Some Aspects of the Indian Stock Market in the Post-Liberalisation Period

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Reprinted from
Journal of Indian School of Political Economy
Vol. XI, No. 4, October-December 1999

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As a part of the process of economic liberalisation, the stock market has been assigned an important place in financing the Indian corporate sector. Besides enabling mobilising resources for investment, directly from the investors, providing liquidity for the investors and monitoring and disciplining company management company managements are the principal functions of the stock markets. This paper examines the developments in the Indian stock market during the `nineties in terms of these three roles. Share price indices have been constructed for the years 1994 to 1999 at select company category and industry levels to bring out the investor preferences and their implications for the resources mobilising capacity of different segments of the corporate sector.

Introduction

Under the structural adjustment programme many developing countries made substantial policy changes to pull down the administrative barriers to free flow of foreign capital and international trade. In the same vein, restrictions and regulations on new investments in reserved areas for public sector witnessed radical change. Strengthening of capital markets was advocated for successful implementation of the privatisation programmes and attracting external capital flows [World Bank, 1996, p. 106; UN, 1996, p. 4].[1] The main attraction of the capital markets is that they provide for entrepreneurs and governments a means of mobilising resources directly from the investors, and to the investors they offer liquidity [*India*, 1986, p. 6]. It has also been suggested that liquid markets improve the allocation of resources and enhance prospects of long term economic growth [Demirguc-Kunt and Levine, 1996, Pp. 291-321]. Stock markets are also expected to play a major role in disciplining company managements.

In India, stock market development received emphasis since the very first phase of liberalisation in the early 'eighties. Additional emphasis followed after the liberalisation process got deepened and widened in 1991 as development of capital markets was made an integral part of the restructuring strategy. After 1991, as a part of the de-regulation measures, the *Capital Issues Control Act, 1947* that required all corporate proposals for going public to be examined and approved by the Government, was dispensed with [Narasimham Committee Report, 1991, p. 120].[2] The Securities and Exchange Board of India (SEBI) which was set up in early 1988 was given statutory recognition in January 1992 to frame rules and guidelines for various operations of the Stock Exchanges in India. The Over the Counter Exchange of India (OTCEI) established earlier for serving the smaller companies became operational in September 1992 and the National Stock Exchange was set up in Mumbai in 1994. India's official *Economic Survey 1992-93*, observed that the process of reforms in the capital market

> ... needs to be deepened to bring about speedier conclusion of transactions, greater transparency in operations, improved services to investors, and greater investor protection while at the same time *encouraging corporate sector to raise resources directly from the*

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This is a revised and updated version of a paper prepared under the project Global Capital Flows and the Indian Stock Market sponsored by the Indo-Dutch Programme on Alternatives in Development (IDPAD). The authors wish to thank S.K. Goyal, the Project Director, for his support and guidance. Among the project personnel the authors wish to thank especially Jan ter Wengel, B.P. Sarkar, Bhupesh Garg, Sandip Sarkar, and K.R. Tripathi. Vinish Kathuria and Alok Puranik offered many useful suggestions. The usual disclaimers apply.

[Since this October-December, 1999, issue of the Journal has been delayed by a quarter, the revised version of this paper could incorporate some of the information beyond December, 1999. - Editor]

> *market on an increasing scale*. Major modernisation of the stock exchanges to bring them in line with world standards in terms of *transparency and reliability is also necessary if foreign capital is to be attracted on any significant scale* (emphasis added) [*Economic Survey*, 1992, p. 67].

This paper seeks to examine the developments in the Indian stock market in the post-liberalisation period in respect of the main functions of resource mobilisation and providing liquidity. The detailed exercises cover 1996 to 1999 and are based on the daily trade data at The Stock Exchange, Mumbai (BSE).[3] A further attempt has been made to examine the share price movements during 1994 to 1999 at certain company category and industry levels. An attempt has also been made to study the implications of the prevailing shareholding pattern of listed companies for monitoring the managements. Another important aspect, relating to foreign portfolio investments on the Indian stock exchanges, forms the subject matter of the accompanying paper `Foreign Institutional Investments and the Indian Stock Market'.

Growth of the Indian Stock Market

Stock exchanges have a long presence in India. The BSE, the oldest one, was established in 1875. At the time of Independence there were seven stock exchanges functioning in different parts of the country. The 'eighties witnessed impressive expansion in the number of listed companies, amount of capital listed, market capitalisation and value of shares sold and purchased on the exchanges (Table 1). Eleven stock exchanges were given recognition during this period. The number increased further to 22 (excluding the National Stock Exchange) by 1995. The overall number of exchanges continues to be the same. The expansion during the 'eighties was probably the after-effect of the acceptance of the recommendations of the Study Group on Financing of the Private Corporate Sector in the Sixth Five Year Plan (1980-81 to 1984-85). The Study Group suggested measures (i) to improve attraction of various investment instruments for small savers; and (ii) strengthen the infrastructure of the capital markets [*India*, 1982, Pp. 117-121; Nagaraj, 1996, Pp. 2,553-63].

Table 1. Select Indicators of Stock Market Growth

(Amount in Rs Crore)

Year	Number of Stock Exchanges#	Number of Listed Cos.	Market Value of Capital of Listed Cos.	GDP at Current Prices	Market Capitalisation as % of GDP [(4)/(5) x 100]
(1)	(2)	(3)	(4)	(5)	(6)
1980	9	2,265	6,750	1,22,772	5.50
1985	14	4,344	25,302	2,32,370	10.89
1991	20	6,229	1,10,279	5,52,768	19.95
1995	22	9,077	6,39,575	9,92,802	64.42

Note: Market capitalisation and GDP correspond to calendar and financial years, respectively.
\# Excluding the National Stock Exchange (NSE).

Source: Based on: (i) Bombay Stock Exchange Official Directory, `Organisation of the Stock Market in India', Vol. 9(II), 1997 and (ii) Bombay Stock Exchange, *The Stock Market Today*, 1992. GDP data are taken from *Economic Survey*: 1997-98.

Dilution of foreign equity by FERA (*Foreign Exchange Regulation Act*, 1973) companies[4] during the latter half of the 'seventies and early 'eighties also helped in popularising stock market as a means of investment by individual investors. Due to the relatively higher return on the shares of FERA companies, it was considered safer and more profitable by the general Indian public to subscribe to public issues by FERA companies [Goyal, 1979].[5] The attraction of FERA companies for the Indian shareholders can be gauged from the fact that a number of issues were oversubscribed multiple times [Chaudhuri, 1979, Pp. 734-44].[6]

The growth in numbers and paid-up capital

(PUC) may not fully reflect the importance of the stock market in the economy. The market capitalisation ratio which is arrived at by dividing the value of listed shares by the GDP is regarded as a measure of the size of stock market in a country. The ratio increased from about 1:5 in 1991 to almost 2:3 by 1995 [Kunt and Levine, 1996].[7] Another indicator of the relative importance of stock market could be the share of equity capital of listed companies in the paid-up capital (PUC) of Indian corporate sector. The value of PUC of companies listed on the stock exchanges of India is, however, not available in a longer time perspective. Since the BSE is the oldest exchange and it has been the most significant one, operations of the BSE can be taken to reflect the growth in size and pattern of stock market in India.[8] At the beginning of the 'nineties, the equity capital of BSE listed companies accounted for a little more than 30 per cent of the paid-up capital of all public limited companies (Tables 2a and 2b). Their share rose sharply thereafter and by 1995-96 almost trebled to 93 per cent. Though this appears to be an over estimate, it does indicate the relatively important place attained by the stock market for the Indian corporate sector [*CMIE, Capital Markets*, 1997].[9]

Resource Mobilisation

With the repealing of the *Capital Issues Control Act, 1947* (CICA) in May 1992 it is no more necessary to obtain prior government approval for access to the capital market. The rapid increase in the number of companies listed on the BSE during the early part of the liberalisation period, has to be seen in this background. The number of companies listed on BSE more than doubled between 1991-92 and 1995-96 and the equity capital increased by more than five times. The number of issues increased from 455 in 1991-92 to nearly 1,700 each in 1994-95 and 1995-96 (Table 3).[10]

Table 2a. Importance of Listed Companies in the Corporate Sector

(Amount in Rs Crore)

Year end # (1)	Number of Public Ltd. Cos. (2)	Number of Cos. Listed on all the Stock Exchanges (3)	No. of Cos. Listed on BSE (4)	Paid-up Capital of all Public Ltd. Cos. (5)	Equity Capital of Cos. Listed on BSE (6)
1990-91	27,358	6,229	2,471	38,567.7	12,205
1991-92	29,792	6,480	2,601	50,809.0	16,128
1992-93	34,112	6,925	2,861	57,929.7	24,527
1993-94	38,000	7,811	3,585	71,836.2	48,809
1994-95	46,662	9,077	4,702	92,422.9	61,514
1995-96	57,402	9,100	5,603	1,13,042.2	1,05,284

Year ending 31st March.
Source: Based on BSE publications and Ministry of Law, Justice & Company Affairs, *Annual Report of the Working and Administration of the Companies Act*, 1956 for various years.

Table 2b. Relative Importance of Listed Companies in the Corporate Sector

Year-end	Number of Listed Cos. As Percentage of All Public Limited Cos.	Number/ PUC of BSE Listed Cos. as Percentage of	
		All Public Limited Cos.	PUC of all Public Limited Cos.
(1)	(2)	(3)	(4)
1990-91	22.77	9.03	31.65
1991-92	21.75	8.73	31.74
1992-93	20.30	8.39	42.34
1993-94	20.56	9.43	67.94
1994-95	19.45	10.08	66.56
1995-96	15.85	9.76	93.13

Source: See Table 2a.

Thereafter, the issues declined steeply and reached 156 in 1997-98, which is about one-third of the 1991-92 level. In terms of the amounts rasied the decline was sharper in case of non-government companies [SEBI, 1998-99].[11] Besides the repealing of CICA, a few major factors seem to be responsible for the initial increase in the number of issues. *First* is the stock scam.[12] Share prices increased rapidly within a span of three months (Jan-Mar 1992) during which time the BSE Sensitive Index (Sensex) more than doubled from about 2,000 to 4,400. This seems to have given the investing public an idea of the windfall gains that can be had from the stock market and created a `herd' mentality. During the boom period, shares of even loss-making companies commanded high premium [India, 1948, p. 5].[13] In such a situation, it would not be difficult to raise money from the market. The *second* factor is the optimism generated among entrepreneurs by the virtual demolition of the industrial licensing system. *Third* is the entry of small companies (especially financial companies) with the main aim of making quick money through price manipulations [SEBI, 1995; CMIE, 1997]. *Last*, is the issues of government companies including banks and public financial institutions which added significantly to the amounts issued.

Table 3. Capital Issues through the Stock Market#: 1991-92 to 1997-98

Year	Number of Issues			Amount Raised (Rs Crore)		
	Government	Non-Govt.	Total	Government	Non-Govt.	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1991-92	31	424	455	4,080	5,361	9,441
1992-93	31	964	995	7,162	18,597	25,759
1993-94	30	1,115	1,145	11,458	20,236	31,694
1994-95	43	1,643	1,686	10,868	26,460	37,328
1995-96	37	1,651	1,688	9,721	14,624	24,345
1996-97	25	863	888	8,340	8,227	16,567
1997-98	38	118	156	8,623	3,236	11,859

Public and Rights issues.

Source: CMIE, *Capital Markets*, October 1998.

Apart from the doubtful quality of many of the new issues, an important case which shook the markets in early 1995 was the Rs 350 crore fully Convertible Debentures issue in February 1995 of M.S. Shoes. The company was accused of inadequate disclosures. Taking advantage of free pricing of issues, many companies charged high premium. But the post-listing returns proved to be disappointing. One major case cited in this regard is the post-listing price of Industrial Development Bank of India, which in July 1995 raised about Rs 2,400 crore at a premium of Rs 120 for a Rs 10 share.[14] Contrary to the expectations, the initial listing price was much lower than the issue price [*Business Standard*, 1995]. The price fell gradually to reached Rs 94 within a few days. During the pre-liberalisation period, proposal for raising capital through public issues were generally for manufacturing companies and involved public financial institutions, which provided assistance (equity or term loans) to the project after appraising the projects.[15] In the post-liberalisation period a good number of companies were not only non-manufacturing ones but the purpose of issue also varied from project finance to working capital. A number of public issues have been made without any critical scrutiny (Table 4). In terms of number, about one-third of the issues were by financial companies with a preponderance of non-banking financial companies (NBFCs) [CMIE, 1998].

Apart from the loss of interest of the general investor due to these developments, the decline in number of issues is attributed to the strengthening of the criteria for public issue by the SEBI. Two main criteria in this regard are: (i) issuing companies should have paid dividend for at least three years out of preceding five years; and (ii) a manufacturing company without the three year track record of dividend payment can access the securities market if its project has been appraised by a public financial institution or a scheduled commercial bank and the appraising agency participates in the project by way of loan or equity to the extent of minimum 10 per cent of the project cost. Subsequently, these norms were made applicable to all types of companies.[16] Regarding these changes, SEBI explained:

> With the rapid expansion in the primary market, there were concerns raised about the quality of some of the issuers who were able to raise funds from the market in the period after the repeal of the Capital Issues (Control) Act, 1947. In response to these concerns, SEBI had strengthened norms for public issues, raised the standards of disclosure in public issues to enhance the level of investor protection without seeking to control the freedom of eligible issuers to enter the market and freely price their issues. This was done in 1995-96... [SEBI, 1996-97; *Economic Times*, 1999].[17]

It appears from Table 4 that the while the changes did make much impact in terms of making more companies get their projects appraised, the stipulation of paying dividends did prevent new companies from entering the market [RBI, 1999,

Table 4. Distribution of Public Issues According to the Appraisal Status

(Number of Issues)

Year	Issues Appraised By FIs/Banks/MFs	Issues not Appraised by such Agencies	Total	Percentage of Unappraised Issues (3)/(4) x 100
(1)	(2)	(3)	(4)	(5)
1994-95	891	452	1,343	33.66
1995-96	582	846	1,428	59.24
1996-97	210	543	753	72.11
1997-98	34	77	111	69.36
1998-99	15	43	58	74.13

Source: (i) 1994-95 to 1996-97: Praxis Consulting & Information Services Pvt. Ltd. *Prime Annual Reports, Part-I: Public Issues, various years*. (ii) 1997-98 and 1998-99: SEBI, *Annual Report: 1998-99*.

Table 5. Proportion of Shares and Debentures in the Financial Assets of Household Sector

(Amount in Rs Cr.)

Year	Total Financial Assets	Of which, Investment in Shares and Debentures	
		Amount	Percentage in Total
(1)	(2)	(3)	(4)
1990-91	56,858	8,412	14.79
1991-92	70,851	15,704	22.16
1992-93	72,099	12,943	17.95
1993-94	1,09,597	14,772	13.48
1994-95	1,45,503	17,381	11.95
1995-96	1,24,871	9,047	7.25
1996-97	1,56,726	10,472	6.68
1997-98	1,80,724	3,637	2.01

Source: Based on India, Central Statistical Organisation, *National Accounts Statistics*, 1995 and 1999.

p. 950; CMIE, 1998, Pp. 16-20].[18]

Thus within a few years of repealing the *Capital Issue Control Act*, restrictions on capital issues had to be introduced, albeit in a different manner, to safeguard investor money and protect the institution of stock market itself. Even in the 'eighties, taking advantage of the boom in the stock market and increase in the exemption limit for capital issue, many non-manufacturing companies issued shares to the public. The rapid growth in the number of listed companies during this period was in part due to the entry of companies promoted by unscrupulous persons who included stock brokers, auditors, and those associated with business houses [Rao, 1997, Pp. 3-12; Rao, 1996-97]. It does appear that while liberalising issue norms after repeal of CICA, this experience was not taken into account. Some of those involved in floating such issues later on became merchant bankers and mutual fund promoters.[19] According to a former President of the BSE, among the `anti-investor steps taken by SEBI or the Government' during the post-liberalisation period, were:

- Abolition of CCI and allowing free pricing of shares - which led to fleecing of investors;
- Licensing of hundreds of Merchant Bankers without ascertaining their credentials and antecedents CRB being the classic example of the same. In the free for all, the only consideration seemed to be collecting money; and
- Clearing all kinds of undesirable issues by fly-by-night operators by issuing them authorisation cards [Damani, 1997, Pp. 5-18].

The fall in new issues is also reflected in the steep decline in the importance of shares and debentures in household savings (Table 5) [CMIE, 1999, p. 101].[20] Further evidence to the decline in the importance of stock market for mobilising resources is reflected in the falling share of new equity capital raised from outside sources in the sources of funds for the large private corporate sector. The share declined sharply from about 33 per cent in 1993-94 to 7.7 per cent in 1997-98 (Table 6). On the other hand, the share of borrowings from banks and financial Institutions recovered from a low of 7.3 in 1993-94 and exceeded the `early' nineties levels by 1995-96.

Table 6. Changing Importance of Select Sources of Funds for the Indian Private Sector

(Percentages)

Year	Percentage Share in Total Sources of Funds		
	Total External# Finance	Fresh Share Issues (incl. premium)	Borrowings from Banks & Institutions (excl. Fixed Deposits and Debentures)
(1)	(2)	(3)	(4)
1991-92	72.0	7.9	24.7
1992-93	74.9	24.7	25.7
1993-94	76.4	33.4	7.3
1994-95	76.9	32.6	21.6
1995-96	71.7	15.1	27.8
1996-97	72.1	8.2	29.4
1997-98	69.4	7.7	28.4

Col. (2) is inclusive of Cols. (3) and (4).
Source: Based on CMIE, Corporate Sector, May 1999.

Liquidity

The aggregate market turnover is an important component in the measurement of the stock market size and liquidity [Kunt and Levine, 1996, p. 295; Gupta, 1992].[21] While the overall turnover at BSE increased significantly during the post-liberalisation period, the increase has been more substantial after 1995-96. The fall in turnover in 1992-93 following the exposure of scam was more than recovered in 1993-94. This is also the year when FIIs made their presence felt. This was, however, followed by decline in trading turnover in 1994-95 and 1995-96 which was attributed to the ban on *badla* [Gupta, 1992, Pp. 85-90; 1996, Pp. 20-28].[22] Following the re-introduction of *badla* in a revised form, turnover more than doubled from about Rs 50,000 crore in 1995-96 to Rs 1,24,000 crore in 1996-97 and further to Rs 2,07,600 crore in 1997-98. 1997 was an important year for the BSE as it was allowed to expand its on-line trading network to locations outside Mumbai. The increase continued in 1998-99 as the turnover at BSE increased by about 50 per cent compared to the previous year (Table 7). These increases appear to contradict the general sentiment reflected in the primary market and may be disguising some of the more serious problems facing the stock market. In this context, it is significant to note that in the face of the growing market turnover, the average number of companies traded (daily) on the BSE declined from June 1996 onwards. The decline appears to be steeper and steadier in case of the number of companies traded relative to those listed. The situation did improve in 1999 as towards the end of the year about two-fifths of the companies were being traded (Annexure and Graph-A).[23]

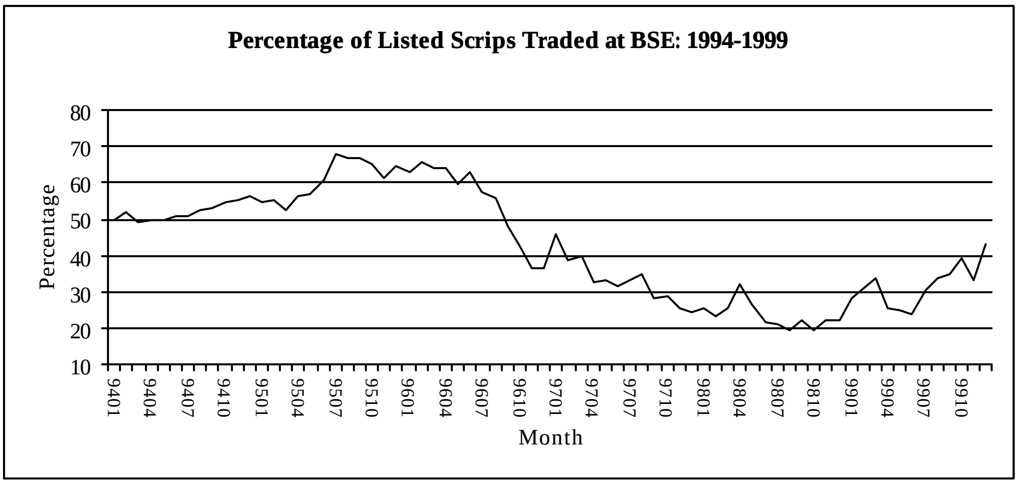
Table 7. Market Turnover at the Bombay Stock Exchange

(Amount in Rs Crore)

Year (1)	Total Turnover (2)	Turnover at BSE (3)	Average Daily Turnover at BSE (4)
1990-91	N.A.	36,012	188.54
1991-92	N.A.	71,777	332.33
1992-93	N.A.	45,696	238.00
1993-94	2,03,705	84,536	387.78
1994-95	1,64,057	67,749	292.02
1995-96	2,27,368	50,064	215.79
1996-97	6,46,116	1,24,284	517.85
1997-98	9,08,691	2,07,644	851.00
1998-99	10,23,381	3,11,999	1,283.95

N.A.: Not Available.
Source: Bombay Stock Exchange, *Facts & Figures, 1997* and BSE, *Stock Exchange Review*, various issues, BSE, website and SEBI, *Annual Report: 1998-99*

Graph - A



Source; Based on CMIE, *Capital Markets*, October 1998. BSE Stock Exchange Review, various issues and the daily trade data obtained from Asian CERC.

In 1997, out of the total number of 5,843 companies listed, 831 were not traded at all. In addition, for more than 2,800 companies, the last traded price was less than Rs 5 per share against the par value of Rs 10.[24] In the following year, the number of non-traded companies more than doubled to 1,800 (Table 8). If the fact that many companies issued shares at heavy premium, the erosion in issue prices will be far more than that reflected from the face values.[25] It thus emerges that out of the nearly six thousand companies listed on the BSE, about 30 per cent were not traded at all during 1998. It appears that a good number of companies whose last traded price was less than Rs 5 ceased to be traded in 1998. Of the total number of companies traded, shares of nearly two-thirds were traded below par. If all those companies which were not traded during the period had their last quotes below par value, the number of below-the-par value cases would be three-fifths of the total listed ones! This could be a reflection of the extent of sickness and crisis in the listed corporate sector and the quality of new public issues.

Table 8. Incidence of Below-par Trading at BSE: 1997 and 1998

Last Traded Price per Share	Number of Companies		Share in Total (%)	
	1997	1998	1997	1998
(1)	(2)	(3)	(4)	(5)
Not Traded#	831	1,805	14.22	30.84
Below Rs 5	2,853	2,041	48.83	34.88
Rs 5 - 10	673	644	11.52	11.00
Sub-Total (below par) (including `not traded')	*4,357*	*4,490*	*74.57*	*76.73*
Rs 10 and above	1,486	1,362	25.43	23.27
Total	5,843	5,852	100.00	100.00

Difference between the number of companies traded and the number of listed companies reported by the BSE.

Source: Generated from BSE company-wise daily trading data.

Concentration in Trading

Heavy concentration in turnover has been an important characteristic of the Indian stock market. While the overall turnover witnessed an impressive increase, the number of companies responsible for the expanded turnover continued to be a few. For instance, out of the turnover of 2,400 companies listed on BSE in 1989-90, the share of top 50 was nearly 82 per cent [Gupta, 1992]; and it stood at nearly 86 per cent in 1996 (Table 9).[26] The concentration remained high in the subsequent years. Shares of different sets of top companies in turnover at the National Stock Exchange (NSE) also reflect high levels of concentration. In case of BSE the share of the top one hundred companies was 96.36 and for NSE it was 97 per cent (Table 10).[27] The increase in concentration is more apparent in the case of the number of share transactions. The top 50 companies accounted for 44.03 per cent of the value of the overall transactions in 1996. This increased to 72.0 per cent in 1998. On a closer examination of the values traded of the top 20 companies, it is observed that there is greater dispersal among the top. Compared to the experience of 1996 to 1998, as we shall see in the following, 1999 presents a somewhat different picture as share prices experienced a general recovery. This was accompanied by a somewhat better distribution among the top companies both in terms of turnover and number of transactions. However, partially at the 100 company level and more so at the 500 company level, the situation in 1999 was similar to that existing in the earlier years.

Table 9. Value Traded and Number of Transactions in Different Groups

(Percentages)

Share of Top$ Companies	Value Traded				No. Of Transactions			
	1996	1997	1998	1999	1996	1997	1998	1999
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Top: 5	67.24	71.36	49.96	37.66	26.57	41.98	25.75	17.47
10	74.57	82.14	67.20	54.70	32.42	54.45	39.25	29.99
20	80.55	89.28	80.18	72.68	37.02	65.02	53.97	44.51
25	81.92	90.74	83.43	76.70	38.60	67.89	58.90	49.41
50	85.76	94.45	90.71	87.11	44.03	75.36	72.07	63.93
100	89.14	97.05	96.36	93.48	50.85	81.35	84.77	76.26
500	96.15	99.59	99.82	99.58	71.78	92.07	96.95	94.36
All	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Traded Cos.	5,612	5,012	4,047	3,929	5,612	5,012	4,047	3,929
No. of Cos. Listed#	5,999	5,843	5,860	5,863	5,999	5,843	5,860	5,863

$ According to annual market turnover.
# At the end of the year.
Source: Generated from BSE company-wise daily trading data.

Table 10. Comparison of Turnover Concentration in BSE and National Stock Exchange: 1998

Top Companies*	Percentage Share	
	BSE	NSE
(1)	(2)	(3)
10	67.20	70
25	83.43	86
50	90.71	93
100	96.36	97
500	99.82	N.A.
All	100.00	100
No. of Companies	4,047	N.A.

* Classified according to the trading values.
Source: Col (2): Table 9 above, and Col (3): NSE *Newsletter*, December 1998.

Not only the value of trading, which might depend upon the price of a share, but also the number of transactions is confined to a few companies. Companies in which 1 lakh or more transactions take place increased and such companies accounted for over 89 per cent of the total turnover in 1998. On the other hand, that trading is only nominal in quite a large number of companies is reflected from the fact that companies in which less than 10 trades took place constituted 22 per cent of the total number of companies traded during the year. Indeed, for half of the companies the number of trades were less than 100! This represented a substantial worsening from the 1996 position (Table 11). The situation appears to have improved relatively in 1999 as companies with less than 10 trades formed only 13.85 per cent of the total possibly due to the improvement in the over all sentiment. In terms of turnover, however, companies with 1,00,000 and more transactions accounted for more than 90 per cent of the total.

Table 11. Distribution of Traded Companies According to the Intensity of Trade

No. of Transactions	Percentage of Companies				Percentage of Turnover	
	1996	1997	1998	1999	1998	1999
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Less than 10	5.54	13.29	23.46	13.85	negl.	negl.
10 - 100	12.18	27.13	27.60	17.51	0.01	negl.
100 - 1,000	45.15	41.64	31.53	32.30	0.22	0.05
1,000 - 10,000	33.52	15.25	13.20	25.71	0.98	0.94
10,000 - 1,00,000	3.43	2.25	3.88	8.32	9.22	7.46
1,00,000 & above	0.18	0.44	1.33	2.32	89.57	91.55
All Traded Companies	100.00	100.00	100.00	100.00	100.00	100.00
No. of Companies	5,612	5,012	4,047	3,929		

Source: Generated from BSE company-wise daily trading data.

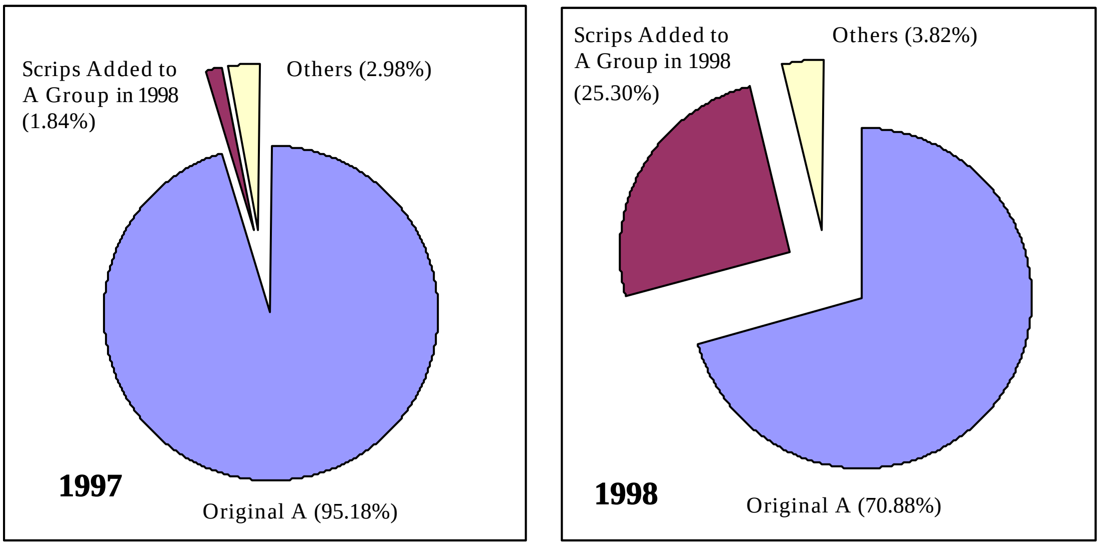
Large turnover companies are only a few and most of them belong to the A Group, or the Specified Group. Under the BSE rules the facility to carry forward the deals without actually taking delivery of shares is permitted only for A Group companies. Because of the carry forward facility, trade in A Group companies is quite often speculative in nature. The size of A Group turnover could be quite related to the number of companies in the Group in which speculative trading is possible. Interestingly, the Group was expanded in early 1998 with the addition of 50 more companies to the existing 100. This seems to have had an immediate impact on the trading values. From Rs 16,419 crore in February 1998 the net turnover of BSE increased to Rs 23,310 crore in March 1998. The turnover of A Group companies increased from Rs 15,717 crore to Rs 22,492 crore [BSE, 1998]. The pattern of the turnover data for different groups of companies shows that the newly included companies accounted for 1.84 per cent of the turnover in 1997. But by 1998 their share increased 25.30 per cent (Table 12 and Graph B). Thus, an overwhelming part of the increased turnover in 1998 was due to the 50 newly added companies. It is important to note that the new entrants included 18 FCCs, six pharmaceutical companies (including FCCs), five banks and four computer software companies. It thus appears that but for the expansion of the specified group, the turnover in 1998 would probably not have been as high as it turned out to be. As we shall see later, the expansion of A Group seems to have had a significant impact on the distribution of turnover at the industry and company category levels. The composition of the A Group underwent another change in September 1999. Interestingly, out of the 17 new entrants as many as 6 are computer software/hardware companies [BSE, 1999].[28] Two each are in pharmaceuticals, telecommu-nication equipment manufacture, and oil refinery.

Table 12. Impact of Enlargement of the Specified Group in February 1998 on Market Turnover

Scrip Category	Net Turnover (Rs Cr.)		Share in Net Turnover (%)	
	1997	1998	1997	1998
(1)	(2)	(3)	(4)	(5)
Original A Group Scrips (100)	1,83,384	1,87,463	95.18	70.88
50 Scrips added to the A Group in February 1998	3,553	66,920	1.84	25.30
Other Scrips	5,736	10,095	2.98	3.82
Total	1,92,673	2,64,479	100.00	100.00

Source: Generated from BSE company-wise daily trading data.

Graph – B
Impact of Enlargement of Specified Group in 1998 in BSE Turnover



The importance of speculative trade is also reflected in the low percentage of actual deliveries. For BSE the delivery ratio in 1997-98 was 12.73 per cent, and for NSE it was 15.97 per cent. While the ratio improved in 1998-99 at BSE to 20.34 per cent, it continued to be low for NSE at 15.15 per cent. At the national level the figures were 9.96 per cent and 12.88 per cent for 1997-98 and 1998-99, respectively [SEBI, 1998-99, Table 2.19]. Thus, an overwhelming part of trade in the Indian stock market may be termed as speculative. This position would worsen if the transactions of the Foreign Institutional Investors (FIIs) are deducted from the total deliveries.[29]

A few top companies may be accounting for substantial turnover due to their large size. Share in aggregate turnover may not, therefore, adequately reflect the trading activity in smaller companies. In spite of the fact that they do not have a high share in aggregate turnover, if the smaller companies have turnover comparable to their respective market capitalisation, their shares could be termed liquid. This, however, does not seem to be the case. In 1996, the turnover to market capitalisation ratio fell progressively sharply from 1.47 for the top five companies to just 1.05 when the top 10 companies are considered. For all the companies for which data on both turnover and market capitalisation are available, the ratio was 0.25. For companies other than the top 500, the ratio was only 0.03 (Table 13). A test check revealed that in 1988 also the picture was similar.

Table 13. Turnover Size-wise Turnover Ratios for BSE Listed Companies: 1996

Top Companies$ (1)	Turnover Ratio (Turnover/Market Capitalisation#) (2)
5	1.47
10	1.05
20	0.64
25	0.61
50	0.48
100	0.37
500	0.29
Remaining Cos.	0.03
All Companies@	0.25

$ Based on market turnover.
# Based on the last traded price during 1996 and amount of equity capital at any time during March 1996 to March 1997.
@ Total number of companies for which we could get information both on equity and share prices were 3,109.

Industry-wise Distribution of Turnover

The annual turnover data can be tabulated to bring out the relative importance of different industries in the changes noticed at the aggregate level. This may indicate the type of industries that are attracting investor attention and resource mobilising potential of different industries. The exercise will have certain limitations in view of (i) heavy concentration in trading and (ii) only a few large companies being engaged in one industry or product. The results based on the industry classification[30] of top 500 companies (according to turnover) in the years 1996, 1998 and 1999 are shown in Table 14. In 1996, public sector banks were at the top with nearly 28 per cent of the turnover followed by the diversified companies which accounted for another 25 per cent. Metals and metal products also had a considerable share (13.59 per cent). Next in importance was Food, Beverages and Tobacco products. In the top ten categories also figured Cement, Power Generation & Distribution, Non-Electrical Machinery, Telecommunications and Textiles.

By 1998, the situation changed significantly. The fourth placed Food, Beverages and Tobacco products climbing to the top with a little more than one-fourth of the turnover. An important new entrant is the second placed Computer Software Development and Training group. Entertainment/Electronic Media, Auto Ancillaries and Allied Products, Personal Care products and Pharmaceuticals also entered the top ten displacing Metals and Metal Products, Power Generation and Distribution, Non-Electrical Machinery, Telecommunications and Textiles. Public sector banks were relegated to the fourth position. Food, Beverages & Tobacco Products and Personal Care Products, which form the core of what are now being termed as the `fast moving consumer goods' (FMCG), together accounted for 29.5 per cent of the turnover in 1998.

Table 14. Shares of Top 10 Industries in Turnover: 1996,1998 and 1999

	1996		1998		Change in Share between 1996 and 1998	1999	
(1)	Industry (2)	% in Total (3)	Industry (4)	% in Total (5)	(6)	Industry (7)	% in Total (8)
1.	Public Sector Banks	27.88	Food, Beverage & Tobacco Prod.	25.98	19.42	Computer Software & Training	29.28
2.	Diversified Companies	25.16	Computer Software & Training	18.32	18.13	Diversified Companies	10.32
3.	Metals & Metal Products	13.59	Diversified Companies	10.23	-14.93	Pharmaceuticals	9.73
4.	Food, Beverages & Tobacco Products	6.56	Public Sector Banks	7.67	-20.21	Food, Beverages & Tobacco Prod.	7.64
5.	Automobiles	3.46	Automobiles	4.96	1.50	Entertainment/ Electronic Media	6.72
6.	Power Gen. & Distn.	2.69	Entertainment/ Electronic Media	4.32	4.27	Computer Hardware	5.09
7.	Cement	2.69	Auto Ancillaries & Allied	3.92	3.10	Telecommu-nication Equipment	4.11
8.	Non-Electrical Match.	1.75	Personal Care Products	3.52	2.72	Public Sector Banks	4.09
9.	Telecommunications	1.72	Pharmaceuticals	3.17	1.97	Automobiles	3.79
10.	Textiles	1.39	Cement	2.59	-0.10	Cement	2.41
	Total of the above	86.89		84.68			83.18

Based on total turnover of top 500 companies in respective years.

By 1999, the relative positions changed further with the Computer Software segment reaching the top with about 29 per cent of the turnover. While the diversified companies retained their share, Pharmaceuticals improved substantially and reached the third position with an almost 10 per cent share. The two new entrants are Computer Hardware and Telecommunication Equipment. These displaced Personal Care Products and Auto Ancillaries and Allied Products. The share of public sector banks fell further to 4.09 per cent. Higher consideration for Computer related companies, pharmaceuticals, consumer products (especially FMCG) and television channels/programming does indicate the possible advantages not available to other industries for raising resources from the public.

The somewhat better distribution of turnover and number of transactions in 1999 could be due to the preference for these sectors shown by the investors cutting across the different groups of companies. The composition of A, B1 and B2 groups was changed again during 1999 [CMIE, 1997, p. 141].[31] During the last quarter (October-December), when the group composition was somewhat stable, computer software/hardware companies and pharmaceutical dominated the B1 Group to such an extent that out of the top 10 turnover companies, eight belonged to the first category and the remaining two the second.[32] The ten companies accounted for half of the turnover of the group. Similarly, in case of the B2 Group, among the top ten, nine belonged to the former category [*Dalal Street Investment Journal*, 2000, Pp. 9-16].[33] The tenth was a company owning a television channel. The combined share of the ten was more than half of the group's total turnover. This sectoral preference may thus have contributed to the decline in concentration in trading values among the top companies in 1999 compared to 1998. The sectoral preference was also reflected in the capital raised and number of issues. Leaving aside the banking sector and public financial institutions, information technology companies mobilised the largest amount of Rs 480 crore (35.5 per cent of the total after excluding Banks and FIs) during April-October 1999. In terms of number of issues also they were far ahead of the rest with 13 out of the 32 issues [SEBI, 1999, Table 9]. Interestingly, the issue of Hughes Software during October 1999 is reported to have attracted subscriptions worth Rs 6,000 crore. A far more impressive response was reported in case of HCL Technologies whose offer through the book-building route attracted bids worth Rs 20,000 crore [CMIE, 1999, p. 73]. In contrast, the Rs 200 crore bond issue of West Bengal Infrastructure Development Corp. received poor response and the closing date was extended by one month [CMIE, 1999, p. 78].

Another aspect of the trading at the BSE could be in viewing the market turnover in terms of foreign-controlled companies (FCCs), public and private sector constituents. We have grouped BSE listed companies under three heads:

(i) **Public Sector:** companies belonging to Central and State public sector including public financial institutions and companies promoted by them (excluding companies promoted with private parties in the joint sector);

(ii) **Indian Large Houses:** those belonging to Large Industrial Houses registered under the MRTP Act and companies promoted or taken-over by the Houses later on and excluding (a) those over which they lost control and (b) those classified as foreign controlled; and

(iii) **FCCs:** companies having 25 per cent or more of foreign equity excluding those in which the foreign equity has been divested) and companies promoted by them.

Classification of the companies was limited to the top 500 companies identified on the basis of the size of their market turnover. The results are presented in Table 15. The exercise could not be extended to 1999 due to the non-availability of shareholding pattern of a large number of companies.

Table 15. Distribution of BSE Turnover According to Major Company Categories: 1996 and 1998

(Amount in Rs Crore)

Category	No. of Companies		Market Turnover		Share in Turnover (%)	
	1996	1998	1996	1998	1996	1998
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Indian Large House Cos.	56	68	40,248	58,659	45.25	22.22
Public Sector Cos.	26	34	29,397	32,418	33.05	12.28
Foreign Controlled Cos.	82	114	7,703	80,886	8.66	30.64
Others	336	284	11,599	92,097	13.04	34.86
All Companies	500	500	88,947	2,63,990	100.00	100.00

Note: Based on turnover data of top 500 companies identified on the basis of their annual market turnover in the respective years.

Source: Generated from BSE company-wise daily trading data.

In 1996, the Indian Large Houses accounted for about 45 per cent of the turnover but by 1998 their share came down to less than half *i.e.,* 22 per cent. The share of public sector companies also recorded a substantial decline from 33 per cent to about 12 per cent.[34] On the other hand, the share of foreign controlled companies increased from 8.66 per cent to about 30 per cent. The number of FCCs in the top 500 of the BSE increased from 82 in 1996 to 114 in 1998. There has been a marked change in the significance of FCCs. Shares of FCCs were obviously at a premium. A noteworthy feature of the period is the substantial increase during 1998 in the share of `Other' companies. To a large extent this is due to the emergence of computer software and pharmaceutical companies in 1998. The important position attained by FCCs is also reflected from the fact that their combined weight in the revised BSE Sensex was 39.58 per cent at the time of revision.35 In all, FCCs in personal care products, foods, beverages and tobacco products had a combined weight of 34.49 per cent in the Sensex [BSE, 1998].

Share Price Changes of BSE Listed Companies

In spite of the increasing availability of a number of indices representing the movement of share prices, the 30-share BSE Sensitive index (Sensex) continues to be the best known and most often referred index [*Economic Survey*, 1998-99, Pp. 56-57].[36] The Sensex is based on market capitalisation. Just before the process of liberalisation began in July 1991, the Sensex having its base as 1978-79 = 100, was in the vicinity of 1,300. Thereafter, it rose quickly to reach a high of 4,467 in April 1992. After the stock market scam broke out, the index fell sharply and by early June 1992, it reached 2,530. After some fluctuations it fell further to 2,037 by April 1993. Following the entry of foreign institutional investors (FIIs), the index started rising again from mid-1993, and by February 1994 it recovered much of the lost ground and reached 4,286. By December 1994, the index reached the post-scam high of 4,631.[37] The slide that followed brought the index down to 3,117 by mid-May 1995. Thereafter till early 1999, the index generally remained in the 3,000 - 4,000 range. Thus, the Sensex remained in a band for about four years. This period happens to be the one in which the turnover at the Bombay Stock Exchange recorded significant increase. In other words, the increases in turnover occurred when the index was oscillating in a band, the primary market was sluggish, shares and debentures as a proportion of household savings were falling and contribution of equity from new issues to company expansion was diminishing. The year 1999, however, presented a different picture. Share prices recovered significantly during the year. From mid-July onwards the index was generally above 4,500, which was the position during September 1994. By the middle of October the Sensex crossed 5,000 for the first time. Among the important policy measures introduced at the beginning of 1999 were (i) amending the *Companies Act, 1956* to allow share buy-backs and free inter-corporate investments from governmental approvals, (ii) reducing the long term capital gains tax from 20 per cent to 10 per cent for resident investors, and (iii) fully exempting the income received from investments in UTI and other mutual funds from income tax. Consequent to the relaxation given for mutual funds, the resources mobilised by the funds increased substantially during the year. During April-December 1999 the funds raised, in gross terms, Rs. 35,915 crore against Rs 16,288 crore during the corresponding months of 1998. Their performance in 1999 turns out to be more spectacular when looked in net terms: Rs 12,194 crore against Rs 950 crore. Another important development in 1999 was the better performance of private sector mutual funds in resource mobilisation [*India*, 1999-2000, p. 67].[38]

Short-term business sentiment is reflected in the daily share price movements. In the long term, however, divergences can occur between different sets of companies. To examine these in detail, we constructed indexes of share prices of companies belonging to different industry/activity groups and ownership categories. For this exercise, we have adopted the Reserve Bank of India (RBI) `Use-Based Classification' of industries [RBI, 1993, Pp. 129-130]. Financial, software and other service sector companies were treated separately. The companies were initially selected in 1998. The main criteria for selection were that the companies should have been traded on at least half of the total number of days traded in 1998 and that there should be wide industry/activity representation. The 500 companies represent 75 industry/activity groups. While extending the exercise to 1999, the same set of companies was maintained. Closing price data was separated for different fortnights starting from January 13, 1994 and ending on December 27, 1999. Wherever prices for a selected day were not available, the closing quotation for the immediately following/preceding days was taken. Changes in each company's equity during 1994 to 1999 were traced. As in the case of analysis of market turnover, for purposes of this exercise, companies having 25 per cent or more of foreign equity by foreign collaborators are classified as foreign controlled companies (FCCs). Also included in this category are companies promoted by FCCs. The 500 companies selected for this exercise covered 92.48 per cent of the market turnover of BSE (excluding turnover of public sector) in 1998. Public sector companies have been kept deliberately outside to enable broad comparison with the earlier study of Institute for Studies in Industrial Development (ISID) which covered the period mid-1991 to the beginning of 1994 [Goyal et al]. The present study covers the six-year period 1994-1999. The two studies have a large number of companies (394) in common. Share price indices for different categories of companies were calculated for each fortnight. The share price index of the 500 companies will be referred to in the following as ISID Index (Sidex).

The methodology for constructing the Sidex is the same as followed by the BSE in constructing its Sensex and National Indices [BSE, 1993, Pp. 2-4]. The price of each component share in the index is weighted by the number of shares outstanding so that it will influence the index in proportion to its respective market capitalisation. The index for a day (fortnight ending) is calculated as the percentage of aggregate market value of the equity shares of all the companies on the day to the average market value of the equity shares of the same set of companies during the base period. This method of compilation has the advantage that it has the necessary flexibility to adjust for price changes caused by the issue of right and bonus shares. In case a company, included in the compilation of the index, issues `bonus shares' the new weighing factor will be the number of equity shares outstanding after the bonus issue has become effective. This new weighing factor will be used while computing the index from the day the change becomes effective. If a company issues `right shares', the weighing factor for this share gets increased by the number of additional shares issued. An offsetting or proportionate adjustment is then made to the Base Year Average. Weighing factors are also revised when new shares are issued by way of conversion of debentures, of loans into equity by financial institutions, mergers, etc. The base year average is also suitably adjusted to offset the change in the market value thus added. The formula for changing the base year average is as follows:

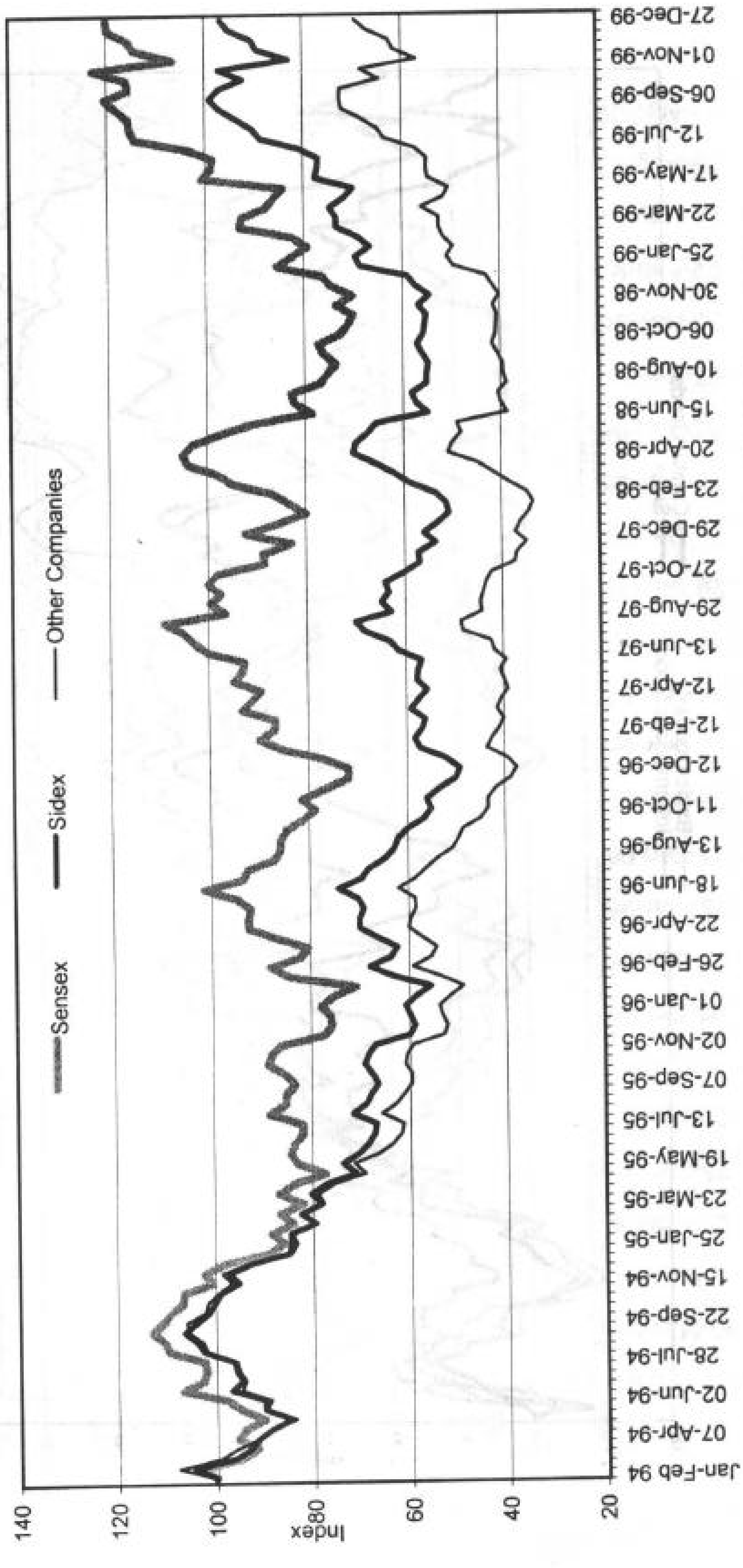
New Base Year Average = Old Base Year Average x (New Market Value/Old Market Value)

In line with Sidex, Sensex has been reworked taking the average of the figures for the three corresponding fortnightly days as the base. The results of the exercise are presented in the following. It can be seen from Graph-C that in the over all, Sensex remain higher than the Sidex and the two started diverging from each other from the beginning of 1995. The divergence between the two grew wider from the middle of 1996. It was only from early 1999 that the two started coming closer once again. It is relevant here to note that the composition of Sensex was revised by the BSE in mid-1996 by replacing half of the 30 companies with new ones. Those brought in included large public sector companies, namely, Bharat Heavy Electricals (BHEL), Steel Authority of India (SAIL), Hindustan Petroleum Corp (HPCL), Indian Petrochemical Corp (IPCL) and Mahanagar Telephone Nigam (MTNL). Public financial institutions -- Industrial Credit & Investment Corp of India (ICICI), Industrial Development Bank of India (IDBI) and the State Bank of India (SBI) -- were also brought in [BSE, 1996, Pp. 5-14]. The latest revision effected in November 1998 removed IPCL and SAIL from the Sensex. Such changes might reflect the prevailing market sentiment better. However, these will not help in understanding the developments in individual sectors. The Graph-C also features index of `Other' companies after excluding the 24 companies common to the latest revised Sensex and the 500. This index is expected to represent the share price movement of companies other than those covered by Sensex. While there is a high degree of similarity in the direction of change in all the three indices, `Others' index remained far lower. At the end of 1999 it was only about 70 per cent of the initial value (beginning of 1994). On the other hand, Sensex was higher by 20 per cent over the corresponding figure. The over all index, namely, Sidex barely managed to reach the 1994 level. Sensex whose composition underwent major changes during the period may thus be projecting a more optimistic picture than what the reality is.

It can be seen from Table 16 that while during the first two and half years, (following liberalisation) the share price index increased by about one and a half times, consumer non-durables showed a distinct pattern as increase in their case was the highest at 2.4 times. Relatively speaking, index of basic goods grew the least followed by capital goods. Having already started from a low level, basic goods suffered the worst again in the following period. The decline in intermediate goods was also substantial. While the poor performance of basic and intermediate goods continued in 1999, capital goods fared somewhat better. This may be due to the classification of computer hardware under this category and presence of a large number of FCCs in the capital goods sector.[39]

Graph C

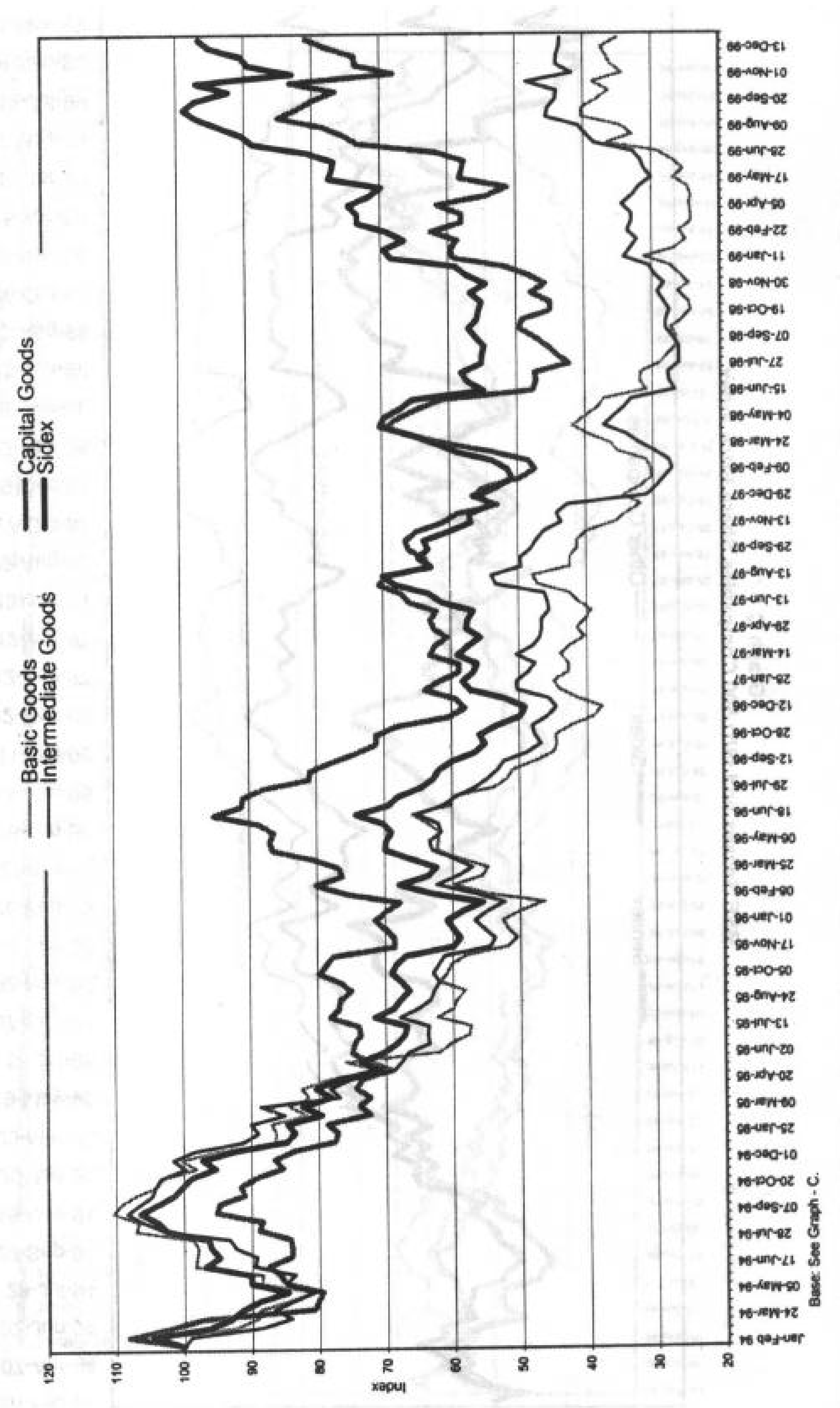
BSE Sensex and ISID 500 Companies Share Price Index



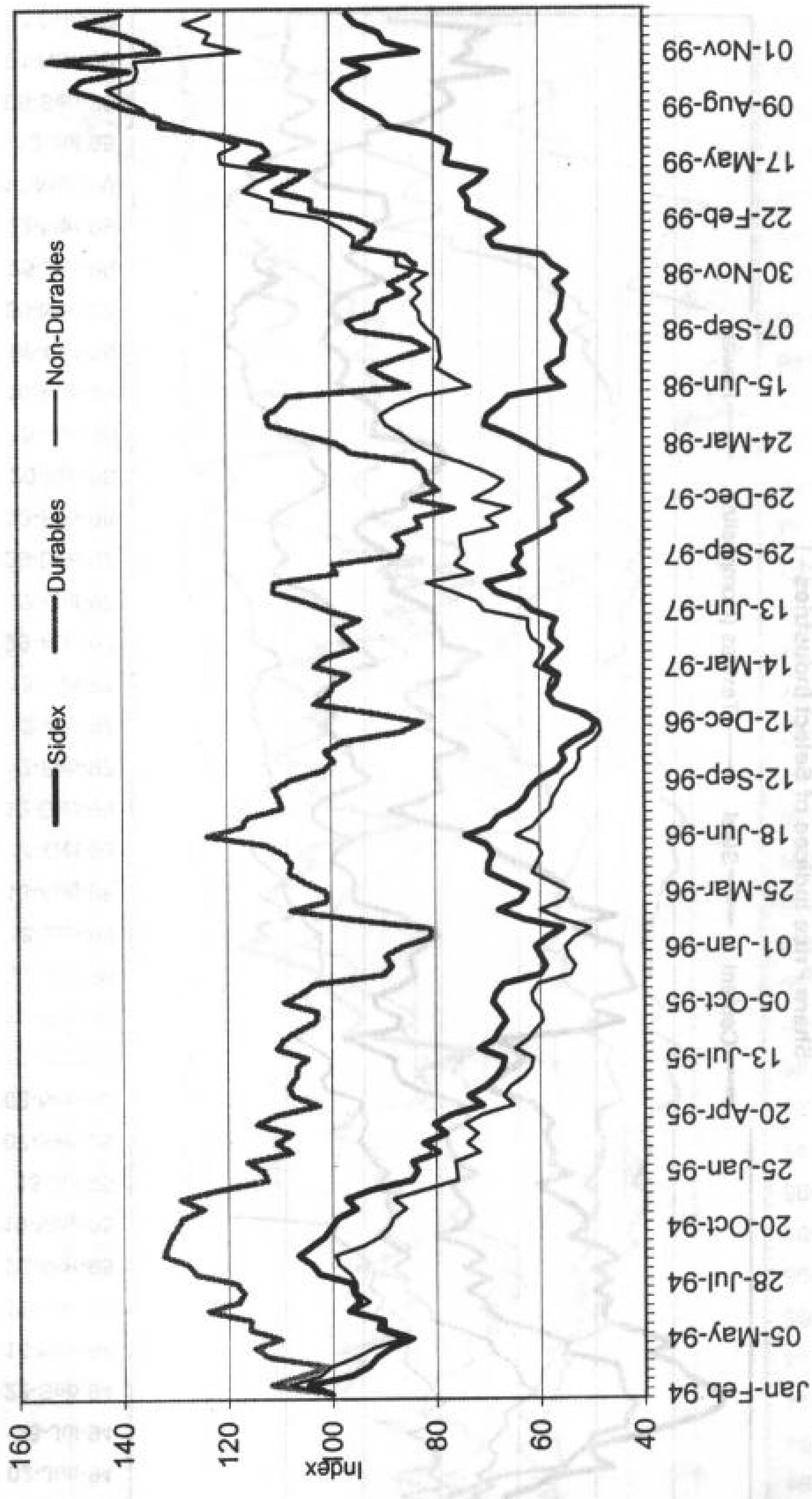
Base: Average market capitalisation in the first three fortnightly points of 1994.
Original base of the Sensex is 1978-79=100.

Graph D

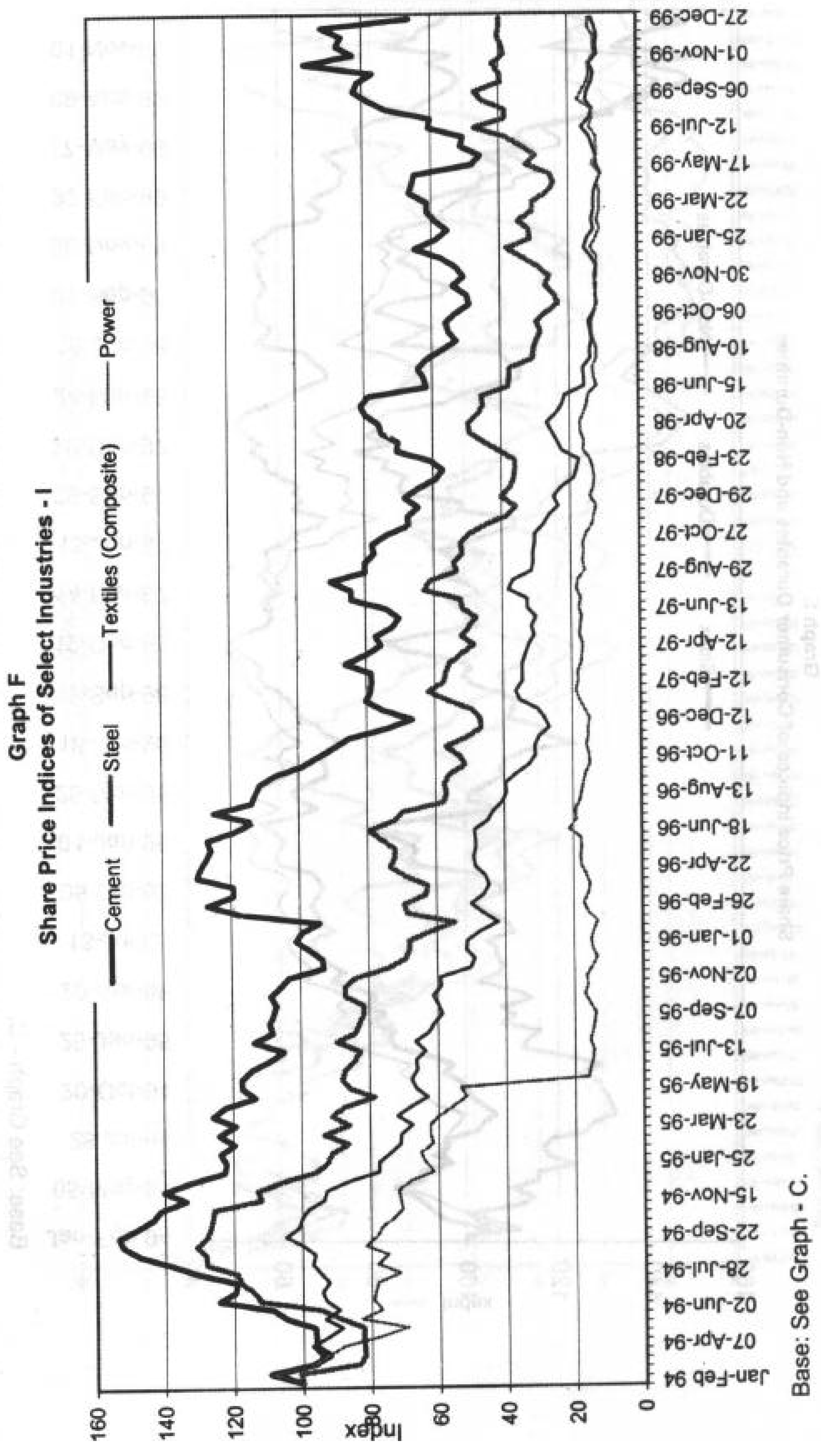
Share Price Indices of Basic, Capital and Intermediate Goods Companies



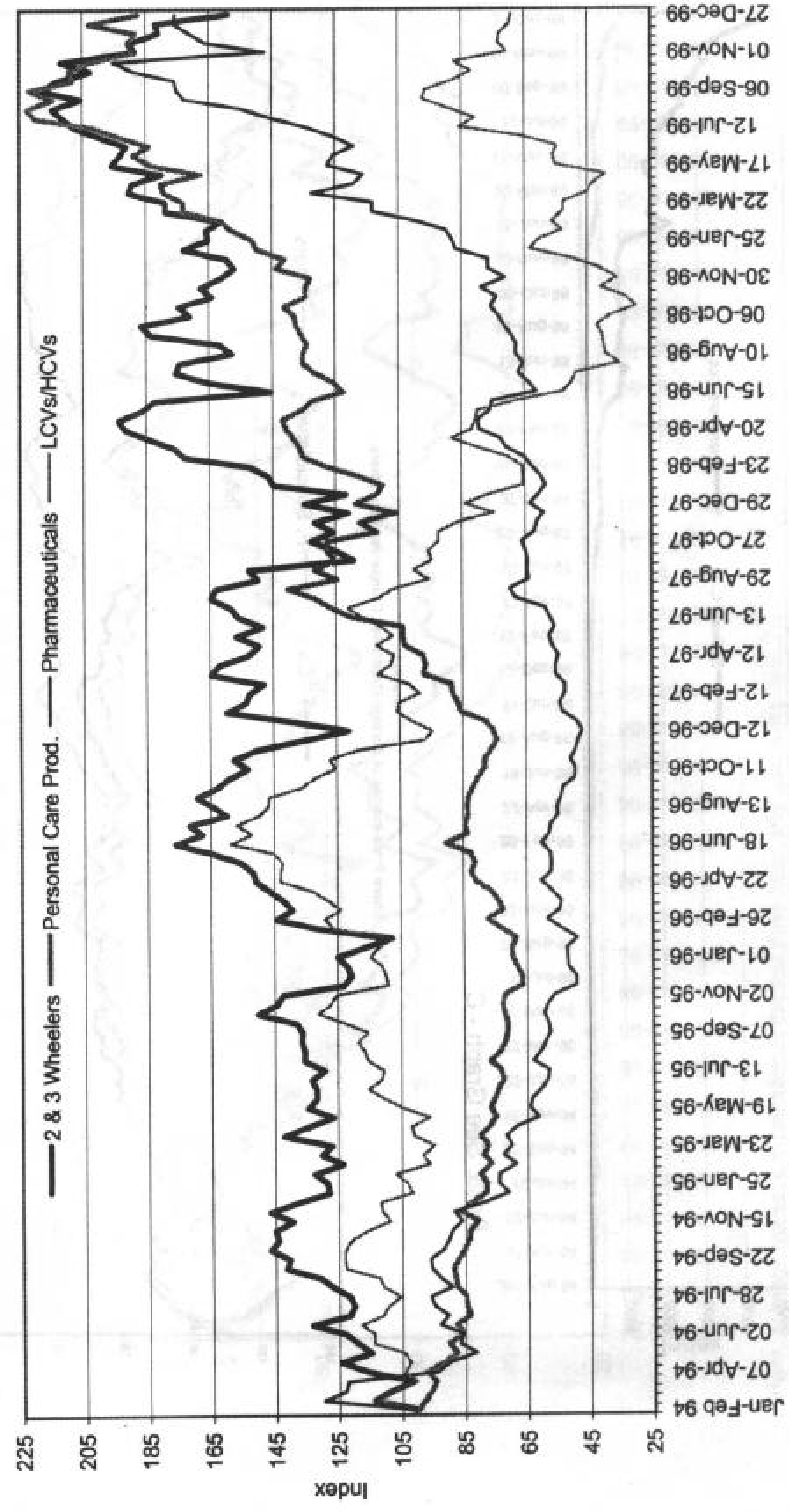
Graph E
Share Price Indices of Consumer Durables and Non-Durables



Base: See Graph - C.


Graph F
Share Price Indices of Select Industries - I
Cement
Steel
Textiles (Composite)
Power
Index
160
140
120
100
80
60
40
20
0
Jan-Feb 94
07-Apr-94
02-Jun-94
28-Jul-94
22-Sep-94
15-Nov-94
25-Jan-95
23-Mar-95
19-May-95
13-Jul-95
07-Sep-95
02-Nov-95
01-Jan-96
26-Feb-96
22-Apr-96
18-Jun-96
13-Aug-96
11-Oct-96
12-Dec-96
12-Feb-97
12-Apr-97
13-Jun-97
29-Aug-97
27-Oct-97
29-Dec-97
23-Feb-98
20-Apr-98
15-Jun-98
10-Aug-98
06-Oct-98
30-Nov-98
25-Jan-99
22-Mar-99
17-May-99
12-Jul-99
06-Sep-99
01-Nov-99
27-Dec-99
Base: See Graph - C.

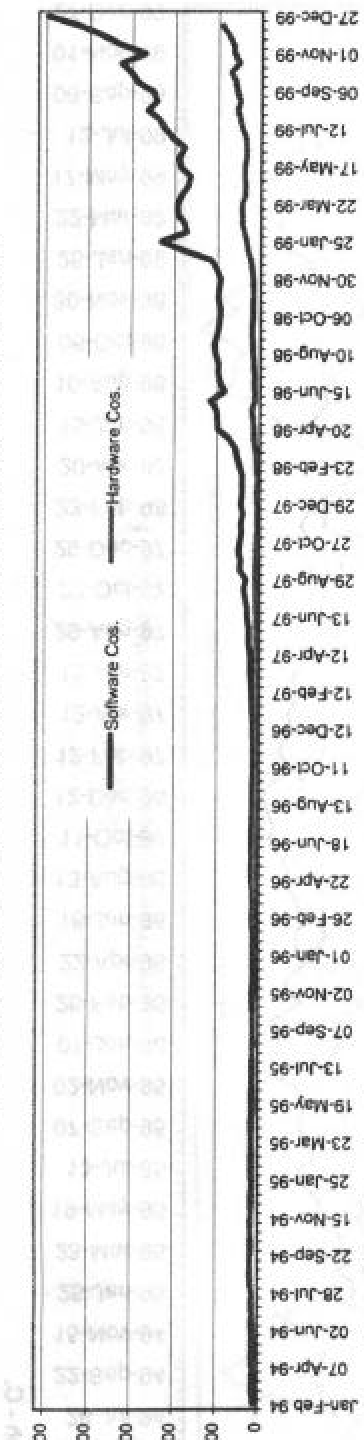
Graph G
Share Price Indices of Select Industries - II



Base: See Graph - C.

Graph H

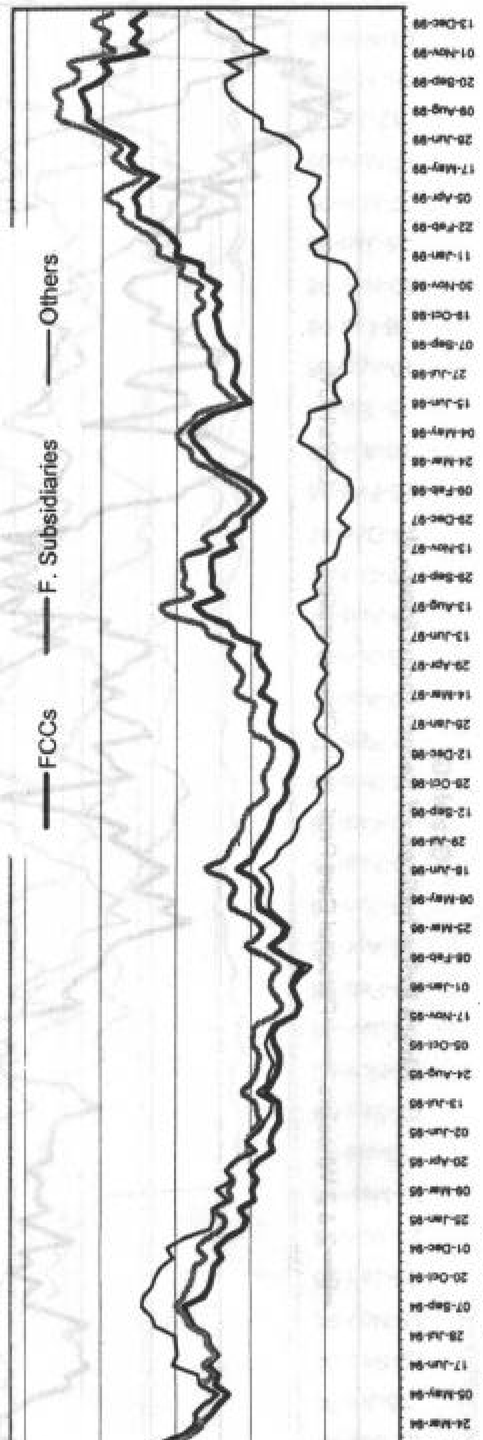
Share Price Indices of Computer Software and Hardware Companies



Base: See Graph - C.

Graph I

Share Price Indices of Foreign-Controlled Companies and Others



Base: See Graph - C.

Table 16. Share Price Indices Based on Use-based Industry Classification

Industry Category@ (1)	Beginning of 1994# (2)	End-1998$ (3)	End-1999$ (4)
Basic Goods	188.66	25.89	36.31
Capital Goods	203.66	44.53	77.40
Intermediate Goods	227.67	29.30	43.58
Consumer Durables	222.67	84.48	142.90
Consumer Non-Durables	340.33	85.53	124.50
All 500 Companies	258.67	58.34	94.03

@ Based on RBI Use-based Classification of Industries.
# Base: Average of the market capitalisation during the selected fortnights of April-June 1991.
$ Base: Average of the market capitalisation during first three fortnightly points of 1994.
End-period values are averages of the indices corresponding to the three final fortnightly points.

Source: Col. (2) is based on S.K. Goyal, et al, *ISID Development Indices*, a report submitted to the Ministry of Finance, 1994. Col. (3) and (4) are based on Sidex and its sub-components.

It can be seen from Graph-D that the relative low level of prices of basic and intermediate goods was not confined to end-of period position but a sustained one. The accentuation became more conspicuous from 1997 and finally in 1998 the two were far apart from the general index. However, there are sectors which withstood the downward pressure and performed quite well compared to the overall index. These are: consumer durables and consumer non-durables (Graph-E). While consumer durables remained above the Sidex and fluctuated violently, consumer non-durables started pulling away from it from the beginning of 1997. The process reached its culmination in September 1999. The picture emanating from the presentation of select industries at the disaggregated level further confirms the trends noticed at the use-based classification level as also the top sectors identified on the basis of market turnover. For instance, while the importance of cement declined in 1997 it continued to be near the top and re-entered the top 10 in 1999. On the other hand, metals and metal products which was in the third position in 1996 disappeared from the top 10 all together. Similar was the case with textiles.[40] Power, an important component of the infrastructure sector, suffered the worst from the point of share prices. After experiencing a steep fall in mid-1995, it never recovered. Pharmaceuticals which were moving closely with the overall index, started pulling away towards the end of 1997 (Graphs F and G). Incidentally, by 1998 it became part of the top 10 in terms of market turnover. The emergence of computer software among the top 10 in aggregate market turnover and its price index (Graph H) also tell a similar story. As we shall see in the accompanying paper on FII investments, there appears to be close relationship between FII investment exposure, large turnover sectors and movement of share prices.

The earlier study of ISID noticed that share prices of foreign-controlled companies (FCCs) increased faster than those of domestic companies. The later trends, especially during 1994-1998, further confirm the understanding that shareholders prefer FCCs. While the overall index fell to about 57 per cent of the original value, the index for FCCs declined to only 90. Indeed, shares of foreign subsidiaries among the FCCs withstood the general decline better (Table 17). Foreign subsidiaries have been market favourites all through the period. In general, the divergence between FCCs and domestic companies started emerging from the middle of 1996 (Graph I). But for the decline in the indices for foreign companies after September 1999, when the shares of consumer non-durables did not appreciate much, the difference would have been far wider.

Monitoring Company Managements

Shareholding pattern and company law provisions have important implications for monitoring and disciplining company managements. Controlling interests will have little difficulty in having their way if major portion of the shareholding is distributed among large number of individual shareholders especially in the absences of significant non-managerial shareholders. If the government directly or through public financial institutions holds substantial stake it could monitor managements through appointment of nominee directors and participation in shareholder meetings. This could be beneficial for the dispersed individual shareholders as well. An attempt is made here to examine the share holding pattern of BSE listed companies from these stand points.

Table 17. Share Price Indices of FCCs and Other Companies

Company Category (1)	Beginning of 1994# (2)	End-1998$ (3)	End-1999$ (4)
Foreign -Controlled Cos.	356.33	89.95	111.14
- of which Foreign Subsidiaries	N.A.	96.36	121.94
Other Companies	217.33	41.64	90.61
All Companies	258.67	56.93	96.67

Notes: See Table 16. N.A. Not available.
Source: See Table 16.

Out of the 3,388 companies studied,[41] for as many as 1,611 government shareholding was less than 1 per cent (Table 18). This implies that in a little less than half of the companies, the government does not have any direct say. If for effective participation a minimum of 10 per cent of the shareholding is needed, then the government cannot do much in case of three-fourths of

Table 18. Shareholding Pattern of the Non-Government Companies Listed on BSE, 1998

Equity Range (Rs Crore)	Government Shareholding# Less Than					Individual Shareholding@ ≥ 40 %		
	1 %	10 %	25 %	40 %	Total	Total	of which	
							Share of Corporate Bodies* and Directors & Relatives > 25%	Government Share-holding# >25 %
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Less than 5	628	859	954	990	999	523	383	9
5 - 10	716	1,075	1,247	1,300	1306	723	486	8
10 - 25	204	459	626	685	703	271	184	8
25 - 50	35	97	161	200	211	72	36	8
50 - 100	19	43	64	89	96	26	10	3
100 & above	9	31	56	72	73	26	8	4
All Companies	1,611	2,564	3,108	3,366	3,388	1,641	1,107	40

* Excluding the holdings categorised under foreign and government categories.
# Includes Government companies, public financial institutions, mutual funds, etc.
@ Includes top 50 and other individual shareholdings but excludes shareholdings of directors and relatives.
Source: K.S. Chalapati Rao, K.V.K. Ranganathan and M.R. Murthy, `Indian Company Law and Protection of Shareholders' Interest', in *Global Capital Flows and the Indian Stock Market,* a report prepared under the Indo-Dutch Programme on Alternatives in Development, November 1999.

the cases [Ramaiah, 1991].[42] This may be understandable because in the post-liberalisation period companies relied on raising resources directly from the public instead of depending upon public financial institutions. Most of these are relatively smaller companies with less than Rs 10 crore equity capital and constitute three-fourths of the total number of companies having less than 10 per cent of government equity. The smaller companies are also characterised by high level of individual shareholding. More than half of the companies with less than Rs 10 crore equity have 40 per cent or more of individual shareholding. In the larger companies share of individuals varied between 27 and 38 per cent. It is also noteworthy that in such companies, substantial shares are held by corporate bodies, directors and their relatives while the share of government was significant in only a few companies. It has been also seen that in the post-liberalisation period, shareholding of government companies declined in the larger companies. Foreign shareholding had an opposite experience. Corporate bodies, directors and their relatives also, in general, improved their position. Significantly, the shareholding of individuals declined in about three-fourths of the cases [Rao et al., 1999].[43] This could be due, apart from the general increase in the level of foreign equity, to the Indian managements' attempt at consolidating control to face take-over threats.

The ownership structure of listed companies thus leaves little scope for monitoring by the Individual shareholders in a large number of companies. Government-controlled shareholding in many small companies is too small to be able to influence managements' decisions in shareholder meetings. The efforts at revamping the *Companies Act, 1956* that would have helped in strengthening the monitoring mechanism, however, got severely bogged down. The phenomenon of contested take-overs of listed companies, an essential element of the disciplining aspect of stock markets, has not yet manifested itself in any meaningful manner in India. Moreover, the introduction of new provisions for share buybacks, the liberalisation of the norms on inter-corporate investments in the *Companies Act, 1956* early in 1999 and the sanction that allows managements to increase their shares substantially without making public offer have further reduced the take-over threat. Thus, in a good number of cases the stock market does not provide a market for corporate control. A number of provisions of the Companies Bill, 1997, such as setting up of Audit Committee and expanding the scope of `officer-in-default' aim at better governance by company managements. It is inexplicable why these were not made statutory along with share buy-back and relaxation of the limits on inter-corporate investments. SEBI has recently directed the stock exchanges to amend the Listing Agreement to provide for certain provisions of corporate governance.[44] It should be seen how these could be enforced and in actual practice work in the absence of corresponding changes in the *Companies Act.*

Summing Up

In the endeavour to encourage companies to raise resources directly from the investors and dismantle administrative barriers, in spite of the known shortcomings, the Indian stock market was encouraged alongside liberalisation. The necessary regulatory framework was, however, slow to evolve. *The Capital Issues Control Act* was repealed even in the face of the securities scam as if one was following a pre-set timetable. From hindsight, it appears that the process of liberalisation could have been more gradual. The inexperience of the regulatory body, namely, SEBI coupled with the government's failure to arm it with adequate powers in time, enabled the private promoters to misuse the new freedom and generated a series of scams of varying magnitudes and types. Sudden deregulation created chaotic conditions as private promoters tried to take advantage of the situation. The fact is that not only perpetrators of scams but even large houses and transnational corporations took advantage of policy vacuum and issued shares to themselves at ridiculously low prices. The official response to the scams unfortunately was characterised by long drawn investigations, procedural delays and a slow acting judiciary. The process understandably brought a lot of discredit to the stock market.

The abrupt change to a market-based system denied the general investor the time to adjust to the new situation where the public financial institutions, the industrial licensing system and finally, the capital issue control mechanism could no longer be relied on to assure the viability of investment projects. The typical investors were neither in a position to understand the nuances of investing in new issues having no long term track record nor were ready to appreciate the risk factors. As a matter of fact, SEBI observed that in the prevailing euphoric atmosphere, the investors ignored the risk factors revealed in the issue prospectuses of the so-called `vanishing companies'.

After experiencing a boom in the early years of liberalisation, the primary market almost dried up as investors lost confidence and households shifted away from investing in shares and debentures. Companies had to once again opt for assistance from banks and financial institutions denying the stock market its resource allocation role. SEBI had to tighten issue norms to prevent further damage. The non-responsive primary market also affected public sector divestment targets and the plans had to be deferred repeatedly.

Since the confidence of the general investor in the market has been shaken, the response to the repetitive attempts by the government at reviving the market proved to be short-lived. Trading got increasingly concentrated and trading volumes were increased mainly through greater speculation. In the face of increasing turnover, the concentration in trading manifested itself in a number of ways: (i) nil or very infrequent trading in an overwhelming number of companies; (ii) increasing concentration both in value and number of trades terms; and (iii) dominance of a few sectors in trading. The heavy emphasis on a few companies and sectors has its reflection in the remaining ones being illiquid. Since in an overwhelming number of companies there was either nil or very little trading, investors hardly had a chance to learn the real value of their shares. Lack of liquidity also meant that the investor could not exit from a company even after realising that the prospects of capital appreciation or dividend earnings were very poor.

While the National Stock Exchange, which was to specialise in medium-sized companies, counts on a number of large companies which are also listed on the BSE, the Over the Counter Exchange of India (OTCEI), meant for smaller companies, has become virtually defunct, hurting the interests of small companies. OTCEI too has come to rely on companies listed on other stock exchanges and permitted to be traded on it for the trading volumes [OTCEI, 1999, p. 14].[45] This is contrary to the expectation that medium and small-sized companies would gain better access to capital market. The turnover activity is concentrated in only a few centres showing the base of the capital market to be highly un-even in the country. Even for the National Stock Exchange three-fourths of its turnover is accounted by just five cities, namely, Bombay, Delhi, Calcutta, Madras and Ahmedabad.

There is a possibility of interpreting the lack of interest shown by the ordinary investor following the primary market scam, as a sign of his maturity and that he would be more cautious in future. Even granting that this was a positive outcome, it should be recognised that this has been achieved at a substantial cost and brought the very concept of stock market regulation to disrepute. The recent developments when excessive attention is being paid to sectors like information technology, telecommunications, media and pharmaceuticals, however, throws serious doubts about the Indian investor gaining maturity. Seeing that investors were flocking to companies carrying software and information technology tags, SEBI had to caution them. Without proper education, the ordinary investors are bound to behave like a herd. Given the comparatively ill-informed investors and lack of liquidity in many shares, the investors would only concentrate on a few shares.

The market's reliance on a few scrips as reflected in the increasing concentration in the number of transactions and market turnover is likely to worsen the volatility. The sudden jumps and steep falls periodically witnessed in the Indian stock market appear to be a result of this banking on the few by the investors - foreign as well as local, large and small. The first two months of 2000 have thrown further indications in this regard with large intra-day as well as day-to-day fluctuations of the Sensex.[46]

While computer software, telecommunications, electronic media, pharmaceuticals and consumer non-durables emerged as leaders, the extent of price declines in the case of important basic, capital and intermediate goods sectors unfortunately has never got reflected in the price indices referred to as barometers of the market mood. If the general lack of interest of the stock market in the latter sectors is due to the excessive attention paid to the former, serious thought should be given as to how their financing needs could be met.[47] If the stock market does not support these industries due to investors' preference for quick returns, as is clearly evident from the low delivery ratios, the efforts of the state in the form of development financial institutions should not be undermined. If the functioning of financial institutions has also to be decided by market forces they cannot obviously undertake ventures based on the projects' long term potential and in the interest of the economy. Given the investors' propensity to seek quick returns due the unsteady nature of the market, it is doubtful if the improvements in the form of dematerialisation of shares, rolling settlement, etc., would improve the situation. In this the role of foreign institutional investors and mutual funds need to be watched carefully.

The fact that 1999 proved to be different in terms of the relatively higher level of share prices and larger number of companies getting traded may give rise to a false sense of security. A number of problems remain. While the share prices of many companies increased in consonance with Sensex, not only the index for these companies remained far lower than its 1994 position, there are wide inter-sectoral differences. The concentration in trading continued to be quite high. The somewhat better distribution at the top appears more to do with investors flocking to select sectors. The shareholding pattern of the listed sector does not appear to be conducive to monitoring by shareholders. The efforts at revamping the *Companies Act, 1956* that would have helped in strengthening the monitoring mechanism are, however, bogged down severely. Since the shareholding pattern does not seem to support stock market discipline, and investor activism is yet to take an organised form, other institutional mechanisms in the form of amendments to the *Companies Act* should have been given precedence over the liberalisation provisions like buy-back, inter-corporate investments and enhanced shares for the promoters.

Stock markets have to function in a country's social, political and economic milieu. When encouraging stock markets it is necessary to give due attention to how rules are framed and how they are implemented by the authorities on the one hand and respected by the target groups on the other. Indian experience shows that evolution of such an institutional framework will most often be gradual and cannot be achieved in a swift manner and that without a suitable institutional framework in place, the cost of transition could be very high. The study, therefore, suggests the need for a deeper understanding of the functioning of developing country stock markets without which inferences based on aggregate data may lead to inappropriate policy prescriptions. Such an understanding would contribute to better appreciation of the role of stock markets in resource mobilisation and their contribution to economic development.

Annexure

Average and Relative Number of Companies Traded at BSE: 1994-1999

Month (1)	Average Number of Companies Traded (2)	No. of Companies Listed (3)	% of Companies Traded (2)/(3) x 100 (4)
9401	1670	3353	49.81
9402	1802	3483	51.74
9403	1758	3585	49.04
9404	1842	3705	49.72
9405	1903	3813	49.91
9406	1989	3900	51.00
9407	2035	3987	51.04
9408	2153	4077	52.81
9409	2206	4172	52.88
9410	2327	4245	54.82
9411	2413	4345	55.54
9412	2479	4413	56.17
9501	2470	4495	54.95
9502	2545	4595	55.39
9503	2483	4702	52.81
9504	2718	4829	56.28
9505	2873	5063	56.75
9506	3146	5183	60.70
9507	3612	5303	68.11
9508	3582	5379	66.59
9509	3619	5435	66.59
9510	3579	5499	65.08
9511	3409	5568	61.22
9512	3639	5621	64.74
9601	3427	5451	62.87
9602	3658	5545	65.97
9603	3591	5603	64.09
9604	3589	5596	64.14
9605	3421	5719	59.82
9606	3610	5760	62.67
9607	3345	5799	57.68
9608	3283	5885	55.79
9609	2856	5933	48.14
9610	2557	5969	42.84
9611	2190	5988	36.57
9612	2184	5999	36.41
9701	2767	6008	46.06
9702	2271	5839	38.89
9703	2316	5832	39.71
9704	1914	5831	32.82

(Contd.)

Annexure (Concld.)

Month (1)	Average Number of Companies Traded (2)	No. of Companies Listed (3)	% of Companies Traded (2)/(3) x 100 (4)
9705	1945	5840	33.30
9706	1849	5844	31.64
9707	1942	5844	33.23
9708	2038	5848	34.85
9709	1662	5839	28.46
9710	1684	5842	28.83
9711	1480	5842	25.33
9712	1435	5843	24.56
9801	1500	5850	25.64
9802	1384	5852	23.65
9803	1490	5853	25.46
9804	1884	5853	32.19
9805	1570	5852	26.83
9806	1265	5854	21.61
9807	1229	5850	21.01
9808	1143	5851	19.54
9809	1302	5854	22.24
9810	1135	5855	19.39
9811	1316	5857	22.47
9812	1300	5860	22.18
9901	1644	5861	28.05
9902	1819	5860	31.04
9903	1983	5848	33.91
9904	1482	5850	25.33
9905	1474	5850	25.20
9906	1420	5851	24.27
9907	1785	5851	30.51
9908	1967	5852	33.61
9909	2041	5854	34.87
9910	2318	5855	39.59
9911	1963	5858	33.51
9912	2516	5863	42.91

Previous month's figure was repeated in the absence of the corresponding month's figure.

Source: Col. (2) - CMIE, *Capital Markets*, October 1998 for the period January 1994 to March 1998. Estimated from the daily trade data for the remaining months. Data for some days in 1999 was not available. Col. (3) - BSE, *The Stock Exchange Review*, various issues.

NOTES

1. The World Bank noted that capital markets were needed in any mass privatisation programme especially for sale of state assets through direct share offerings. The UN noted that `Besides the stock market's ability to mobilize domestic savings effectively, it also draws in foreign savings to augment investment. Clearly countries without a stock market will have severe difficulties competing with other countries having such an institution'.

2. The Narasimham Committee [1991] which recommended the discontinuation of the Controller of Capital Issues (CCI), felt that

> (I)n the scenario that we envisage it would be for the merchant bankers and the underwriters who should offer professional advice on a particular issue, on the nature of the instrument, its terms and pricing and for the issuer to decide on these matters. The Committee does not believe that CCI or, for that matter, SEBI should be involved in prior sanction of new capital issues in respect of companies whose scrips are listed on the stock exchange. In respect of unlisted shares however, where investor awareness of the prospects and background of the promoters may not be high and with a view to prevent any misuse by promoters, it may be stipulated that the Stock Exchanges should approve the prospectus.

3. Though the exchange is now called The Stock Exchange, Mumbai, we shall refer to it as Bombay Stock Exchange or BSE, its better known form.

4. As a follow up of the adoption of the FERA it became obligatory for all foreign branches operating in India to get registered as Indian companies under the *Companies Act, 1956* with up to 40 per cent foreign equity. Companies already registered in India and having more than 40 per cent foreign equity were also required to dilute the extent of foreign equity to 40 per cent.

5. The consequential wide dispersal of shareholding (a) provided insurance against likely attempt at cornering of shares by any groups or individuals and (b) created a situation in which a large number of shareholders can be mobilised to create public opinion in favour of the foreign company. For an empirical analysis of FERA dilution strategy.

6. For instance, the issue of Mdeod Russel was oversubscribed 41 times, that of Warren Tea by 27 times, Britannia 20 times and of Cadbury 16 times.

7. Since market capitalisation depends on prevailing share prices, its ratio to GDP must be read with caution. Market capitalisation is a stock concept, whereas the GDP represents flow. The use of this ratio to represent the size of a market has, however, been justified on the ground that market size is positively correlated with the ability to mobilise capital and diversify risk.

8. Besides being the oldest, most of the larger Indian companies are listed at the Bombay Stock Exchange. It is estimated that at the end of 1997, companies listed on BSE accounted for 92 per cent of market capitalisation of all-India listed companies. The share of traded volumes of BSE, however, got reduced in a substantial manner with commencement of the operations by the National Stock Exchange (NSE) in 1994. Subsequently, BSE introduced On-Line Screen Based Trading covering different cities to recover the lost ground.

9. These figures, however, have to be read with caution due of the uncertainty surrounding the estimation of the paid-up capital of the Indian corporate sector. Moreover, growth in the market capitalisation and the listed capital need not necessarily be due to new productive investments but due to the listing of *existing large companies*. For instance, in India many large public sector companies came to be listed on the stock exchanges in the post-liberalisation period due to partial divestment of government equity. These included Indian Oil Corporation, Steel Authority of India (SAIL), Mahanagar Telephone Nigam (MTNL) and Oil and Natural Gas Corp. (ONGC) apart from large banks like the State Bank of India (SBI) and financial institutions like the Industrial Development Bank of India (IDBI) and the Industrial Finance Corporation of India (IFCI). The importance of public sector companies can be seen from the fact that at the end of 1996 there were seven public sector companies among the top ten in terms of market capitalisation. Additionally, much of the market capitalisation of public sector companies is illusive because an overwhelming part of the equity of the companies is still with the government.

10. Capital can be raised from the primary market either through public issues or from rights issues to the existing shareholders. The amounts can either be in the form of equity, preference shares or debt. There are differences in the estimates provided by the *Economic Survey* and private monitoring organisations like the Centre for Monitoring Indian Economy (CMIE) and the Praxis Consultancy and Information Services Pvt. Ltd.'s Prime Database. While there are differences in number of issues and the amount raised, there is considerable similarity in the overall dimensions and the year-to-year movements. CMIE has been preferred here because it gives ownership-wise distribution of issues.

11. Though the two sources are not comparable, the fact that the situation worsened in 1998-99 is reflected from the data offered by SEBI. According to SEBI the number of issues declined from 111 in 1997-98 to 58 in 1998-99. Even among these, initial issues suffered the worst with just 18 in 1998-99 against 52 in the previous year.

12. Through irregularities in securities and banking transactions huge amounts were diverted to the stock market.

13. By sheer coincidence, we found that the observations of a Committee in 1948 describe aptly the situation that prevailed during those months. In the context of the steep rise in the shares of Indian Iron & Steel Co. between June 1936 and April 1937 from about Rs 9 to Rs 79 3/4 it was noted that: For the first time in its history, the stock market became the playground for all comers. Seized with an insatiable lust for money-making, uninitiated in the technique of stock speculation, ill-informed as to the relative position of and the value of the various speculative shares, the man-in-the-street was wildly dragged into the maelstrom of stock market boom. After reaching the above record price on 6th April, Indian Irons fell abruptly to Rs 43-4-0 by the end of the month causing immense loss to numerous persons and benefiting only a few clever manipulators who had taken full advantage of the pitiable *laissez faire* policy then pursued by the Government.

14. Part of this was through issue of new shares and part through off-loading of government shares.

15. An additional safeguard was provided in the form of official scrutiny at the time of issuing an industrial licence.

16. Exceptions were, however, allowed for banks. SEBI subsequently modified the criteria. The latest guidelines indicate that instead of actually paying dividend the issuing company should have had *distributable* profits and minimum networth of Rs 1 crore during three out of the immediately preceding five years. In case of infrastructure projects it is sufficient if the projects have been appraised by public financial institutions and if any such institutions irrespective of whether they appraised the issue or not meet 5 per cent of the project cost. See SEBI Disclosure and investor Protection Guidelines 2000.

17. SEBI Chairman was reported to have said that `(T)he details of the mechanism (to find out the vanishing promoters) will be worked out soon. The total amount raised by these promoters is not known'. It was also reported that about half of the nearly 6,000 listed companies did not file annual results for March 1998.

18. According to RBI, the number of new non-government public limited companies which made new capital issues declined sharply from 577 in 1995-96 to just 27 in 1997-98 and to only 7 in 1998-99. Financing companies were affected severely in the process. The number of public issues of NBFCs declined from 477 in 1995-96 to 249 in 1996-97 and further to just 24 in 1997-98.

19. The case of CRB group whose diversion of funds raised from public issues led to the focus on non-banking financial companies provides a relevant example here. The group was associated with a number of public issues in the 'eighties. The kingpin of the group was even auditing the accounts of companies on which his father and mother were directors. Some other auditors associated with the group at that time later appeared as auditors to CRB Capital Markets Ltd., a merchant banking company, also engaged in leasing and other financial services. The company came to the public thrice in the early 'nineties - public issue August 1992, and public-cum-rights issues in August 1993 and January 1995 - the total issue amount being Rs 238 crore. Another company of the group CRP Crop Ltd., formerly Jaihind Granite Industries Ltd.) made two issues totalling Rs 81 crore. (See: Praxis Consulting and Information Services Pvt Ltd., Prime-MRL and Prime-MIL, covering All public Issues: 1.4.1989 - 31.3.1999 and All Rights Issues: 1.4.1990 - 31.3.1999, n.d.) The group received FDI approval for floating a financial services joint venture with Daewoo group of Korea and for setting up asset management companies in association with Daewoo Securities and Keystone Group Inc., USA. The group floated a mutual funds in August 1994 to raise about Rs 100 crore. The Group was on the verge of promoting a bank when the matter was exposed. In addition to the NBFCs, the operations of `plantation companies' have also hurt the investor sentiment.

20. CMIE's observations are relevant in this context. CMIE noted that `(U)nlike the 1980s or the early 1990s, the business sectors are unable to directly draw upon the savings of the household sectors. IPOs are replaced by private placement issues. Banks and financial institutions have displaced manufacturing corporates and a significant part of fund mobilised is through debt instruments rather than equity'.

21. Liquidity enables investors to alter their portfolios quickly and cheaply and makes investments less risky. One measure of liquidity is total value traded as a proportion of GDP. Turnover ratio, i.e., value of total shares traded as a proportion of market capitalisation is another important one. However, high level of trading in a few scrips may indicate unhealthy speculation.

22. When shares are purchased they will normally be taken delivery at the end of the settlement by making the necessary payment or the deals are squared off. The carry forward system enables the purchaser to postpone the delivery to the next settlement by paying *badla* or carry forward charges to a *badla* financier. The main difference between the margin system in USA is reported to be while in the Indian case there is no need for the seller to have shares and the buyer to have the money, in the margin trading the buyer has to put up at least 50 per cent of the purchase value of shares and also pledge the shares in actuality. For a detailed description of the carry forward system. In December 1993, SEBI directed the four major stock exchanges in Bombay, Delhi, Ahmedabad and Calcutta, where forward trading is permitted, to have all fresh trades only on cash basis. Banning of *badla* had severe adverse impact on trading volumes of Specified Group (also called the A Group) shares during 1994-95 in BSE. Average daily turnover in A group fell from Rs 285 crore in 1993-94 to Rs 67 crore in 1994-95. Due to this, the share of A group in total volume got reduced from 73.59 per cent in 1993-94 to only 22.81 per cent in 1994-95. Re-introduction of *badla* in January 1996 again led to the A Group's share increasing substantially in total volume transacted in the last quarter of 1995-96. During the first nine months of 1996-97, the share of A Group in total trading volume rose to 93 per cent.

23. Though data for certain days in 1999 was missing, the estimates may not have been affected seriously as only the number of days for which the data was available were taken for arriving at the average number of companies traded.

24. For purposes of this and the subsequent analysis of BSE trading data for the years 1996, 1997, 1998 and 1999, we have relied on the daily trade data supplied in machine readable format (called the QE files) along with the Investment Decision Support System (IDSS) by the Dalal Street Journal group. The database was later renamed as *Equity Research Station* (ERS) and is being maintained by the Asian CERC Information Services (India) Ltd. Though there are a few gap in the provided by the company, since most of the exercises analyse the relative shares of different sets of companies instead of the absolute amounts, this may not significantly affect the conclusions. The face value of each share is Rs 10 though there are some exceptions. Such companies are invariably the older ones with a face value of Rs 100. The assumption of uniform face value of Rs 10 made here does not, therefore, result in any over-estimation. The stock splits that have been introduced recently, however, make such assumptions unrealistic in future.

25. The percentage of premium issues was especially high during 1994-95 and 1995-96. During 1994-95 out of the 1,230 issues as many as 388 had a premium component. Out of 87 equity issues by already listed companies as many as 75 involved premium. Indeed, during 1995-96 all but one of the 59 public issues by the already listed companies were premium issues. During this year also the premium issues were high as out of 1,351 issues 300 had premium component (Based

on Prime Database Annual Reports).

26. The Bombay Stock Exchange has started giving data on trading values in 1996. We have confined to trading in equity shares of companies after excluding data relating to debt securities and transactions by mutual funds. For companies traded both in the regular and dematerialised forms with distinct scrip codes, the turnover has been combined and only one scrip code has been retained.

27. The concentration appears quite heavy when compared with the trading pattern at the New York Stock Exchange (NYSE). The turnover data of the NYSE for 1998 shows that at the 10 company mark, the share in turnover was only 12.64 per cent while it was 67.20 per cent for BSE. When the top 100 companies are considered the share at NYSE works out to about half of the share at BSE. Even at the 500 company level there is considerable difference between the shares: 83.13 per cent for NYSE against 99.82 per cent for BSE.

28. Initially BSE decided to remove 26 companies and introduce 27 new ones to maintain the strength of the Group was 149 at the time of revision). It, however, decided to bring in only 17 new companies thereby reducing the Group's strength to 140.

29. FIIs are obliged to take/give delivery of the shares traded by them.

30. The classification broadly follows the equity research (ERS) database pattern.

31. While the scrips in A Group can have carry forward deals with weekly settlements, those in B1 would have weekly settlements without the facility of carry forward. Those of B2 (also referred to as B Group) would be similar to B1 but with a fortnightly settlement.

32. These were: Aftek, Cybertech, DSQ Software, Kale Consultants, Mars Software, Mastek, Rolta (I), and Visualsoft in the software sector; Lupin Labs and Morepen Labs in the pharmaceutical.

33. Including Boss Industries (new name: Sriven Multitech) and Vakrangee Ltd. (new name: Vakrangee Software) which are reported to be under the scrutiny of BSE for changing their names to relate to software business.

34. A limited exercise at identifying public sector companies in 1999 revealed that its share declined further to about nine per cent.

35. The Sensex was revised in November 1998 by the inclusion of two FCCs (Castrol and Novartis) and two computer software companies (NIIT and Infosys Technologies). These replaced two public sector companies (SAIL and IPCL) and two large house companies (Arvind Mills and GE Shipping).

36. The mass media (Radio & T.V. networks) as also the newspapers invariably give prominence to the Sensex. Even the *Economic Survey* 1998-99, while presenting the monthly levels of Sensex (30 companies) and the NSE Nifty (50 companies) described the movements in BSE Sensex and referred to those in Nifty in a passing manner. Needless to say, there was no discussion on industry-wise price movements.

37. Though the FIIs started making purchases in early 1993, it was only during the last quarter, i.e., October-December 1993 their net investments reached a substantial amount of US$ 600 million.

38. Private sector accounted for about two-thirds of the gross mobilisation and nearly three-fourths of the mobilisation in net terms. Resources mobilised by different types of mutual funds are discussed a little more in the accompanying paper on FII investments.

39. Out of the 70 companies in the capital goods category as many as 30 were FCCs. Their presence becomes more prominent if computer hardware companies are taken out: 28 out of 61.

40. See Table 7 in the accompanying paper: `Foreign Institutional Investments and the Indian Stock Market'.

41. Out of about 5,600 companies listed on the BSE during 1998, we could get the shareholding pattern for 3,894 companies. After excluding public sector companies and companies promoted by them and the companies for which the information was not available for any of the years 1996, 1997 or 1998 we were left with 3,388 companies.

42. Under Section 169 of the *Companies Act, 1956* the minimum voting strength required for convening an extraordinary general meeting is 10 per cent of the paid-up capital of the company.

43. For this, a separate exercise was made to identify top 200 private sector companies in 1989-90 for which a shareholding pattern was available for both pre- and post-liberalisation periods. We assumed that shareholding data prior to mid-1992 represents the pre-liberalisation period and that for any time after 1995 reflects the impact of liberalisation. By eliminating companies for which shareholding data was not available for both the periods, companies which have got merged, the unlisted ones, those which have undergone extensive restructuring and the public sector companies, the final list of top 200 companies based on their ranking in 1989-90 was arrived at.

44. The Circular which followed the recommendations of a Committee constituted by SEBI under the Chairmanship of Mr. Kumar Mangalam Birla was issued in February 2000.

45. At the OTCEI, during 1999, turnover of equity shares of listed companies was Rs 4.47 crore against the corresponding figure of Rs 1,778.90 crore for the permitted ones.

46. On the 15 of the 41 days traded, daily highs of the Sensex were at least 3 per cent higher than the corresponding daily lows.

47. It is relevant to note here that investor preferences for select sectors have resulted in wide variations in the price-earning ratios. Out of the 304 product/activity groups for which price-earning (P/E) ratios are available, in case of six the ratio was more than 100 and in case of another five it was more than 50. For as many as 196, it was less than 10. The six with the highest P/E ratios are: Entertainment and Electronic media (765); Large Computer Software Companies (431); Magnetic Tapes and Cassettes (281); Computer Software Converts (161); Large Telecommunication Equipment (128); and computer Education (125). Figures in brackets are P/E ratios. Source: Industry Score Board at www.capitalmarket.com. Prices are for February 18, 2000.

ABBREVIATIONS

BHEL	Bharat Heavy Electricals
BSE	Bombay Stock Exchange
CCI	Controller of Capital Issues
CICA	Capital Issues Control Act, 1947
CMIE	Centre for Monitoring Indian Economy
ERS	Equity Research Station

FCCs	foreign-controlled companies
FDI	Foreign Direct Investment
FERA	Foreign Exchange Regulation Act, 1973
FIIs	Foreign Institutional Investors
FMCG	Fast Moving Consumer Goods
GDP	Gross Domestic Product
HPCL	Hindustan Petroleum Corp. Ltd.
ICICI	Industrial Credit & Investment Corp. of India
IDBI	Industrial Development Bank of India
IDPAD	Indo-Duch Programme on Alternatives in Development
IDSS	Investment Decision Support System
IFCI	Industrial Finance Corporation of India
IPCL	Indian Petrochemical Corp.
ISID	Institute for Studies in Industrial Development
MRTP	Monopolies and Restrictive Trade Practices Act, 1969
MTNL	Mahanagar Telephone Nigam Ltd.
NBFCs	Non-Banking Financial Companies
NSE	National Stock Exchange
NYSE	New York Stock Exchange
ONGC	Oil and Natural Gas Corporation
OTCEI	Over the Counter Exchange of India
PUC	Paid-Up Capital
RBI	Reserve Bank of India
SAIL	Steel Authority of India Ltd.
SBI	State Bank of India
SEBI	Securities and Exchange Board of India

REFERENCES

BSE, 1993; `Bombay Stock Exchange, *Sensitive Index of Equity Prices*, (1978-79=100)', July.

BSE, 1996; `Reconstitution of the BSE 30 Index', *The Stock Exchange Review*, September.

BSE, 1998; `Revamping of BSE-30 Sensitive Index', *Bombay Stock Exchange* release dated October 13.

BSE, 1998; *The Stock Exchange Review*, December.

Business Standard, 1995; `IDBI scrip goes at 20 per cent discount on stock market debut', September 21.

Chalapati Rao, K.S., 1996-97; `Corporate Sector and Emerging Company Law', in Delhi Science Forum, *Alternative Economic Survey*.

Chalapati Rao, K.S., 1997; `Indian Private Corporate Sector: Some Characteristics and Trends', *Company News and Notes*, August.

Chalapati Rao, K.S., K.V.K. Ranganathan and M.R. Murthy, 1999; `Indian Company Law and Protection of Shareholders' Interest', in *Global Flows and the Indian Stock Market*, a report prepared under the Indo-Dutch Programme on Alternatives in Development, November.

Chaudhuri, Sudip, 1979; `FERA: Appearance and Reality', *Economic and Political Weekly*, April 21.

CMIE, 1997; *Capital Markets*, January.

CMIE, 1998; Capital Markets, October.

CMIE, 1999; *Monthly Economic Review*, December.

CMIE, 1999; *Monthly Economic Review*, November.

CMIE, 1999; *Monthly Review of the Indian Economy*, March-April.

Dalal Street Investment Journal, 2000, `Look for the Next Infosys', January 3-16.

Damani, M.G., 1997; `The View from Dalal Street', *The Stock Exchange Review*, August.

Demirguc-Kunt, Asli and Ross Levine, 1996; `Stock Market Development and Financial Intermediaries: Stylized Facts', *The World Bank Economic Review*, Vol. 10, No. 2, May.

Economic Survey, 1992; India, Ministry of Finance.

Economic Survey, 1998-99; India, Ministry of Finance.

Economic Times, 1999; `DCA, SEBI to set up joint panel to tame errant promoters', February 28.

Goyal, S.K., 1979; *The Impact of Foreign Subsidiaries on India's Balance of Payments*, a report submitted to the UNCTC-ESACP Joint Unit, Bangkok.

Gupta, L.C., 1992; *Stock Exchange Trading in India: Agenda for Reform*, Society for Capital Market Research and Development.

Gupta, L.C., 1996; `Badla on Bolt', *The Stock Exchange*, January 15 and February 14.

India, 1948; *Report on the Regulation of the Stock Market in India*, by P.J. Thomas, Economic Adviser, Ministry of Finance, New Delhi.

India, 1982; *Report of the Study Group on Financing of the Private Corporate Sector in the Sixth Five Year Plan*, Planning Commission, New Delhi.

India, 1986; *Report of the High Powered Committee on Stock Exchange Reforms*, Chairman: G.S. Patel, Ministry of Finance, New Delhi.

India, 1999-2000; *Economic Survey: 1999-2000*, Ministry of Finance, New Delhi.

Kunt and Levine, 1996; `Stock Market Development and Financial Intermediaries: Stylized Facts', *The World Bank Economic Review*, Vol. 10, No. 2, May.

Nagaraj, R., 1996; `India's Capital Market Growth: Trends, Explanations and Evidence', *Economic and Political Weekly*, Special Number, Nos. 35-37, September.

Narasimham Committee, 1991; *Report on the Financial System*: Standard Book Co., New Delhi.

OTCEI, 1999; *The Monthly Bulletin*, December.

Ramaiah, A. 1991; *Guide to the Companies Act*, Eleventh Edition, Wadhwa & Co., Nagpur.

Reserve Bank of India, 1993; `Use-based Series of Index Numbers of Industrial Production 1986-87 to 1991-92', *RBI Bulletin*, February.

Reserve Bank of India, 1999; *Handbook of Statistics on Indian Economy,* Table 63.

SEBI, 1995; *Report of the Committee on Disclosure Requirements in Offer Documents*, (Chairman: Y.H. Malegam).

SEBI, 1996-97; *Annual Report*.

SEBI, 1998-99; *Annual Report*.

SEBI, 1999; *Monthly Bulletin*, Table 9, October.

United Nations, 1996*; Foreign Investment in Asian Stock Markets*.

World Bank, 1996; *World Development Report: From State to Market*.