(Rs.crore)

Stock Exchange	2003-04	2004-05	Percentage Share
1	2	3	4
Ahmedabad	4,544	8	0.001
BSE	5,02,618	5,18,716	31.1
Bangalore	0	Nil	Nil
Bhubaneswar	0	Nil	Nil
Calcutta	1,928	2,715	0.2
Cochin	0	Nil	Nil
Coimbatore	0	Nil	Nil
Delhi	3	Nil	Nil
Gauhati	0	Nil	Nil
Hyderabad	2	14	0.001
ISE	0	Nil	Nil
Jaipur	0	Nil	Nil
Ludhiana	0	Nil	Nil
Madras	101	27	0.002
Magadh	0	Nil	Nil
Mangalore	0	0	Nil
MPSE	0	Nil	Nil
NSE	10,99,534	11,40,072	68.4
OTCEI	16	0.01	0.0
Pune	0	0.3	0.0
SKSE	0	0	0.0
UPSE	11,751	5,343	0.3
Vadodara	0	Nil	Nil
Total	16,20,497	16,66,896	100.0

Source: Various Stock Exchanges.

Table 2.11: Turnover in BSE and NSE

	BS	SE	N:	SE	Total	
Year / Month	Turnover	Percentage Variation	Turnover	Percentage Variation	Total Turnover	
1	2	3	4	5	6	
2003-04	5,02,618	60.03	10,99,534	77.92	16,02,152	
2004-05	5,18,717	3.20	11,40,071	3.68	16,58,788	
April	44,864	-11.66	1,00,951	-3. <i>7</i> 5	1,45,815	
May	45,938	2.39	98,920	-2.01	1,44,858	
June	36,990	-19.48	84,898	-14.18	1,21,888	
July	39,449	6.65	93,836	10.53	1,33,285	
August	38,195	-3.18	86,856	-7.44	1,25,051	
September	39,603	3.69	88,508	1.90	1,28,111	
October	34,608	-12.61	75,698	-14.47	1,10,306	
November	35,742	3.28	82,035	8.37	1,17,777	
December	50,226	40.52	1,15,593	40.91	1,65,819	
January	43,888	-12.62	99,732	-13.72	1,43,620	
February	49,686	13.21	99,989	0.26	1,49,675	
March	59,528	19.81	1,13,055	13.07	1,72,583	

Source: NSE, BSE.

#### **City-wise Turnover**

Widening the geographical reach of capital markets is one of the avowed objectives of development of securities markets in India. Besides the regulation aspect of securities market, development of market infrastructure and automated systems has been high on the agenda of the regulatory agency. It is believed that securities market can generate a nation-wide interest on the pillars of a transparent and efficient securities market. On-line trading facilities, dematerialised securities and electronic IPO application system are a few of the features that catalyse the penetration of stock investment culture into the farthest corners of a diverse nation like India. The financial hub at Mumbai accounted for 56 per cent of stock turnover, while Delhi region accounted for 11 per cent of business during 2004-05. Among the other metropolitan cities, Kolkata accounted for 9 per cent, but Chennai shared a meagre 2 per cent (Table 2.12).

#### IV. Market Capitalisation

The market capitalisation indicates the size of capital market. Moreover, it acts as an indicator of the amount of notional wealth generated, though all of it cannot be realised. The market capitalisation increased by more than 41 per cent by the end of 2004-05 for both BSE and NSE over the previous year (Tables 2.13 and 2.14). In absolute terms, market capitalisation at BSE was higher at Rs. 16,98,428 crore than that of NSE at Rs. 15,85,585 crore on March 31, 2005. A higher market capitalisation implies the larger number of active scrips at BSE during 2004-05. Market capitalisation of the shares included in S&P CNX Nifty rose by a higher margin of 49 per cent during the financial year as compared with 41 per cent increase in the total market capitalisation of NSE. Hence, the valuation of Nifty scrips has risen faster as compared to the whole of NSE. The market capitalisation in BSE Teck recorded an impressive increase of 94.7 per cent in

Table 2.12: City-wise Turnover of Top 10 Cities in Cash Segment: BSE and NSE Combined (Rs. crore)

200	03-04		200	<b>14-05</b>	
City	Turnover	Percentage Share in All-India Turnover	City	Turnover	Percentage Share in All-India Turnover
1	2	3	4	5	6
Mumbai / Thane	8,59,600	53	Mumbai / Thane	9,33,119	56
Delhi/Ghaziabad	1,93,244	12	Delhi/Ghaziabad	1,85,994	11
Kolkata / Howrah	1,50,113	9	Kolkata / Howrah	1,46,939	9
Ahmedabad	49,680	3	Ahmedabad	49,257	3
Chennai	33,231	2	Chennai	34,916	2
Hyderabad/ Secunderabad/			Hyderabad/ Secunderabad/		
Kukatpally	26,520	2	Kukatpally	25,667	2
Bangalore	22,867	1	Bangalore	22,864	1
Jaipur	18,753	1	Jaipur	17,168	1
Indore	13,471	1	Indore	13,611	1
Pune	13,047	1	Baroda	12,652	1

2004-05 on top of 63.5 per cent in the previous year. In NSE, the IT sector witnessed still higher increase in market capitalisation (120.2 per cent).

# V. Activities in Regional Stock Exchanges

All the 22 stock exchanges in India are geographically widespread. However, other than NSE, BSE, Ahmedabad, Calcutta and UPSE, the remaining exchanges had negligible or nil turnover. During 2004-05, the total turnover at regional exchanges increased by 4 per cent over the previous financial year. Many brokers of regional exchanges trade on the terminals of NSE and/or BSE through their regional subsidiary. The trading details of subsidiaries of regional exchanges are provided in Tables 2.15 to 2.17. Trading on subsidiaries has recorded a substantial jump in the case of a few regional exchanges. Subsidiary of Delhi Stock Exchange witnessed a rise in turnover by 113 per cent while that of Bangalore Stock Exchange recorded a rise of 48 per cent. The number of total brokers declined in most of the stock exchanges except Bangalore, BSE, Delhi, Interconnected Stock Exchange, Magadh and NSE where there were marginal increase. Barring NSE and BSE, active brokers were much less than the total brokers (Table 2.16).

While the all-India turnover increased by 3 per cent, the number of shares traded increased by 14 per cent in 2004-05. Again quantity of shares delivered increased by a substantial 23 per cent and the value of total delivered shares increased by 19 per cent. Thus lower value shares have traded with higher frequency as compared to the previous financial year.

#### VI. Trading Frequency

The fulfillment of listing requirements does not ensure liquidity of scrips unless frequently traded in the stock exchanges.

Table 2.13: Market Capitalisation at BSE

Year/ Month	All listed companies	Percent- age Variation	BSE Sensex	Percent- age Variation	BSE- TECK Index	Percent- age Variation	BANKEX Index	Percent- age Variation	BSEPSU Index	Percent- age Variation
1	2	3	4	5	6	7	8	9	10	11
2003-04	12,01,207	109.92	6,25,173	148.93	1,45,053	63.47	1,13,094	151.09	4,11,532	158.75
2004-05	16,98,428	41.39	7,25,553	16.06	2,82,425	94.70	1,54,048	36.21	5,16,365	25.47
Apr. 04	12,55,347	4.51	6,33,834	1.39	1,54,586	6.57	1,22,133	7.99	4,25,107	3.29
May 04	10,23,129	-18.50	5,29,384	-16.48	1,44,999	-6.20	91,851	-24.79	3,04,933	-28.27
Jun. 04	10,47,258	2.36	5,35,262	1.11	1,50,479	3.78	93,195	1.46	3,15,156	3.35
Jul. 04	11,35,589	8.43	5,78,250	8.03	1,65,106	9.72	95,846	2.84	3,47,646	10.31
Aug. 04	12,16,566	7.13	5,79,970	0.30	1,66,448	0.81	95,888	0.04	3,49,381	0.50
Sep. 04	13,09,318	7.62	6,21,289	7.12	1,81,351	8.95	1,02,697	7.10	3,75,079	7.36
Oct. 04	13,37,191	2.13	6,37,506	2.61	1,92,021	5.88	1,01,581	-1.09	3,79,468	1.17
Nov. 04	15,39,595	15.14	6,93,960	8.86	2,16,159	12.57	1,23,763	21.84	4,13,141	8.87
Dec. 04	16,85,988	9.51	7,35,528	5.99	2,86,294	32.45	1,44,529	16.78	5,34,650	29.41
Jan. 05	16,61,532	-1.45	7,31,785	-0.51	2,81,455	-1.69	1,44,731	0.14	5,13,525	-3.95
Feb. 05	17,30,940	4.18	7,47,866	2.20	2,88,054	2.34	1,55,303	7.30	5,38,601	4.88
Mar. 05	16,98,428	-1.88	7,25,553	-2.98	2,82,425	-1.95	1,54,048	-0.81	5,16,365	-4.13

Source: BSE.

Table 2.14: Market Capitalisation at NSE

(Rs. crore)

Year/ Month	All listed com- panies	Per- centage Varia- tion	S&P CNX Nifty	Per- centage Varia- tion	CNX Mid Cap	Per- centage Varia- tion	CNX IT	Per- centage Varia- tion	CNX Bank	Per- centage Varia- tion	S&P CNX Pharma	Per- centage Varia- tion
1	2	3	4	5	6	7	8	9	10	11	12	13
2003-04	11,20,976	108.69	6,38,599	NA	81,280	-1.32	1,03,168	39.52	1,01,928	NA	68,831	83.69
2004-05	15,85,585	41.44	9,51,672	49.02	1,48,019	82.11	2,27,191	120.21	1,36,921	34.33	93,126	35.30
Apr. 04	11,71,828	4.53	7,71,153	20.57	88,625	9.04	1,08,155	4.83	1,13,816	11.66	75,813	10.14
May 04	9,50,494	-18.89	6,32,652	-17.96	76,742	-13.41	1,06,787	-1.26	83,650	-26.50	69,219	-8.70
Jun. 04	9,79,700	3.07	6,42,325	1.53	77,912	1.52	1,11,064	4.01	84,118	0.56	65,074	-5.99
Jul. 04	10,66,087	8.82	6,98,209	8.70	86,617	11.17	1,19,934	7.99	86,980	3.40	67,943	4.41
Aug. 04	11,43,075	7.22	6,98,427	0.03	96,473	11.38	1,23,695	3.14	87,468	0.56	69,909	2.89
Sep. 04	12,27,550	7.39	7,47,280	6.99	1,03,303	7.08	1,32,096	6.79	93,465	6.86	79,971	14.39
Oct. 04	12,53,825	2.14	7,65,067	2.38	1,04,862	1.51	1,44,522	9.41	92,038	-1.53	79,177	-0.99
Nov. 04	14,46,292	15.35	8,39,857	9.77	1,18,528	13.03	1,62,594	12.50	1,11,850	21.53	84,850	7.16
Dec. 04	15,79,161	9.19	9,02,831	18.01	1,36,202	14.91	1,59,453	-1.93	1,30,849	16.99	1,09,712	29.30
Jan. 05	15,57,444	-1.38	8,93,674	-1.01	1,38,413	1.62	1,55,455	-2.51	1,28,324	-1.93	98,700	-10.04
Feb. 05	16,14,597	3.67	9,78,440	9.49	1,45,942	5.44	2,26,700	45.83	1,37,593	7.22	95,572	-3.17
Mar. 05	15,85,585	-1.80	9,51,672	-2.74	1,48,019	1.42	2,27,191	0.22	1,36,921	-0.49	93,126	-2.56

Source: NSE.

**Table 2.15: Trading Statistics of Stock Exchanges** 

Stock Exchanges		s Traded akh)		Delivered akh)		f Shares (Rs. crore)
	2003-04	2004-05	2003-04	2004-05	2003-04	2004-05
1	2	3	4	5	6	7
Ahmedabad	2,514 (0.23)	(0.00)	115 (0.04)	0.05	0.00	0.25 (0.00)
BSE	3,88,748 (34.84)	4,77,174 (37.55)	1,44,531 (45.09)	1,89,077 (48.13)	1,29,311.90 (36.95)	1,40,055.90 (33.54)
Bangalore	(0.00)	Nil	3.18 (0.00)	Nil	0.53 (0.00)	Nil
Bhubaneswar	0.00	Nil	0.00	Nil	0.00	Nil
Calcutta	4,378 (0.39)	3,381 (0.27)	1,225 (0.38)	1,383 (0.35)	265.84 (0.08)	1,262.00 (0.30)
Cochin	0.00	Nil	0.00	Nil	0.00	Nil
Coimbatore	0.00	Nil	0.00	Nil	0.00	Nil
Delhi	0.03 (0.00)	Nil	0.03 (0.00)	Nil	0.14 (0.00)	Nil
Gauhati	0.00	Nil	0.00	Nil	0.00	Nil
Hyderabad	17 (0.00)	45 (0.00)	11 (0.01)	37 (0.01)	1.86 (0.00)	9.10 (0.00)
ISE	0.06 (0.00)	Nil	0.04 (0.00)	Nil	0.03 (0.00)	Nil
Jaipur	0.00	Nil	0.00	Nil	0.00	Nil
Ludhiana	0.00	Nil	0.00	Nil	0.00	Nil
Madras	85 (0.01)	14 (0.00)	(0.00)	14 (0.00)	0.19 (0.00)	27.33 (0.00)
Magadh	0.19 (0.00)	Nil	0.00	Nil	0.00	Nil
Mangalore	0.00	Nil	0.00	Nil	0.00	Nil
MPSE	0.00	Nil	0.00	Nil	0.00	Nil
NSE	7,13,301 (63.93)	7,87,996 (62.02)	1,74,538 (55.46)	2,02,277 (51.49)	2,20,340.70 (62.95)	2,76,120.00 (66.14)
OTCEI	(0.00)	(0.00)	0.00	0.00	0.00	0.00
Pune	0.00	(0.00)	Nil	0.00	Nil	0.00
SKSE	0.00	0	Nil	0	Nil	0
UPSE	6,737.00 (0.60)	1,917 (0.15)	74 (0.02)	28 (0.01)	76.00 (0.02)	28.0 (0.01)
Vadodara	Nil	Nil	Nil	Nil	Nil	Nil
Total	11,15,807	12,70,535	3,20,504	3,92,817	3,49,997	4,17,501.58

Note: Figures in parentheses indicate percentage to total.

Source: Various Stock Exchanges.

Table 2.16: Status of Brokers with Stock Exchanges

Stock Exchange	Total E	Brokers		of Active kers*	Active Brokers as Percentage to Total		
	2003-04	2004-05	2003-04	2004-05	2003-04	2004-05	
1	2	3	4	5	6	7	
Ahmedabad	323	317	24	10	7.43	3.15	
Bangalore	242	250	5	0	2.07	0.00	
BSE	673	726	516	560	76.67	77.13	
Bhubaneswar	229	221	0	8	0.00	3.62	
Calcutta	980	962	268	152	27.35	15.80	
Cochin	468	446	0	80	0.00	17.94	
Coimbatore	177	135	0	0	0.00	0.00	
Delhi	373	376	0	0	0.00	0.00	
Gauhati	172	119	10	12	5.81	10.08	
Hyderabad	305	288	55	42	18.03	14.58	
ISE	633	654	4	0	0.63	0.00	
Jaipur	532	522	0	0	0.00	0.00	
Ludhiana	297	293	0	90	0.00	30.72	
MPSE	179	174	0	0	0.00	0.00	
Madras	182	178	12	9	6.59	5.06	
Magadh	195	198	0	0	0.00	0.00	
Mangalore	105	66	0	0	0.00	0.00	
NSE	970	976	805	822	82.99	84.22	
OTCEI	867	801	113	111	13.03	13.86	
Pune	197	186	0	1	0.00	0.54	
SKSE	437	425	0	0	0.00	0.00	
UPSE	514	504	177	177	34.44	35.12	
Vadodara	318	311	3	0	0.94	0.00	

<sup>\*</sup> Figures received from various stock exchanges.

Therefore, frequency of trading assumes significance as an indicator of liquidity. As indicated earlier, although India has 22 stock exchanges, BSE and NSE together account for more than 99 per cent of the total turnover. Therefore, trading frequency of listed scrips is analysed in respect of BSE and NSE. The trading frequency improved in 2004-05 over that of the previous year (Table 2.18). The number of shares traded on BSE and NSE were higher at 2,906 and 856, respectively than those of 2,610 and 804 in the previous

year. The number of shares traded on BSE for more than 100 days rose from 1,960 in 2003-04 to 2,368 in 2004-05. Similarly, the number of shares traded on NSE for more than 100 days increased from 741 to 818 during the same period. The actively traded shares above 100 days as percentage to total traded shares also rose considerably in both the exchanges. Another positive development was that the percentage of stocks that are traded for 30 days or less, declined in 2004-05 over the previous year.

Table 2.17: Trading Details of Subsidiaries of Stock Exchanges

Stock Exchange	No. of Subsidary/ies	Name of the Subsidiary		over of ubsidiary	Percentage Variation
Lacitatige	oubsidal y/les		2003-04	2004-05	Variation
1	2	3	4	5	6
Ahmedabad	2	ACML – BSE Operations	1,836	19,639	
		ACML – NSE Operations	17,196	1,013	
		Total	19,031	20,652	8.52
BSE	Nil	Nil	Nil	Nil	Nil
Bangalore	1	BgSE Financials Ltd.	14,640	21,798	48.80
Bhubaneswar		Bhubaneswar Shares and Securities Ltd.	Nil	Nil	Nil
Calcutta	Nil	Nil	Nil	Nil	Nil
Cochin	1	Cochin Stock Brokers. Ltd.	4,062	3,795	-6.60
Coimbatore	1	CSX Securities Ltd.	Nil	Nil	Nil
Delhi	1	DSE Financial Services Ltd.	380	841	113.20
Gauhati	Nil	Nil	Nil	Nil	Nil
Hyderabad	1	HSE Securities Ltd. (HSES) of which,			
		At NSE (Cash)	5,660	4,842	
		At NSE (F&O)	3,122	3,544	
		At BSE (Cash)	354	395	
		Total	9,137	8,781	3.90
ICSE	1	ISE Securities and Services Ltd. of which			
		NSE (Cash)	22,603	21,771	
		NSE (F & O)	11,369	11,347	
		BSE (Equities)	_	59	
		Total	33,972	33,178	-2.30
Jaipur	1	JSEL Securities Ltd.	6,817	5,953	-12.70
Ludhiana	1	LSE Securities Limited	36,961	37,224	0.70
Madras	1	MSE Financial Services Ltd.	843	1,101	30.40
Magadh	1	MSEA Securities Ltd.	Nil	Nil	Nil
Mangalore	Nil	Nil	Nil	Nil	Nil
MPSE	1	MPSE Securities Ltd.	2,865	3,166	10.50
NSE	Nil	Nil	Nil	Nil	Nil
OTCEI	1	OTCEI Securities Ltd.	2,070	1,645	-20.60
Pune	1	PSE Securities Ltd.	8,550	7,150	-16.40
SKSE	1	SKSE Securities Ltd.	14,118	13,852	-2.00
UPSE	1	UPSE Securities Ltd.	2,323	2,474	6.50
Vadodara	1	VSE Stock Services Ltd.	8,251	9,074	9.90
Subsidiaries' T	otal		1,64,019	1,70,683	4.00
Subsidiaries' T Total for All Ex	otal as percentage changes	of Gross	10.12	10.23	

Source: Various Stock Exchanges.

Table 2.18: Trading Frequency of Listed Stocks

Trading		200	03-04			2004	l-05	
Fre-	В	SE	N:	SE	В	SE	N	SE
quency (Range of Days)	No. of Com- panies Traded	Percentage of Total						
1	2	3	4	5	6	7	8	9
Above 100	1,960	75.10	741	92.16	2,368	81.49	818	95.56
91-100	65	2.49	7	0.87	36	1.24	2	0.23
81-90	54	2.07	8	1.00	37	1.27	1	0.12
71-80	49	1.88	3	0.37	35	1.20	4	0.47
61-70	46	1.76	2	0.25	32	1.10	6	0.70
51-60	58	2.22	11	1.37	50	1.72	3	0.35
41-50	61	2.34	8	1.00	34	1.17	1	0.12
31-40	56	2.15	2	0.25	41	1.41	4	0.47
21-30	52	1.99	7	0.87	68	2.34	4	0.47
11-20	63	2.41	8	1.00	63	2.17	3	0.35
1-10	146	5.59	7	0.87	142	4.89	10	1.17
Total	2,610	100.00	804	100.00	2,906	100.00	856	100.00

### **VII. Capital Market Indicators**

The ratios such as market capitalisation to GDP (m-cap ratio), traded value to GDP (traded value ratio) and price to earning per share (P/E ratio) are monitored to gauge the extent of development of stock market. The m-cap ratio, which was 23.2 per cent in 2002-03, more than doubled to 43.5 per cent in 2003-04 and further increased to 54.6 per

cent in 2004-05 (Table 2.19). Similarly, the traded value ratio in the cash segment went up from 39.3 per cent in 2002-03 to 58.7 per cent in 2003-04, before slightly declining to 53.6 per cent in 2004-05. However, the turnover in derivative segment as percentage to GDP rose persistently from 17.9 per cent in 2002-03 to 77.6 per cent in 2003-04 and further to 82.5 per cent in 2004-05.

Table 2.19: Select Ratios Relating to Capital Market

(Per cent)

Year	BSE Market Capitalisation to GDP	Turnover to GDP at Current Market Prices			
	Capitalication to CD1	Cash Segment	Derivative Segment		
1	2	3	4		
2002-03	23.23	39.33	17.95		
2003-04	43.52	58.71	77.64		
2004-05	54.64	53.62 82.46			

Sources: 1. Central Statistical Organisation.

2. Various Stock Exchanges.

During the upswing of a business cycle, P/E ratio has a general tendency to fall. Following global recovery, the P/E ratio, in fact, declined in most of the countries despite higher security prices (Chart 2.6). Similar to the international trend, the P/E ratio relating

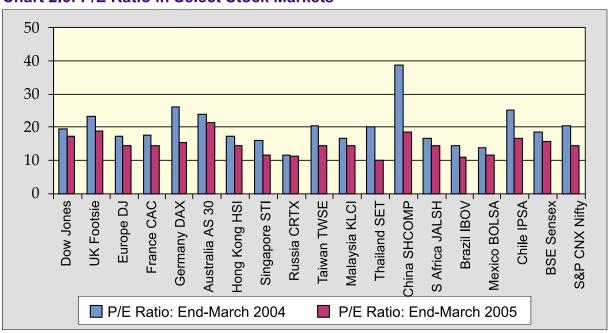
to benchmark indices also declined in India (Table 2.20). This is an indication that market has the potential to grow further. However, the P/E ratios relating to major sectoral indices such as Mid-cap, IT were higher than those in the previous year.

**Table 2.20: Price-Earnings Ratio** 

Year/ Month	BSE Sensex	BSE 100 Index	S&P CNX Nifty	CNX Mid Cap	CNX IT	CNX Bank	CNX PSE
1	2	3	4	5	6	7	8
2003-04	18.57	16.11	20.70	17.15	28.77	9.84	12.37
2004-05	15.61	13.30	14.60	21.93	51.14	10.79	10.57
Apr. 04	18.83	16.58	18.68	18.74	30.81	10.99	12.53
May 04	15.49	13.37	11.94	16.23	30.42	8.08	8.96
Jun. 04	14.23	12.23	12.64	18.92	28.83	7.36	9.40
July 04	15.38	13.06	13.63	20.97	31.14	7.61	10.52
Aug. 04	15.42	13.21	13.64	16.62	29.53	6.90	10.43
Sep. 04	16.74	13.98	14.59	15.02	30.65	7.37	10.83
Oct. 04	17.26	13.91	14.93	15.45	32.48	7.26	9.63
Nov. 04	18.79	15.21	16.39	17.46	36.55	8.82	10.13
Dec. 04	17.07	14.28	15.32	19.82	35.56	10.32	10.89
Jan. 05	16.33	13.70	14.68	20.14	34.67	10.12	10.63
Feb. 05	16.09	13.79	15.02	21.63	51.03	10.85	11.05
Mar. 05	15.61	13.30	14.60	21.93	51.14	10.79	10.57

Source: NSE, BSE.

Chart 2.6: P/E Ratio in Select Stock Markets



Month-wise, the P/E ratio shows that CNX IT index witnessed consistently higher P/E ratio above 30 with the highest (51.14) by end-March 2005. As compared to the IT index, the CNX Bank had low P/E ratio at approximately 10 with highest of 11.0 at end-April 2004.

The P/B ratio is an indicator of the returns left for shareholders after providing for liabilities of a company. Thus, the P/B ratio indicates the asset quality of companies pertaining to that sector. The CNX IT index recorded the highest P/B ratio of 11.3 at the end of February and March 2005. The lowest P/B ratio was noticed in CNX Bank index hovering around 2 (Table 2.21). A combination of rising P/B ratio and falling P/E ratio in a buoyant market condition offers tremendous scope for investment.

#### VIII. Volatility in Stock Markets

Volatility measures the variability of the

price of an asset. Conventionally, it can be measured in terms of variance, standard deviation or coefficient of variation. Several sophisticated econometric techniques could also be applied to measure volatility. For simplicity, conventionally used measure of volatility such as standard deviation is relied upon. For most of the months during 2004-05, volatility in both the indices was less than one (Table 2.22). The highest monthly volatility was recorded during May 2004 at 3.8 per cent for the BSE Sensex and 4.2 per cent for S&P CNX Nifty. The May 2004 volatility captures the 842 points intra-day slide in Sensex on May 17, 2004 when an 8 sigma deviation was observed in Value-at-Risk. The risk management systems, that were put in place, were used to contain volatility. As a result, payment defaults and other anomalies did not occur out of market shock. During the last quarter of 2004-05, January saw the highest volatility of 1.5 per cent in Sensex and 1.7 per cent in Nifty index.

Table 2.21: Price to Book-Value Ratio

Year/ Month	BSE Sensex	BSE 100 Index	S&P CNX Nifty	CNX Mid Cap	CNX IT	CNX Bank	CNX PSE
1	2	3	4	5	6	7	8
2003-04	3.50	3.09	3.50	1.49	5.70	2.07	2.87
2004-05	3.72	3.23	3.82	2.40	11.28	2.31	2.55
Apr. 04	3.55	3.16	3.54	1.61	6.07	2.31	2.91
May 04	2.91	2.54	2.84	1.40	5.99	1.70	2.08
June 04	2.67	2.37	2.83	1.42	5.87	1.59	2.18
July 04	2.88	2.55	2.95	1.58	6.50	1.65	2.44
Aug. 04	2.89	2.58	2.94	1.64	6.71	1.47	2.44
Sept. 04	3.20	2.81	3.16	1.70	6.84	1.58	2.58
Oct. 04	3.29	2.83	3.08	1.71	7.15	1.55	2.30
Nov. 04	3.58	3.09	3.38	1.93	8.05	1.89	2.42
Dec. 04	3.77	3.33	3.61	2.21	7.86	2.21	2.62
Jan. 05	3.75	3.26	3.57	2.25	7.67	2.16	2.56
Feb. 05	3.83	3.35	3.92	2.36	11.26	2.32	2.66
Mar. 05	3.72	3.23	3.82	2.40	11.28	2.31	2.55

Note: CNX Bank Index was launched w.e.f. September 15, 2003.

Source: NSE, BSE.

Table 2.22: Daily Volatility of Benchmark Indices

(Per cent)

2004-05	BSE Sensex	S&P CNX Nifty
1	2	3
April	1.3	1.1
May	3.8	4.2
June	1.3	1.5
July	1.0	1.3
August	0.9	1.0
September	0.7	0.8
October	0.9	1.0
November	0.7	0.7
December	0.8	0.7
January	1.5	1.7
February	0.8	0.8
March	1.0	1.1

**Note:** Volatility is measured in terms of standard deviation and is computed from the returns based on closing values of Indices.

# Volatility of International Indices: A Comparison

Global investors explore emerging markets in search of higher returns and also to reduce risk through portfolio diversification. However, cross border flows entail a possible contagion in the event of a financial turbulence. Hence, at times, volatility of international markets moves in sync with each other. The developed markets, in general, had less annualised volatility during 2004-05 compared to the volatility exhibited by the emerging market economies (Chart 2.7). The highest volatility among developed markets was observed in Nasdaq (15.7 per cent) followed by Hang Seng Index (15.1 per cent) and the lowest volatility was in AS30 Index of Australia (6.8 per cent). Among the emerging economies, Russia witnessed the highest annualised volatility of 36.4 per cent while Malaysia had the lowest volatility of 10.2 per cent (Table 2.23).

A comparative picture of annual returns on indices vis-à-vis the annualised volatility is examined (Table 2.24). It is evident from Table 2.24 that among developed markets, with a low volatility of 6.8 per cent, Australia posted a healthy return of 20 per cent. However, Hong Kong with a volatility of 15.1 per cent could provide only a 6.6 per cent index return on a year-on-year basis. In emerging markets, index returns trace the volatile pattern with China SHCOMP index sliding by 32.2 per cent with an annualised volatility of 20.4 per cent. In case of India, both Sensex and Nifty posted positive returns of 16.1 and 14.9 per cent, respectively with annualised volatility of 23.8 and 26.1 per cent, respectively. The correlation coefficient between volatility and annualised return from a sample of 19 countries worked out to be negative (-0.43). A high level of return from stock market may be possible with low level of volatility.

Table 2.23: Trends in Daily and Annualised Volatility of International Stock Indices (2004-05)

(Per cent)

														01 00111,
Country	Index	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Ann- uali- sed Vol- atility
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
DEVELOPE	DEVELOPED MARKETS													
USA	DJIA	0.7	0.7	0.5	0.5	0.8	0.6	0.7	0.6	0.6	0.6	0.7	0.6	10.3
USA	Nasdaq													
	Composite	1.3	1.0	1.0	1.2	1.3	0.9	1.1	0.7	0.7	1.0	0.8	0.7	15.7
UK	Footsie	0.6	0.9	0.5	0.7	0.7	0.5	0.7	0.6	0.4	0.5	0.5	0.4	9.5
Europe	DJ Stoxx	0.9	1.2	0.7	0.8	0.9	0.7	1.0	0.6	0.6	0.6	0.6	0.6	12.6
France	CAC	0.9	1.2	0.8	0.8	0.9	0.7	1.0	0.6	0.6	0.6	0.6	0.6	12.8
Germany	DAX	1.0	1.4	0.9	1.0	1.0	0.7	1.1	0.6	0.6	0.6	0.6	0.6	14.3
Australia	AS 30	0.4	0.5	0.4	0.4	0.4	0.3	0.5	0.4	0.4	0.4	0.4	0.5	6.8
Hong Kong	HSI	1.0	1.6	1.3	0.8	0.8	0.8	0.9	0.8	0.7	0.8	0.6	0.7	15.1
Singapore	STI	0.8	1.4	0.6	0.6	0.7	0.5	0.8	0.5	0.7	0.5	0.5	0.6	11.5
EMERGING	MARKETS													1
Taiwan	TWSE	1.5	2.5	1.8	1.1	1.0	0.8	0.9	1.1	0.5	0.8	0.5	0.6	20.9
Russia	CRTX	2.2	2.8	3.8	3.0	1.8	0.7	2.4	1.5	2.8	1.4	1.0	1.6	36.4
Malaysia	KLCI													
	(Comp)	0.7	1.1	0.7	0.6	0.5	0.6	0.5	0.7	0.5	0.5	0.4	0.5	10.2
Thailand	SET	1.8	2.4	0.9	1.0	1.1	1.0	1.7	0.9	0.8	0.8	0.7	1.0	20.3
China	Shanghai A	0.9	1.2	1.3	1.3	1.1	2.0	1.3	1.2	0.9	1.2	1.4	1.0	20.4
S. Africa	JALSH	0.7	1.6	0.9	0.9	1.2	0.6	0.8	0.6	0.6	0.6	0.4	0.6	13.6
Brazil	IBOV	1.7	2.5	1.6	1.4	1.6	1.1	1.3	1.1	1.0	1.6	1.6	1.5	25.0
Mexico	BOLSA	1.1	1.6	1.0	0.8	0.8	0.8	0.8	0.7	0.6	1.3	0.7	0.8	15.3
Chile	IPSA	0.8	1.0	0.7	0.4	0.5	0.7	0.9	0.5	0.5	0.9	0.4	0.7	11.1
Argentina	INMEX	1.1	1.7	1.0	0.8	0.8	0.8	0.8	0.7	0.6	1.3	0.7	0.9	15.9
India	SENSEX	1.3	3.8	1.3	1.0	0.9	0.7	0.9	0.7	0.8	1.5	0.8	1.0	23.8
India	S&P CNX NIFTY	1.1	4.2	1.5	1.3	1.0	0.8	1.0	0.7	0.7	0.7	0.8	1.1	26.1

**Note:** Daily volatility is computed as the standard deviation of daily returns on closing values of indices for the respective months. Annualised volatility is calculated as daily volatility for the financial year multiplied by the square root of number of trading days during the period.

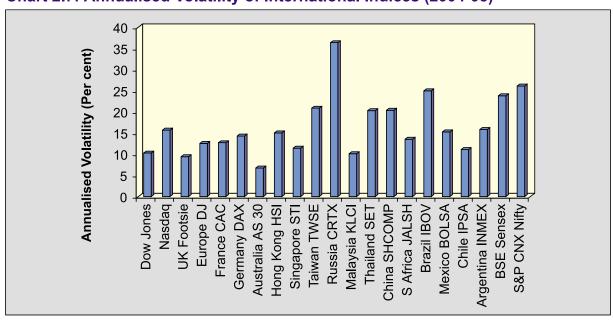
Source: Bloomberg Financial Services.

Table 2.24: P/E Ratio, Return and Volatility of Select International Indices (2004-05)

Country	Index	P/E Ratio: End-March 2004	P/E Ratio: End-March 2005	Percentage Variation in P/E Ratio	Year-on- Year Index Return	Annualised Volatility
1	2	3	4	5	6	7
DEVELOPED MARKETS						
USA	DJIA	19.2	17.4	-9.5	1.4	10.3
UK	Footsie	23.4	18.9	-19.0	11.6	9.5
Europe	DJ Stoxx	17.4	14.4	-17.2	9.6	12.6
France	CAC	17.8	14.6	-18.0	12.2	12.8
Germany	DAX	26.1	15.5	-40.7	12.8	14.3
Australia	AS 30	23.6	21.3	-9.7	20.0	6.8
Hong Kong	HSI	17.3	14.7	-14.8	6.6	15.1
Singapore <b>EMERGING</b>	STI	16.3	11.5	-29.6	15.2	11.5
MARKETS						
Russia	CRTX	11.5	11.2	-2.6	-23.1	36.4
Taiwan	TWSE	20.6	14.7	-28.8	-7.9	20.9
Malaysia	KLCI (Comp)	16.5	14.4	-12.4	-3.4	10.2
Thailand	SET	20.1	9.9	-50.8	5. 3	20.3
China	SHCOMP	38.7	18.6	-52.0	-32.2	20.4
S Africa	JALSH	16.6	14.4	-13.0	24.4	13.6
Brazil	IBOV	14.4	11.0	-23.6	20.2	25.0
Mexico	BOLSA	13.6	11.8	-13.7	24.1	15.3
Chile	IPSA	24.9	16.6	-33.3	34.5	11.1
India	BSE SENSEX	18.6	15.6	-16.1	16.1	23.8
India	S&P CNX NIFTY	20.7	14.6	-28.9	14.9	26.1

Source: Bloomberg Financial Services.

**Chart 2.7: Annualised Volatility of International Indices (2004-05)** 



#### IX. Dematerialisation

In order to speed up the transfer and ownership of securities and also to reduce risks associated with transfer of shares, SEBI has pursued the policy of dematerialisation since 1996. The number of companies signed up for dematerialisation in NSDL increased from 5,216 in 2003-04 to 5,537 in 2004-05. In case of CDSL, the number rose from 4,810 in 2003-04 to 5,068 in 2004-05. The number of companies available at NSDL for dematerialisation also increased from 5,212 in 2003-04 to 5,536 in 2004-05. The number of dematerialised shares in NSDL went up by 53.7 per cent to 12,86,630 lakh in 2004-05 from 8,36,935 lakh shares in 2003-04. In CDSL, the number of shares dematerialised rose by 36.2 per cent to 1,90,800 lakh in 2004-05 as compared with 1,40,100 lakh in 2003-04 (Table 2.25).

The depository participants (DPs) of NSDL were available at 340 cities in 2004-05 compared to 241 in 2003-04. Similarly, the depository participants of CDSL were available at 124 cities in 2004-05, higher than that of 108 in 2003-04. In terms of absolute figures, the reach of DPs of NSDL and CDSL increased by 99 and 16 locations, respectively in 2004-05.

The dematerialisation process in bonds and commercial paper was also accelerated in 2004-05. The total value of dematerialised bonds in NSDL rose from Rs.2,48,190 crore in 2003-04 to Rs.2,81,205 crore in 2004-05, an increase of 13.3 per cent (Table 2.26). The total value of dematerialised commercial paper also increased in NSDL from Rs.10,229 crore in 2003-04 to Rs.15,880 crore in 2004-05, a rise of 55.2 per cent.

#### X. Derivatives Market in India

Investors require derivative instruments for effective risk management. Financial derivatives such as futures, options and swaps are conventionally used by the investors for managing various types of risks. Moreover, several hybrid derivative products are also offered through financial engineering which are tailor made to suit the requirements of the clients. The underlying assets have been broadly securities, commodities and foreign currencies. The commodity and currency related derivatives are regulated by Forward Market Commission and RBI, respectively, while SEBI regulates derivatives on securities.

Indian stock market provides various kinds of derivative instruments to investors for hedging and investment purposes. The trading platform in derivative instruments is offered by BSE and NSE only. Derivatives trading began with the launch of index futures in June 2000 followed by index options, single stock options and single stock futures in 2001. Interest rate futures were launched in June 2003. There is hardly any secondary market trading in interest rate futures. The derivative products have a monthly maturity cycle. From September 13, 2004 onwards, weekly stock and index options cycle was launched on the derivative segment of BSE.

The combined turnover in derivatives in both the exchanges was much higher than the combined turnover in the cash segment (Chart 2.8). The last four months of fiscal year 2004-05 saw higher derivatives turnover. The picture is different if we take stock exchanges individually. The turnover of derivatives at BSE was a meager 3.09 per cent of its own cash market turnover. On the other hand, NSE derivatives turnover was 223 per cent of its cash market turnover during 2004-05.

During 2004-05, the combined turnover in the derivative segments of NSE and BSE witnessed an increase of 19.6 per cent over the previous year (Table 2.27). The total number of contracts traded in the derivative segments of NSE and BSE together rose by 35.4 per cent to 7,75,48,904 in 2004-05 from 5,72,69,034 in 2003-04. The derivative market

Table 2.25: Depository Statistics as at end-March: Equity Shares

Particulars	NS	SDL	CD	SL
Particulars	2003-04	2004-05	2003-04	2004-05
1	2	3	4	5
Companies signed up	5,216	5,537	4,810	5,068
Companies – available for demat	5,212	5,536	4,810	5,068
Demat : Quantity of shares (lakh)	8,36,935	12,86,630	1,40,100	1,90,800
Total no. of shares settled in demat (lakh)	2,89,360	3,69,401	97,540	1,32,750
Total value of shares settled in demat (Rs. crore)	3,01,079	3,97,031	83,715	89,399
Market capitalisation of companies in demat (Rs. crore)	11,07,084	16,38,316	11,92,263	16,71,226
Cities According to No. of DP Locations				
No. of DP Locations	Cit	ies	Cit	ies
1 – 10	217	298	105	119
11 – 20	15	26	1	3
21 – 50	2	8	1	1
51 – 100	5	3	0	0
> 100	2	5	1	1
Total	241	340	108	124

Source: NSDL, CDSL.

Chart 2.8: Derivatives Turnover vis-à-vis Cash Market Turnover

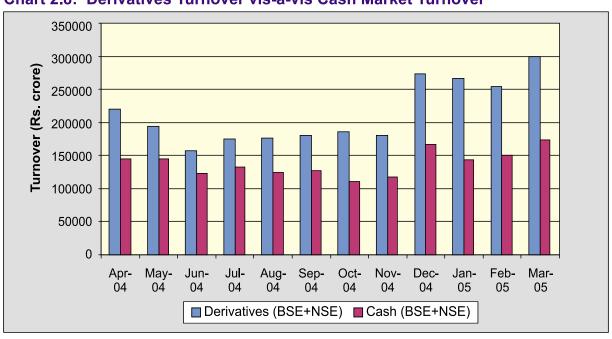


Table 2.26: Depository Statistics: Debenture / Bonds and Commercial Paper

	Ι	Debentures	/ Bonds	Commercial Paper				
Particulars	2003-04		2004-05		2003	3-04	2004-05	
	NSDL	NSDL CDSL		CDSL	NSDL	CDSL	NSDL	CDSL
1	2	3	4	5	6	7	8	9
No. of issuers	570	255	602	318	357	69	365	78
No. of active instruments	7,477	3,453	6,937	3,953	427	74	426	113
Demat value	2,48,190	5,623	2,81,205	6,456	10,229	396	15,880	613

Source: NSDL, CDSL.

is dominated by NSE with its share of 99.3 per cent in the turnover as well as in the number of transactions. The highest number of derivative contracts was recorded in March 2005 and the lowest in November 2004. Similarly, the highest turnover in terms of notional value was recorded in March 2005 and lowest in June 2004. The open interests

in terms of number of contracts as well as notional value went up significantly since September 2004.

Product-wise, single stock futures continued to remain the most popular product followed by index futures, stock options and index options (Table 2.28, 2.29 and Chart 2.9). As mentioned earlier, BSE introduced weekly

Table 2.27: Trends in Turnover and Open Interest in Derivatives at NSE & BSE

		Total			Оре		st at the end of or / month		
Year / Month	No. of C	ontracts		Turnover (Rs. crore)		ontracts	Notional Turnover (Rs. crore)		
	NSE	BSE NSE BSE		BSE	NSE	BSE	NSE	BSE	
1	2	3	4	5	6	7	8	9	
2003-04	5,68,86,776	3,82,258	21,30,649	12,452	2,35,792	35	7,187	1	
2004-05	7,70,17,185	5,31,719	25,47,053	16,112	5,92,646	0	21,052	0	
Apr. 04	65,68,668	2,892	2,20,299	85	2,49,845	8	7,668	0	
May 04	64,81,198	1,146	1,94,763	39	1,79,487	7	4,696	0	
June 04	58,22,819	0	1,58,306	0	2,01,871	0	5,367	0	
July 04	61,34,513	10	1,75,345	0	2,06,709	0	5,964	0	
Aug. 04	59,78,503	0	1,76,006	0	2,61,185	0	7,332	0	
Sept. 04	59,31,706	39,788	1,78,380	2,056	4,46,299	382	13,353	11	
Oct. 04	56,66,914	1,15,298	1,82,224	3,290	3,21,545	928	9,845	26	
Nov. 04	53,14,655	1,57,458	1,75,805	4,695	3,71,842	1,050	12,239	33	
Dec. 04	75,15,469	1,54,902	2,68,227	4,947	4,26,606	478	15,221	16	
Jan. 05	72,46,915	43,942	2,65,290	1,415	3,88,354	246	13,604	8	
Feb. 05	66,61,661	9,213	2,53,551	304	4,04,809	25	14,900	1	
Mar. 05	76,94,164	7,070	2,98,857	243	5,92,646	0	21,052	0	

Source: NSE, BSE.

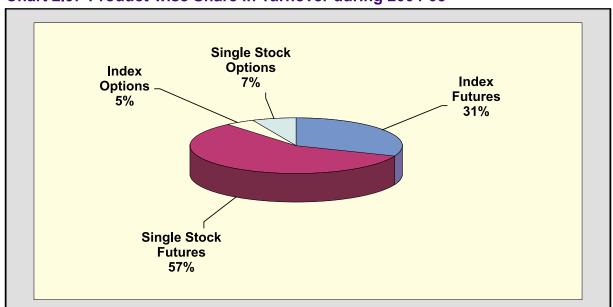


Chart 2.9: Product-wise Share in Turnover during 2004-05

Table 2.28: Product-wise Derivatives Turnover at NSE (Percentage Share to Total)

Year/ Month	Index Futures	Index Options	Single Stock Options	Single Stock Futures	Total
1	2	3	4	5	6
2003-04					
April	14.0	3.4	23.1	59.5	100.0
May	11.8	3.0	23.9	61.3	100.0
June	12.8	2.7	20.7	63.8	100.0
July	13.4	2.9	19.5	64.2	100.0
August	17.8	2.7	14.4	65.0	100.0
September	24.8	2.7	11.0	61.5	100.0
October	37.6	3.0	15.3	97.6	100.0
November	25.8	2.0	8.5	63.7	100.0
December	27.4	2.3	7.2	63.2	100.0
January	30.8	2.1	6.6	60.4	100.0
February	31.7	2.4	6.8	59.2	100.0
March	34.1	3.1	7.4	55.4	100.0
2004-05					
April	36.1	3.3	5.6	54.9	100.0
May	42.2	5.3	5.0	47.6	100.0
June	40.4	5.4	4.7	49.5	100.0
July	34.9	5.7	5.9	53.6	100.0
August	32.9	4.2	6.3	56.6	100.0
September	27.7	4.2	8.0	60.1	100.0
October	25.9	4.7	8.1	61.3	100.0
November	21.8	5.0	8.7	64.6	100.0
December	21.7	3.6	7.8	66.9	100.0
January	28.7	4.9	6.3	60.1	100.0
February	28.2	5.2	6.8	59.8	100.0
March	28.9	6.0	6.4	58.7	100.0

Source: NSE.

Table 2.29: Product-wise Derivatives Turnover at BSE (Percentage Share to Total)

Year/ Month	Index Futures	Index Options	Single Stock Options	Single Stock Futures	Total
1	2	3	4	5	6
2003-04					
April	74.2	Na	1.9	23.8	100.0
May	35.4	Na	17.4	45.6	100.0
June	6.3	Na	27.6	66.1	100.0
July	49.3	Na	3.3	47.4	100.0
August	59.4	Na	0.0	40.5	100.0
September	47.9	Na	0.1	51.9	100.0
October	49.0	Na	0.3	50.8	100.0
November	48.4	Na	0.1	51.4	100.0
December	48.5	Na	1.5	50.1	100.0
January	58.4	Na	2.0	39.6	100.0
February	76.0	Na	13.2	10.8	100.0
March	62.3	Na	17.2	20.4	100.0
2004-05					
April	89.6	0.0	0.0	10.4	100.0
May	0.0	0.0	0.0	100.0	100.0
June	Na	Na	Na	Na	Na
July	0.0	0.0	0.0	100.0	100.0
August	Na	Na	Na	Na	Na
September	76.2	20.8	0.0	3.0	100.0
October	84.3	15.6	0.0	0.0	100.0
November	89.3	10.3	0.0	0.4	100.0
December	90.0	8.9	0.0	1.0	100.0
January	77.1	21.1	0.1	1.7	100.0
February	44.3	48.9	0.0	6.8	100.0
March	17.3	75.8	0.0	7.0	100.0

Source: BSE.

options for trading in Sensex and three selected stocks. Thereafter, there was a significant increase in the turnover of index options in BSE (Tables 2.29 and 2.32). However, stock options did not pick up. Monthwise detail derivative transactions in BSE and NSE are given in Tables 2.30 to 2.33.

At NSE, there were 418 trading members at the end of March 2005. There were 160 trading-cum clearing members and 96 trading-cum-self-clearing members (Table 2.34). At BSE, there were 198 trading members and 62 trading cum clearing members at the end of March 2005. The percentage share of trading cum clearing members in the total F&O turnover was the highest for all the months in 2004-05. It increased from 45.7 per cent in April 2004 to 50.8 per cent in March 2005 (Table 2.35). The trading member share in the F&O turnover declined from 32.4 per cent in April 2004 to 25.8 per cent in March 2005.

Table 2.30: Trends in Index Futures in NSE & BSE

					Оре	n Interest the Year/	(at the end Month)	of
Year / Month	No. of C	ontracts		Turnover (Rs. crore)		ontracts	Notional Turnover (Rs. crore)	
	NSE	BSE	NSE	BSE	NSE BSE		NSE	BSE
1	2	3	4	5	6	7	8	9
2003-04	1,71,91,668	2,46,443	5,54,463	6,572	37,495	17	1305	0.48
2004-05	2,16,35,449	3,08,950	7,72,174	13,600	93,468	0	3,791	0
Apr. 04	21,64,528	2,633	79,560	76	44,845	0	1,588	0
May 04	25,51,985	0	82,149	0	51,236	0	1,496	0
Jun. 04	21,52,644	0	64,017	0	46,120	0	1,364	0
Jul. 04	19,71,231	0	61,125	0	46,090	0	1,491	0
Aug. 04	18,03,263	0	57,926	0	41,923	0	1,358	0
Sep. 04	14,63,682	30,234	49,500	834	66,514	84	2,311	2
Oct. 04	13,20,173	97,381	47,191	2,775	51,813	533	1,846	15
Nov. 04	10,23,111	1,40,680	38,277	4,193	50,088	606	1,953	19
Dec. 04	14,47,464	1,39,550	58,333	4,454	57,740	263	2,403	9
Jan. 05	19,31,290	33,839	76,151	1,091	58,375	200	2,398	7
Feb. 05	17,29,103	4,077	71,546	135	68,768	15	2,902	1
Mar. 05	20,76,975	1,236	86,398	42	93,468	0	3,791	0

Table 2.31: Trends in Single Stock Futures in NSE & BSE

					Open Interes	(at the e	nd of the year	month)
Year / Month	No. of Co	ntracts	ntracts Turnover (Rs. crore)		No. of Con	tracts	Notional Turnover (Rs. crore)	
	NSE	BSE	NSE	BSE	NSE	BSE	NSE	BSE
1	2	3	4	5	6	7	8	9
2003-04	3,23,68,842	1,28,193	13,05,949	5,171	1,53,854	18	4,492	0.58
2004-05	4,70,43,066	6,725	14,84,067	213	3,14,806	46	10,366	0.00
Apr. 04	38,29,403	259	1,21,048	9	1,69,779	43	4,947	0.26
May 04	33,22,799	1,146	92,628	39	98,762	43	2,386	0.19
Jun. 04	31,25,283	0	78,392	0	1,14,925	42	2,873	0.00
Jul. 04	34,92,774	10	94,009	0	1,31,372	41	3,588	0.00
Aug. 04	35,77,911	0	99,591	0	1,67,396	42	4,452	0.00
Sep. 04	37,68,178	1,308	1,07,123	32	2,30,304	42	6,408	0.05
Oct. 04	36,60,047	24	1,11,695	1	2,17,469	45	6,281	0.02
Nov. 04	36,00,135	621	1,13,525	20	2,48,788	46	7,747	0.65
Dec. 04	52,38,498	1,583	1,79,387	50	2,99,997	46	10,256	1.43
Jan. 05	45,51,564	717	1,59,564 2		2,61,971	46	8,632	1.26
Feb. 05	41,67,787	637	1,51,743	21	2,57,797	46	8,969	0.44
Mar. 05	47,08,687	420	1,75,363	17	3,14,806	46	10,366	0.00

Source: NSE, BSE.

Table 2.32: Trends in Index Options in NSE & BSE

					Open Interes	t (at the e	end of the year	month)
Month / Year	No. of Co	of Contracts Turnover (Rs. crore) No. of		No. of Con	No. of Contracts		rnover re)	
	NSE	BSE	NSE	BSE	NSE	BSE	NSE	BSE
1	2	3	4	5	6	7	8	9
2003-04	17,32,414	1	52,823	0.03	14,664	0	519	0
2004-05	32,93,558	75,275	1,21,954	2,297	91,875	0	3,741	0
Apr. 04	1,96,111	0	7,315	0	12,817	0	460	0
May 04	2,96,628	0	10,293	0	14,524	0	431	0
Jun. 04	2,75,825	0	8,473	0	20,161	0	607	0
Jul. 04	3,13,531	0	9,915	0	10,834	0	354	0
Aug. 04	2,26,397	0	7,385	0	22,263	0	727	0
Sep. 04	2,18,355	8,238	7,447	228	59,361	295	2,072	8
Oct. 04	2,35,727	17,883	8,530	514	23,907	394	854	11
Nov. 04	2,33,441	16,156	8,793	482	30,263	423	1,186	13
Dec. 04	2,39,207	13,769	9,711	443	27,061	170	1,126	6
Jan. 05	3,20,098	9,316	12,973	298	36,136	8	1,487	0
Feb. 05	3,13,221	4,499	13,126	149	40,417	0	1,700	0
Mar. 05	4,25,017	5,414	17,992	184	91,875	0	3,741	0

Table: 2.33: Trends in Single Stock Options in NSE & BSE

					Open Interes	t (at the e	end of the year	/ month)
Year / Month	No. of Co	ntracts		Turnover (Rs. crore)		No. of Contracts		rnover re)
	NSE	BSE	NSE	BSE	NSE	BSE	NSE	BSE
1	2	3	4	5	6	7	8	9
2003-04	55,83,071	7,621	2,17,212	332	29,779	0	871	0
2004-05	50,45,112	89	1,68,858	3	92,497	О	3,154	0
Apr. 04	3,78,626	0	12,376	0	22,404	0	672	0
May 04	3,09,786	0	9,693	0	14,965	0	382	0
Jun. 04	2,69,067	0	7,424	0	20,665	0	523	0
Jul. 04	3,56,977	0	10,296	0	18,413	0	531	0
Aug. 04	3,70,932	0	11,104	0	29,603	0	795	0
Sep. 04	4,81,491	8	14,309	0	90,120	1	2,562	0
Oct. 04	4,50,967	10	14,808	0	28,356	0	864	0
Nov. 04	4,57,968	1	15,210	0	42,703	0	1,354	0
Dec. 04	5,90,300	0	20,796	0	41,808	0	1,436	0
Jan. 05	4,43,963	70	16,601	2	31,872	0	1,086	0
Feb. 05	4,51,550	0	17,137	0	37,827	0	1,329	0
Mar. 05	4,83,485	0	19,103	0	92,497	0	3,154	0

Source: NSE, BSE.

Table 2.34: Category of Members at Derivative Segment of BSE and NSE as on March 31, 2005

Type of Member	BSE	NSE
1	2	3
Trading Members	198	418
Professional Clearing Members	4	18
Trading-cum-Clearing Members	62	160
Trading-cum-Self-Clearing Members	4	96
Total	268	692

Table 2.35: Shares of Various Classes of Traders/ Investors in F & O Turnover in 2004-05

		Trading Volun	ne (Rs. crore)		Po	ercentage Sha	are
Month	Trading Members	Clearing Self Total Members Clearing Members		Total	Trading Members	Trading cum Clearing Members	Trading cum Self Clearing Members
1	2	3	4	5	6	7	8
Apr. 04	1,42,612	2,01,310	96,846	4,40,769	32.36	45.67	21.97
May 04	1,20,176	1,83,453	85,974	3,89,603	30.85	47.09	22.07
June 04	98,932	1,44,612	73,067	3,16,611	31.25	45.67	23.08
July 04	1,12,114	1,61,016	77,562	3,50,691	31.97	45.91	22.12
Aug. 04	1,08,578	1,62,572	80,862	3,52,011	30.85	46.18	22.97
Sep. 04	1,11,252	1,70,321	77,375	3,58,948	30.99	47.45	21.56
Oct. 04	1,19,216	1,75,497	76,315	3,71,028	32.13	47.30	20.57
Nov. 04	1,13,291	1,72,818	74,889	3,60,999	31.38	47.87	20.74
Dec. 04	1,67,456	2,57,587	1,21,307	5,46,350	30.65	47.15	22.20
Jan. 05	1,56,600	2,56,866	1,19,943	5,33,409	29.36	48.16	22.49
Feb. 05	1,34,040	2,56,234	1,17,437	5,07,712	26.40	50.47	23.13
Mar. 05	1,54,490	3,03,868	1,39,841	5,98,199	25.83	50.80	23.38

Source: NSE, BSE.

Put Call Ratio (PCR) is one of the important indicators used by market participants in gauging the market movements. Index put call ratio in fiscal year 2004-05 was in range of 51-99 per cent

showing that number of calls were greater than number of puts. In the last four months, the ratio increased with range bound Nifty. PCR for the stocks was much lower in range of 23 to 39 per cent (Chart 2.10).

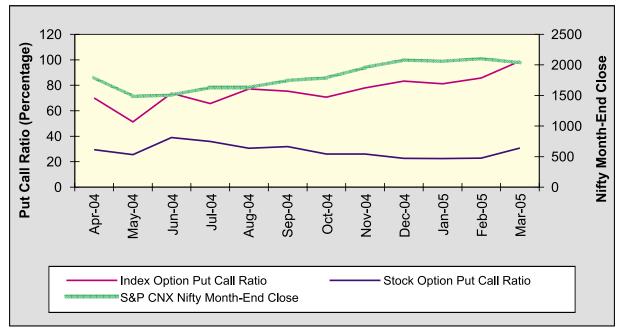


Chart 2.10: Put Call Ratio(NSE) and S&P CNX Nifty Index

#### 3. MUTUAL FUNDS

The growth of mutual fund industry globally can be accredited to increase in the investment opportunities due to liberalisation of capital markets world-wide. In emerging economies, the demand for mutual fund products is expected to increase further due to privatisation of the pension /insurance systems. Indian investors prefer to invest in capital markets through some institutional structure having professional expertise in fund management.

Net resource mobilisation by mutual funds (MFs) declined by 95.3 per cent to Rs. 2,200 crore in 2004-05 as compared with Rs. 46,808 crore in the previous year (Table 2.36). The UTI Mutual Fund and other public sector mutual funds witnessed net outflows of Rs.2,722 crore and Rs.2,677 crore, respectively in 2004-05 as against net inflow of Rs.1,667 crore and Rs. 2,597 crore in 2003-04. The sectoral shares in the gross mobilisation and redemption indicate dominance of private sector mutual funds (Chart 2.11). However, the net resource

mobilisation by private sector mutual funds came down significantly in 2004-05. The major reason behind such performance of MFs has been the redemption pressures mainly on income and gilt schemes. In an environment of rising interest rates, gilt schemes lost some of its appeal. Part of the proceeds redeemed from the mutual fund investments might have been reinvested in the small savings schemes due to attractive rates offered by the Government along with the fiscal incentives.

Scheme-wise, the gross amount of funds mobilised by income oriented schemes amounted to Rs. 7, 98,674 crore in 2004-05 whereas the amount mobilised by equity and balanced schemes amounted to Rs. 37,280 crore and Rs. 3,755 crore, respectively. The percentage share of equity and balanced schemes together in gross funds mobilised was 4.89 per cent only which was meager as compared to income oriented schemes with a share of 95.11 per cent. Similar trend was observed in case of repurchases where income schemes had a lion's share of 96 per

cent with gross redemption of Rs. 8, 03,918 crore. There was a net outflow of Rs. 5,244 crore from income oriented schemes in 2004-05. Equity and balanced schemes experienced a net inflow of Rs. 7,100 crore and Rs. 345 crore, respectively during 2004-05.

The total assets under management went up by 7.2 per cent to Rs. 1,49,600 crore by end of March 2005 from Rs. 1,39,616 crore as on March 31, 2004. In India, the assets under equity funds are meagre as compared to debt similar to many other emerging markets. Assets under income and debt schemes India oriented in were Rs. 1,06,250 crore (71.0 per cent) whereas assets under equity oriented schemes were only Rs. 38, 483 crore (25.7 per cent). There were 450 mutual fund schemes in total as on March 31, 2005 of which, 227 were income/ debt oriented schemes, 188 were growth/ equity oriented schemes and the remaining 35 were balanced schemes (Table 2.37).

Break up of schemes into open-ended and close-ended schemes shows the dominance of open ended schemes (Table 2.38 and Chart 2.12). There were 403 openended schemes of which 200 were income oriented, 169 equity oriented and the rest 34 were balanced schemes in 2004-05. There were 47 close-ended schemes of which 27 were income oriented, 19 equity oriented and only one was balanced scheme.

In the secondary market, mutual funds have an important role to play. Their gross purchases and sales (equity + debt) stood at Rs. 1,07,232 crore and Rs. 89,796 crore, respectively in the secondary market. The net purchase of both equity and debt securities by Mutual Funds amounted to Rs. 17,435 crore in 2004-05 of which 97.4 per cent was in debt (Table 2.39). Another important institutional investor in the capital market was the Foreign Institutional Investors (FIIs). Comparing both the classes of institutional investors, it was found that net investment by mutual funds in debt at Rs. 16,987 crore was much higher than that by FII investment at Rs. 1,759 crore (Table 2.40 and Chart 2.13). Reverse was the case with equity where net investment by FII was much higher (Rs.44,123 crore) as compared with mutual

Table 2.36: Sector-wise Resource Mobilisation by Mutual Funds during 2004-05

(Rs.crore)

	Pri	vate Sector	MFs	Pι	ıblic Sector	MFs		UTI MF*		Grand
Particulars	Open ended	Close ended	Total	Open ended	Close ended	Total	Open ended	Close ended	Total	Total
1	2	3	4	5	6	7	8	9	10	11
Mobilisation of Funds Repurchase/ Redemption Amount	7,20,603 (5,31,939) 7,18,440 (4,90,537)	15,860 (2,710) 10,423 (1,567)	7,36,463 (5,34,649) 7,28,864 (4,92,104)	55,771 (31,548) 58,976 (28,911)	818 (0) 290 (41)	56,589 (31,548) 59,266 (28,952)	45,630 (23,992) 48,560 (21,999)	1,026 (0) 818 (327)	46,656 (23,992) 49,378 (22,326)	8,39,708 (5,90,189) 8,37,508 (5,43,382)
Net Inflow/ Outflow of Funds	2,163 (41,402)	5,437 (1,143)	7,600 (42,545)	-3,205 (2,638)	528 (-42)	-2,677 (2,597)	-2,930 (1,994)	208 (-327)	-2,722 (1,667)	2,200 (46,809)

Note: Figures in parentheses relate to 2003-04.

<sup>\*</sup> Net assets of Rs. 980.26 crore pertaining to Fund of Funds schemes is not included in above data (i.e. for the period April 2004- March 2005).

Table 2.37: Scheme-wise Resource Mobilisation by and Assets under Management of Mutual Funds: 2004-05

	Schemes	No. of Schemes	Gross Funds Mobilised	Repurchase/ Redemption	Net Inflow/ Outflow of Funds	Cumulative Asset Under Management as on March 31, 2005	Percentage Variation over March 31, 2004
	1	2	3	4	5	6	7
<b>A</b> :	Income / Debt Oriented Schemes of which	227	7,98,674	8,03,918	-5,244	1,06,250	-3.63
i.	Liquid/ Money Market	39	6,38,594	6,28,246	10,348	54,068	29.65
ii.	Gilt	30	4,361	5,706	-1,345	4,576	-24.05
iii.	Debt	158	1,55,719	1,69,966	-14,247	47,606	-23.86
В:	Growth / Equity Oriented Schemes of which	188	37,280	30,180	7,100	38,484	52.22
i.	ELSS	37	155	349	-194	1,727	3.49
ii.	Others	151	37,126	29,832	7,294	36,757	55.66
C:	Balanced Schemes	35	3,755	3,410	345	4,867	19.29
Tota	I (A+B+C)	450	8,39,708	8,37,508	2,200	1,49,600	7.15

Table 2.38: Number of Schemes by Investment Objectives as on March 31, 2005

		Schemes	Open-ended	Close-ended	Total
		1	2	3	4
<b>A</b> :	Inco	ome / Debt Oriented Schemes	200	27	227
	i.	Liquid/ Money Market	39	0	39
	ii.	Gilt	30	0	30
	iii.	Debt(other than assured return)	131	27	158
	iv.	Debt (assured return)	0	0	0
В:	Gro	wth / Equity Oriented Schemes	169	19	188
	i.	ELSS	20	17	37
	ii.	Others	149	2	151
C:	Bala	anced Schemes	34	1	35
Tota	I (A+I	B+C)	403	47	450

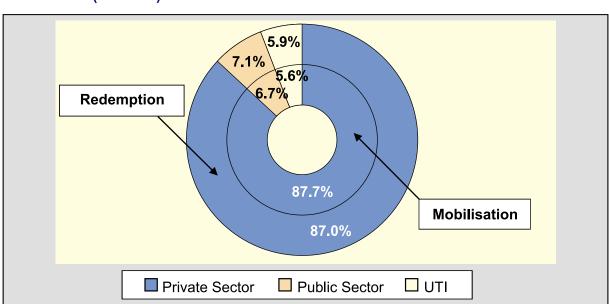


Chart 2.11: Sectoral Share(%) in Gross Mobilisation and Redemption (2004-05)

funds (Rs. 448 crore). Less investment in debt market by FIIs can be explained in terms of regulatory restrictions which put the cumulative limits of US \$ 1.75 billion on G-sec including Treasury bills and US \$ 500 million on corporate debt.

Chart 2.12: Percentage Share of Open-ended and Close-ended Funds: Scheme-wise Classification (2004-05)

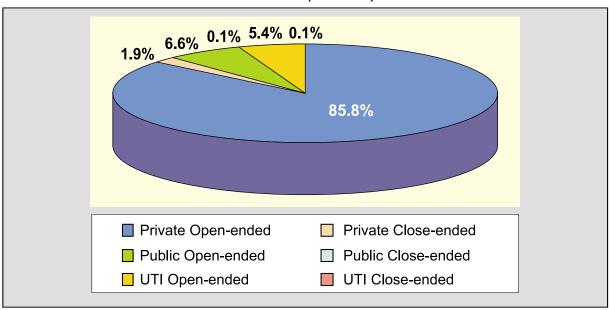


Table 2.39: Transactions on Stock Exchanges by Mutual Funds (2004-05)

		Equity			Debt			Total	
Month	Gross Purchases	Gross Sales	Net Pur- chases/ Sales	Gross Purchases	Gross Sales	Net Pur- chases/ Sales	Gross Purchases	Gross Sales	Net Pur- chases/ Sales
1	2	3	4	5	6	7	8	9	10
Apr. 04	3,675	3,895	-219	6,106	3,654	2,452	9,781	7,548	2,232
May 04	4,857	3,852	1,005	4,312	3,684	627	9,169	7,536	1,632
June 04	2,130	2,390	-260	4,067	5,338	-1,272	6,197	7,728	-1,531
July 04	2,679	3,149	-470	4,357	4,006	350	7,036	7,156	-120
Aug. 04	2,822	2,920	-98	4,583	3,228	1,355	7,405	6,148	1,257
Sep. 04	3,530	3,759	-229	4,621	3,412	1,209	8,151	7,171	980
Oct. 04	2,861	3,283	-422	2,355	2,819	-464	5,216	6,102	-886
Nov. 04	3,589	4,285	-695	3,709	2,527	1,182	7,299	6,812	487
Dec. 04	4,796	5,152	-356	6,573	3,873	2,701	11,369	9,024	2,345
Jan. 05	3,768	3,220	548	5,818	3,137	2,680	9,585	6,357	3,228
Feb. 05	3,845	3,743	102	7,498	4,744	2,754	11,343	8,487	2,855
Mar. 05	6,493	4,950	1,543	8,189	4,776	3,413	14,682	9,726	4,956
Total	45,045	44,597	448	62,186	45,199	16,987	1,07,232	89,796	17,435

Table 2.40: Investment by MFs and FIIs

(Rs. crore)

2004-05	1	nvestment tual Funds	Net Investr	et Investment by Fils		
	Equity	Debt	Equity	Debt		
1	2	3	4	5		
April	-219	2,452	7,638	-919		
May	1,005	627	-3,247	-300		
June	-260	-1,272	516	-790		
July	-470	350	914	-200		
August	-98	1,355	2,892	-371		
September	-229	1,209	2,386	190		
October	-422	-465	3,263	-1,235		
November	-695	1,182	6,741	1,445		
December	-356	2,701	6,684	3,456		
January	548	2,680	457	-774		
February	102	2,754	8,376	833		
March	1,543	3,413	7,502	424		
Total	448	16,987	44,123	1,759		

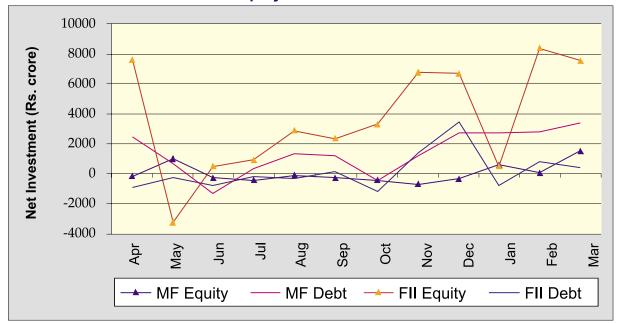


Chart 2.13: Net Investment in Equity and Debt: MFs and Flls

# 4. FOREIGN INSTITUTIONAL INVESTORS

Foreign Institutional Investors (FIIs) invest in various countries including emerging markets in order to reduce risk through portfolio diversification and also to receive additional returns. Country-specific factors are important determinants of such institutional investment. Strong macro-economic fundamentals of the Indian economy coupled with other positive factors like good corporate results, low inflation, abolition of long-term capital gains tax, transparent regulatory system, etc., were the major factors which influenced the FII investment in India during 2004-05. The total number of FIIs registered with SEBI went up from 540 as on March 31, 2004 to 685 as on March 31, 2005, an increase of 145 over the year.

The FIIs continued to remain bullish on the Indian securities for the second year in succession. The net FII investment in 2004-05 (including debt) was Rs. 45,881 crore which was marginally higher than Rs.45,765 crore in 2003-04 (Table 2.41 and Chart 2.14). In terms of the US Dollar, the net investment

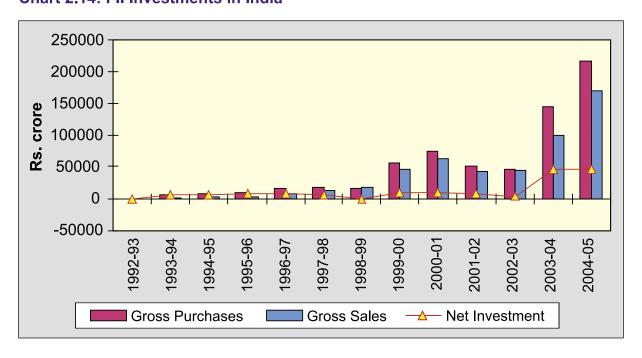
by FIIs in 2004-05 was US \$ 10.17 billion, which was the highest ever net investment by FIIs in any year since 1992-93 when FIIs were allowed to invest in Indian securities (Chart 2.15). The cumulative investment by FIIs by the end of 2004-05 was US \$ 35.93 billion.

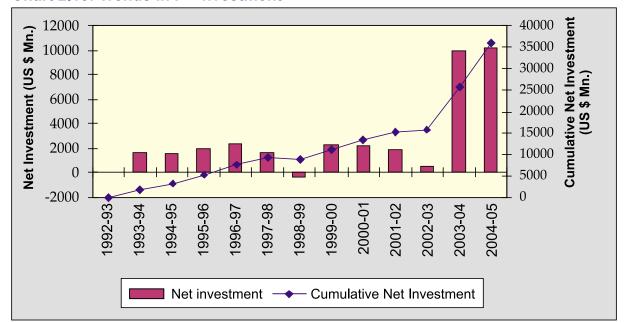
The pace of investment was slow in the first two quarters of the year, but increased considerably in the subsequent months (Table 2.42). The gross purchases and sales in 2004-05 were Rs. 2,16,953 crore and Rs. 1,71,073 crore, respectively. Comparing with 2003-04, there was an increase of 49.77 per cent in gross purchases and 72.64 per cent in gross sales by FIIs. The highest gross purchases and sales were observed in the month of March 2005. The highest net investment was witnessed in the month of December 2004 (US \$ 2.23 billion), followed by February 2005 (US \$ 2.10 billion), March 2005 (US \$ 1.81 billion) etc. Bulk of the net investment by FIIs was in equities, i.e., 96 per cent of net investment or Rs. 44,123 crore, whereas investment in debt was only Rs. 1,759 crore (Table 2.43).

Table 2.41: Investments by FIIs

Year	Gross Purchases (Rs. crore)	Gross Sales (Rs. crore)	Net Investment (Rs. crore)	Net Investment (US \$ Mn.)	Cumulative Net Investment (US \$ Mn.)
1	2	3	4	5	6
1992-93	17	4	13	4	4
1993-94	5,593	466	5,126	1,634	1,638
1994-95	7,631	2,835	4,796	1,528	3,167
1995-96	9,694	2,752	6,942	2,036	5,202
1996-97	15,554	6,979	8,574	2,432	7,634
1997-98	18,695	12,737	5,957	1,650	9,284
1998-99	16,115	17,699	-1,584	-386	8,898
1999-00	56,856	46,734	10,122	2,339	11,237
2000-01	74,051	64,116	9,934	2,159	13,396
2001-02	49,920	41,165	8,755	1,846	15,242
2002-03	47,061	44,373	2,689	562	15,805
2003-04	1,44,858	99,094	45,765	9,950	25,755
2004-05	2,16,953	1,71,072	45,881	10,172	35,927

Chart 2.14: FII Investments in India





**Chart 2.15: Trends in FII Investment** 

The FIIs continue to be one of the major players in the stock market (Chart 2.16). The mutual funds were generally active when FIIs were cautious, except in March 2005, when both the institutional investors were active.

Mutual funds' exposure to equity market improved significantly in the last quarter of the year reflecting large mobilisation of resources under equity schemes.

Table 2.42: Month-wise Investments by FIIs during 2004-05

Month	Gross Purchases (Rs. crore)	Gross Sales (Rs. crore)	Net Investment (Rs. crore)	Net Investment (US \$ Mn.)	Cumulative Net Investment (US \$ Mn.)
1	2	3	4	5	6
April	19,692	12,972	6,720	1,483	27,237
May	15,655	19,201	-3,546	-806	26,431
June	10,894	11,168	-274	-57	26,374
July	11,247	10,534	713	157	26,531
August	12,856	10,335	2,521	550	27,081
September	13,097	10,522	2,575	556	27,637
October	16,063	14,035	2,028	439	28,076
November	21,302	13,117	8,185	1,783	29,859
December	25,841	15,701	10,140	2,229	32,087
January	17,502	17,819	-317	-75	32,013
February	24,360	15,151	9,209	2,101	34,114
March	28,444	20,517	7,927	1,813	35,927
Total	2,16,953	1,71,073	45,881	10,172	35,927

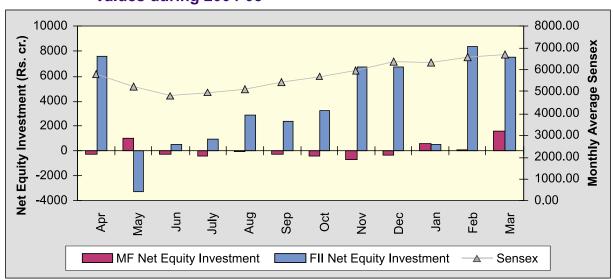


Chart 2.16: Monthly Institutional Investment(Net) and Average Sensex Values during 2004-05

The FIIs were permitted to trade in derivatives market since February 2002. The cumulative FII investment in derivatives was Rs. 1,52,970 crore as on March 31, 2005. Open interest position of FIIs in single stock

futures was 59.0 per cent by end March 2005 followed by index futures (29.7 per cent). The share in index options was 10.9 per cent whereas the lowest investment was in stock options (0.4 per cent) (Table 2.44).

Table 2.43: Instrument-wise FII Investment (2004-05)

(Rs. crore)

		Equity		Debt				
Month	Gross Purchases	Gross Sales	Net Investment	Gross Purchases	Gross Sales	Net Investment		
1	2	3	4	5	6	7		
April	19,692	12,053	7,638	0	919	-919		
May	15,532	18,778	-3,247	123	423	-300		
June	10,634	10,117	516	261	1,051	-790		
July	11,096	10,183	914	150	351	-200		
August	12,595	9,702	2,892	261	633	-371		
September	12,385	10,000	2,386	712	522	190		
October	15,752	12,489	3,263	310	1,546	-1,235		
November	18,340	11,600	6,741	2,962	1,518	1,445		
December	20,626	13,943	6,684	5,215	1,760	3,456		
January	16,651	16,194	457	851	1,625	-774		
February	22,388	14,012	8,376	1,972	1,139	833		
March	27,311	19,808	7,502	1,133	709	424		
Total	2,03,002	1,58,879	44,123	13,951	12,193	1,759		

Table 2.44: Notional Value of Open Interest of FIIs in Derivatives

Items	Apr. 04	May 04	Jun. 04	Jul. 04	Aug. 04	Sep. 04	Oct. 04	Nov. 04	Dec. 04	Jan. 05	Feb. 05	Mar. 05
1	2	3	4	5	6	7	8	9	10	11	12	13
Index Futures	998	1,327	996	1,011	914	1,862	1,770	1,735	2,019	2,077	2,407	3,567
Index Options	47	22	57	17	214	478	176	321	303	707	527	1,307
Stock Futures	2,944	1,416	1,522	1,403	2,166	3,013	3,720	3,735	6,537	5,963	5,838	7,072
Stock Options	0	2	13	0	8	51	5	5	10	2	9	43
Total	3,989	2,767	2,588	2,431	3,302	5,404	5,671	5,796	8,869	8,749	8,781	11,989
Change in open position	594	-1,222	-179	-157	871	2102	267	125	3,073	-120	32	3,208
% Change	17.51	-30.63	-6.47	-6.07	35.83	63.66	4.94	2.20	53.02	-1.35	0.37	36.53
Cumulative FII Investment Change	1,13,809	1,10,263	1,09,989	1,10,702	1,13,223	1,15,798	1,17,826	1,26,011	1,36,151	1,35,834	1,45,043	1,52,970
in Cumulative												
Investment	6,720	-3,546	-274	713	2,521	2,575	2,028	8,185	10,140	-317	9,209	7,927
% Change	6.27	-3.12	-0.25	0.65	2.28	2.27	1.75	6.95	8.05	-0.23	6.78	5.47

## 5. DEVELOPMENTS IN DEBT MARKET

#### I. Bond Markets: Global Trend

Bond market behaviour in the major international markets was mainly influenced by international liquidity and policy stance of the central banks. The overall liquidity condition continued to remain comfortable during 2004-05. This had an enduring impact on the bond prices. As a result, the long-term yields in the major economies either declined or remained broadly steady over the year. The short term yields, however, looked up heralding turnaround in the interest rate cycle following signs of rising inflation expectations. Many central banks, including the Federal Reserve revised their policy rates upward in a measured way. Consequently, the sovereign yield curve continued to flatten, driven by rise in short-term rates. In the Euro area, as the growth impulse was rather hesitant, the policy rates remained unchanged. Nevertheless, the shape of the yield curve was flat as the decline in the long-term yields was more pronounced. With the flattening of the yield curve, the term spread narrowed in most parts of the globe.

Following comfortable liquidity condition, the credit spread also narrowed in the major economies. In the emerging markets, particularly in the Asia-Pacific region, the outlook was better with upgradation of sovereign ratings of many countries such as Brazil, India, Indonesia, Malaysia, Mexico, Russia, South Africa, Turkey and Venezuela. The local currency bonds were in demand due to yield differential. There was large inflow of funds into the debt markets of the emerging economies in search of high yields. In the

emerging markets, together with bond prices, other asset prices like equity, real estate also hardened significantly during 2004-05.

#### II. Indian Wholesale Debt Market

In the WDM segment of NSE, the net traded value and the number of trades declined by 32.6 per cent and 34.4 per cent, respectively in 2004-05 over the previous year. Month-wise trend shows that there was a continuous fall in the net traded value from April 2004 to August 2004 (Table 2.45). However, in September 2004, it went up to Rs.87,695 crore registering a growth of 37.4 per cent over the previous month. The net traded value could not reach this level thereafter. The highest net traded value was observed in April 2004 (Rs.1,33,478 crore) and the lowest in November (Rs.45,541 crore) during 2004-05. The net traded value remained below the previous year's level in each month except April 2004 and February

2005 (Chart 2.17). The average daily traded value worked out for 2004-05 was Rs.3,039 crore, which was 32.1 per cent lower than that of Rs.4,477 crore for 2003-04. Monthwise, the highest average daily traded value was recorded in April 2004 (Rs.6,067 crore). The trend in the number of trades broadly mimicked the trend in the net traded value.

Instrument-wise, the government dated securities continued to dominate the transactions in the WDM segment of NSE, although their share declined considerably from 92.6 per cent in 2003-04 to 81.7 per cent in 2004-05 (Table 2.46). On the other hand, the share of Treasury bills traded in the WDM segment of NSE rose significantly from 4.2 per cent to 14.1 per cent during the same period. This indicates the preference of the market players to remain liquid in an uncertain interest rate environment. The combined share of the government dated securities and Treasury bills also declined,

Table 2.45: Business Growth on the WDM Segment (NSE)

		2003-04		2004-05				
Month	Net Traded Value	Average Daily Traded Value	Number of Trades	Net Traded Value	Average Daily Traded Value	Number of Trades		
1	2	3	4	5	6	7		
Apr.	1,01,052	4,812	15,512	1,33,478	6,067	19,075		
May	1,23,359	5,140	18,651	91,340	3,806	13,097		
Jun.	1,26,672	5,067	18,400	82,453	3,171	11,382		
Jul.	1,31,027	4,853	18,220	66,012	2,445	9,303		
Aug.	1,62,737	6,509	22,753	63,806	2,552	9,241		
Sep.	1,25,199	4,815	17,152	87,695	3,508	12,659		
Oct.	1,43,404	5,975	20,465	55,770	2,425	8,437		
Nov.	80,903	3,518	11,737	45,541	1,980	5,767		
Dec.	83,906	3,227	12,529	72,593	2,792	10,321		
Jan.	77,533	2,982	11,407	61,205	2,550	8,384		
Feb.	61,499	2,795	8,675	73,588	3,066	10,156		
Mar.	98,806	3,952	14,017	53,812	2,242	6,486		
Total	13,16,097	4,477	1,89,518	8,87,294	3,039	1,24,308		

Source: NSE.

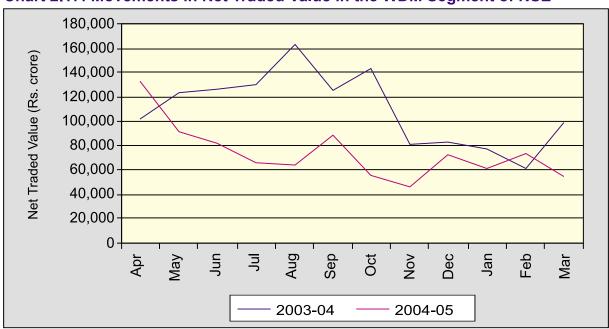


Chart 2.17: Movements in Net Traded Value in the WDM Segment of NSE

Table 2.46: Instrument-wise Share of Securities Traded in the WDM Segment (NSE)

(Per cent)

		200	3-04			200	4-05	
Month	Govt. Dated Securities	T-Bills	PSU / Institu- tional Bonds	Others	Govt. Dated Securities	T-Bills	PSU / Institu- tional Bonds	Others
1	2	3	4	5	6	7	8	9
Apr.	91.01	4.95	2.67	1.37	92.46	4.01	1.72	1.81
May	93.36	3.07	2.09	1.48	87.67	8.89	1.89	1.55
Jun.	95.80	2.32	1.11	0.77	84.82	10.63	2.55	2.00
Jul.	94.48	3.20	1.67	0.65	81.72	13.72	2.07	2.49
Aug.	94.53	2.60	2.15	0.72	85.79	10.04	2.15	2.02
Sep.	91.32	5.17	2.56	0.95	84.90	11.31	1.54	2.25
Oct.	92.74	3.92	2.40	0.94	82.74	13.61	1.58	2.07
Nov.	91.62	5.72	1.68	0.98	70.14	25.61	1.96	2.29
Dec.	91.31	5.34	2.24	1.11	78.42	16.75	1.88	2.95
Jan.	90.71	5.98	1.66	1.65	73.80	21.48	2.15	2.57
Feb.	90.89	6.42	1.78	0.91	73.99	21.37	2.51	2.13
Mar.	89.29	5.79	2.48	2.44	62.46	31.38	2.42	3.74
Average	92.60	4.23	2.06	1.11	81.69	14.07	2.01	2.23

Source: NSE.

Table 2.47: Share of Participants in Turnover of WDM Segment (NSE)

(Per cent)

			2003-04					2004-05		
Month	Trading Members	FIs/MFs/ Corp- orates	Primary Dealers	Indian Banks	Foreign Banks	Trading Members	FIs/MFs/ Corp- orates	Primary Dealers	Indian Banks	Foreign Banks
1	2	3	4	5	6	7	8	9	10	11
Apr.	32.55	3.40	18.65	35.91	9.49	33.75	5.69	18.92	35.71	5.93
May	32.28	3.83	18.74	36.89	8.26	32.90	5.24	17.88	35.57	8.41
Jun.	33.59	3.58	19.03	37.08	6.72	30.78	6.03	19.60	33.96	9.63
Jul.	33.15	5.10	17.77	37.37	6.61	33.33	7.03	19.15	28.88	11.61
Aug.	33.34	4.97	16.34	39.09	6.26	32.27	6.04	20.60	25.23	15.86
Sep.	36.13	5.33	15.32	37.01	6.21	33.97	4.99	21.49	25.79	13.76
Oct.	35.78	5.81	16.38	35.86	6.17	34.17	4.54	18.64	27.08	15.57
Nov.	40.68	5.16	14.61	33.90	5.65	36.30	4.28	16.73	23.30	19.39
Dec.	35.49	4.25	16.00	37.65	6.61	39.94	3.33	18.10	23.94	14.69
Jan.	35.78	4.47	17.38	34.85	7.52	34.07	4.04	16.80	26.64	18.45
Feb.	36.32	3.93	17.28	32.54	9.93	34.26	4.66	15.27	29.74	16.07
Mar.	36.21	3.96	16.30	33.82	9.71	33.15	4.73	16.91	33.49	11.72
Average	34.80	4.56	17.03	36.36	7.25	33.96	5.14	18.50	29.90	12.50

Source: NSE.

although modestly from 96.8 per cent in 2003-04 to 95.8 per cent in 2004-05. The percentage share of "others" which include mainly corporate debt securities, improved from 1.1 per cent to 2.2 per cent during the same period. This is a healthy sign given the need for the development of the corporate debt market. The share of PSU/institutional bonds remained unchanged at 2.0 per cent.

With regard to the market share of participants, the trading members dominated the debt market although their share of participation declined marginally from 34.8 per cent in 2003-04 to 34.0 per cent in 2004-05

(Table 2.47). One of the most notable developments during 2004-05 was the significant decline in the share of Indian banks which fell from 36.4 per cent in 2003-04 to 29.9 per cent in 2004-05. Besides more reliance on repo transactions, the RBI policy to allow Indian banks to hold more government securities under the category of 'held to maturity' could be the possible reason for decline in their share. It is also important to note that the share of foreign banks jumped from 7.3 per cent to 12.5 per cent during the same period. The rise in the shares of FIs/MFs/corporates and mutual funds was modest.