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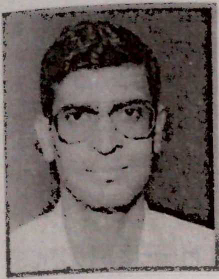

An Overview of the Securities Market in India

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Transfer of resources from those with idle resources to others who have a productive need for them is perhaps most efficiently achieved through the securities markets. Stated formally, securities markets provide channels for allocation of savings to investments and thereby decouple these two activities. As a result, the savers and investors are not constrained by their individual abilities, but by the economy's abilities to invest and save respectively, which inevitably enhances savings and investment in the economy. An overview of the securities market in India is presented herein.

AN OVERVIEW

The securities market has two interdependent and inseparable segments, the new issues (primary market) and the stock (secondary) market. The primary market provides the channel for sale of new securities while the secondary market deals in securities previously issued. The price signals, which subsume all information about the issuer and his business including associated risk, generated in the secondary market, help the primary market in allocation of funds. The issuers of securities issue (create and sell) new securities in the primary market to raise funds for investment and/or to discharge some obligation. They do so either through public issues or private placement. It is a public issue if any body and everybody can subscribe for the securities. If the issue is made to select people, it is called private placement. In terms of the Companies Act, 1956, an issue becomes public if the offer or invitation to subscribe for securities is made to 50 persons or more. This means an issue offered to less than 50 persons is private placement. If the shares are issued exclusively to the existing shareholders, it is called 'rights' issue. It is a public issue if the offer is made to public at large. The securities are issued at face value or at a discount / premium. There are two major types of issuers who issue securities. The corporate entities issue mainly debt and equity instruments (shares, debentures, etc.), while the governments (central and state governments) issue debt securities (dated securities, treasury bills).

The secondary market enables participants who hold securities to adjust their holdings in response to changes in their assessment of risk and return. They also sell securities for cash to meet their liquidity needs. The secondary market has further two components, namely the over-the-counter (OTC) market and the exchange-traded market. OTC is different from the market place provided by the Over The Counter Exchange of India Limited. OTC markets are essentially informal markets where trades are negotiated. Most of the trades in government securities are in the OTC market. All the spot trades where securities are traded for immediate delivery and payment take place in the OTC market. The exchanges do not provide facility for spot trades in a strict sense. Closest to spot market is the cash market where settlement takes place after some time. Trades taking place over a trading cycle, i.e. a day under rolling settlement, are settled together after a certain time (currently 2 working days). All the 23 stock exchanges in the country provide facilities for trading of equities. The trades in corporate debt securities and retail trades in government securities take place in the cash equity segments of the leading exchanges. Trades executed on the leading exchange (NSE) are cleared and settled by a clearing corporation which provides novation and settlement guarantee. The trades on other exchanges are cleared and settled through clearing houses. All trades on all exchanges enjoy settlement guarantee. Over 99.99% of the trades settled by delivery are settled in demat form. Three exchanges namely NSE, OTCEI and BSE provide trading platform for government securities.

A variant of secondary market is the forward market, where securities are traded for future delivery and payment. Pure

*This article is based on various publications (print and web) of the SEBI, RBI, NSE, NSDL, SCMR&D, AMFI AND CMIE.

forward is out side the formal market. The versions of forward in formal market are futures and options. In futures market, standardised securities are traded for future delivery and settlement. These futures can be on a basket of securities like an index or an individual security. In case of options, securities are traded for conditional future delivery. There are two types of options - a put option permits the owner to sell a security to the writer of options at a predetermined price while a call option permits the owner to purchase a security from the writer of the option at a predetermined price. These options can also be on individual stocks or basket of stocks like index and can follow European or American style of settlement. Two exchanges, namely NSE and BSE provide trading of derivatives of securities.

Products and Participants

Savings are linked to investments through a range of complex financial products called "securities" which is defined in the Securities Contracts (Regulation) Act, 1956 (SCRA) to include shares, scrips, stocks, bonds, debentures, debenture stock, or other marketable securities of like nature in or of any incorporated company or body corporate, government securities, derivatives of securities, units of collective investment scheme (CIS), security receipts, interest and rights in securities, or any other instruments so declared by the central government. A SAT pronouncement considers the units of mutual funds to be securities. There are a set of economic units who demand securities in lieu of funds and another set who supply securities for funds. The supply of securities comes from those who wish to invest but do not have resources. They create and exchange securities for funds. The demand for securities comes from those who generally have surplus budgets, but do not have use for them. They exchange funds for securities. The demand for securities is equal to supply of funds and supply of securities is equal to demand for funds. These demand for and supply of securities and funds determine, under competitive market conditions in goods and securities market, the prices of securities.

It is not that the suppliers of funds and suppliers of securities meet each other and exchange funds for securities. It is difficult to accomplish such double coincidence of wants. The amount of funds supplied by the supplier of funds may not be the amount needed by the supplier of securities. Similarly, the risk, liquidity and maturity characteristics of the securities may not match preference of the supplier of funds. In such cases, they incur substantial search costs to find each other. Search costs are minimised by the intermediaries who match and bring these suppliers together. They may act as agents to match the needs of the suppliers of funds / securities, help them in creation and sale of securities or buy the securities issued by supplier of securities and in turn, sell their own securities to suppliers of funds. It is, thus, a misnomer that securities market disintermediates by establishing a direct relationship between the suppliers of funds and suppliers of securities. The market does not work in a vacuum; it requires services of a large variety of intermediaries like merchant bankers, brokers, etc. (Table 1) to bring the suppliers of funds and suppliers of securities together for a variety of transactions. All the intermediaries are registered and regulated by SEBI. The disintermediation in the securities market is in fact an intermediation with a difference; it is a risk-less intermediation, where the ultimate risks are borne by the suppliers of funds/securities (issuers of securities and investors in securities), and not the intermediaries.

TABLE 1: Market Participants in Securities Market.

Market Participants	Number as on March 31, 2003
Securities Appellate Tribunal	1
Regulators (DEA, DCA, SEBI, RBI)	4
Depositories	2
Depository Participants	438
Stock Exchanges	23
Brokers (Cash Segments)	9,519
Sub-brokers (Cash Segments)	13,291
Derivative Brokers	795
Foreign Institutional Investors	502
Portfolio Managers	54
Custodians	11
Share Transfer Agents	143
Primary Dealers	18
Merchant Bankers	124
Bankers to an Issue	67
Debenture Trustees	35
Underwriters	43
Venture Capital Funds	43
Foreign Venture Capital Investors	6
Mutual Funds	38
Collective Investment Schemes (Provisional - 5)	0
Credit Rating Agencies	4
Approved Intermediaries (Stock Lending Scheme)	4
Investor Associations (Registered)	5
Central Listing Authority (Set up 2003-04)	1

Source: SEBI

The securities market, thus, has essentially three categories of participants, namely the issuers of securities, investors in securities and the intermediaries and two categories of products, namely the services of the intermediaries and the securities, including derivatives. The issuers and investors are the consumers of services rendered by the intermediaries while the investors are consumers of securities issued by issuers. Those who receive funds in exchange for securities and those who receive securities in exchange for funds often need the reassurance that it is safe to do so. This reassurance is provided by the law and custom, often enforced by the regulator. The regulator develops fair market practices and regulates the conduct of issuers of securities and the intermediaries so as to protect the interests of investors in securities. The regulator ensures a high standard of service from intermediaries and supply of quality securities and nonmanipulated demand for them in the market so that issuers and investors are able to undertake more and more transactions with ease, efficiency and security. In Indian context, the regulators have additional responsibility of developing the market and exclusive responsibility of protecting interests of investors in securities.

PROFILE OF THE SECURITIES MARKET

The past decade in many ways has been remarkable for securities market in India. It has grown exponentially as measured in terms of amount raised from the market, number of stock exchanges and other intermediaries, the number of listed stocks, market capitalisation, trading volumes and turnover on stock exchanges, and investor population. The market has witnessed fundamental institutional changes resulting in drastic reduction in transaction costs and significant improvements in efficiency, transparency and safety.

Dependence on Securities Market

Three main sets of entities depend on securities market. While the corporates and governments raise resources from the securities market to meet their obligations, the households invest their savings in securities. While the corporate sector and governments together raised a sum of Rs. 2,52,018 crore during 2002-03, the household sector invested 8% of their financial savings through the securities market during 2001-02 (Tables 2 and 4).

Corporate Sector: The 1990s witnessed emergence of the securities market as a major source of finance for trade and industry. The share of capital market based instruments in resources raised externally increased to 53.2% in 1993-94, but declined thereafter to 20.6% by 2001-02.

Governments: Along with increase in fiscal deficits of the governments, the dependence on market borrowings to finance fiscal deficits has increased over the years. The state governments and the central government financed about 14% and 18% respectively of their fiscal deficit by market borrowings during 1990-91. In percentage terms, dependence of the state governments on market borrowing did not increase much since then. In case of central government, it increased to 77.6% by 2002-03.

Households: Household sector accounted for 93.7% of gross domestic savings during 2001-02; 49.8% of their savings were in financial assets. The share of financial savings of the household sector in securities (shares, debentures, public sector bonds and units of UTI and other mutual funds and government securities) is estimated to have gone down from 22.9% in 1991-92 to 8% in 2001-02.

Though there was a major shift in the saving pattern of the household sector from physical assets to financial assets and within financial assets, from bank deposits to securities, the trend got reversed in the recent past due to high real interest rates, prolonged subdued conditions in the secondary market, lack of confidence by the issuers in the success of issue process as well as of investors in the credibility of the issuers and the systems and poor performance of mutual funds. The portfolio of household sector remains heavily weighted in favour of physical assets and fixed income bearing instruments.

TABLE 2: Dependence on Securities Market

Year	Share (%) of Securities Markets in			
	External Finance of Corporates	Fiscal Deficit of Central Government	Fiscal Deficit of State Government	Financial Savings of Households
1990-91	19.35	17.9	13.6	14.4
1991-92	19.17	20.7	17.5	22.9
1992-93	33.38	9.2	16.8	17.2
1993-94	53.23	48.0	17.6	13.9
1994-95	44.99	35.2	14.7	12.0
1995-96	21.67	54.9	18.7	7.7
1996-97	22.12	30.0	17.5	7.0
1997-98	28.16	36.5	16.5	4.5
1998-99	27.05	60.9	14.1	4.1
1999-00	33.58	67.1	13.8	8.0
2000-01	31.39	61.4	14.0	4.2
2001-02	20.60	62.2	17.7	8.0
2002-03	NA	77.6	19.9	NA

Source: CMIE & RBI

Investor Population

The Society for Capital Market Research and Development (SCMR&D) carries out periodical surveys of household investors to estimate the number of investors. Their first survey carried out in 1990 placed the total number of share owners at 90-100 lakh. Their second survey estimated the number of share owners at around 140-150 lakh as of mid-1993. Their latest survey estimates the number of shareowners at around 2 crore at 1997 end, after which it remained stagnant upto the end of 1990s. The bulk of increase in number of investors took place during 1991-94 and tapered off thereafter. 49% of the share owners at the end of 2000 had, for the first time, entered the market before the end of 1990, 44% entered during 1991-94, 6.3% during 1995-96 and 0.8% since 1997. The survey attributes such tapering off to persistent depression in the share market and investors' bad experience with many unscrupulous company promoters and managements.

According to the first SEBI-NCAER survey of Indian investors conducted in early 1999, an estimated 12.8 million, or 7.6% of all Indian households representing 19 million individuals had directly invested in equity shares and or debentures as at the end of financial year 1998-99. The investor households increased at a compound growth rate of 22% between 1985-86 and 1998-99. About 35% of investor households became investors in equity shares prior to 1991, while 47% of the investors entered the market between 1991 and 1995 and 17% after 1995. More than 156 million or 92% of all Indian households were non-investor households who did not have any investments in equity/debentures. Low per capita income, apprehension of loss of capital, and economic insecurity, which are all inter-related factors, significantly influenced the investment attitude of the households. The lack of awareness about securities market and absence of a dependable infrastructure and distribution network coupled with aversion to risk inhibited non-investor households from investing in the securities market. An estimated 15 million (nearly 9%) of all households representing at least 23 million unit holders had invested in units of mutual funds.

According to the second SEBI-NCAER Survey conducted in late 2000, 13.1 million, or 7.4% of all Indian households, representing 21 million individuals directly invested in equity shares and or debentures during the financial year 2000-01. There were 11.8 million households representing 19 million unit holders who had invested in units of mutual funds in 2000-01.

According to SEBI-NCAER survey, of the 48 million urban households, an estimated 8.8 million households, or 18%, representing approximately 13 million urban investors owned equity shares and/or debentures. Of the 121 million rural households, only about 4 million households, or 3%, representing nearly 6 million rural investors owned these instruments. The rural investor households have increased at a compound growth rate of 30% compared to 19% for urban investor households. The Society for Capital Market Research & Development estimates that 15% of urban households and only 0.5-1.0% of semi-urban and rural households own shares. 4% of all households own shares.

An indirect, but very authentic source of information about distribution of investors is the data base of beneficial accounts with the depositories. At the end December 2002, there were 4.6 million beneficial accounts with the National Securities Depository Limited (NSDL). The state-wise distribution of beneficial accounts with NSDL at the end of August 2003 is presented in Table 3.

TABLE 3: Distribution of Beneficial Accounts as on 31st August 2003.

State	No. of Demat Accounts	% to Total
Andaman & Nicobar	114	0.00
Andhra Pradesh	2,04,187	6.11
Arunachal Pradesh	42	0.00
Assam	8,517	0.25
Bihar	31,461	0.94
Chandigarh	8,479	0.25
Daman & Diu	39	0.00
Delhi	3,35,614	10.05
Goa	12,524	0.37
Gujarat	5,38,881	16.13
Haryana	53,027	1.59
Himachal Pradesh	4,500	0.13
Jammu & Kashmir	10,433	0.31
Karnataka	2,19,748	6.58
Kerala	80,754	2.42
Madhya Pradesh	76,278	2.28
Maharastra	9,20,365	27.55
Manipur	104	0.00
Meghalaya	203	0.01
Mizoram	13	0.00
Nagaland	167	0.00
Orissa	16,455	0.49
Pondicherry	2,681	0.08
Punjab	62,,597	1.87
Rajasthan	75,518	2.26
Tamil Nadu	2,42,841	7.27
Tripura	384	0.01
Uttar Pradesh	2,12,076	6.35
West Bengal	2,23,096	6.68
Total	33,41,098	100.00

Source: NSDL

Primary Market

Corporate Securities: Average annual capital mobilisation by non-government public companies from the primary market, which used to be about Rs.70 crore in the 1960s and about Rs.90 crore in the 1970s, increased manifold during the 1980s, with the amount raised in 1990-91 being Rs. 4,312 crore. It received a further boost during the 1990s with the capital raised by these companies rising sharply to Rs. 26,417 crore in 1994-95. The capital raised, which used to be less than 1% of gross domestic savings during 1970s, increased to about 13% of in 1992-93. It decreased to less than 1% in 2002-03. In real terms, the amount raised by non-government public companies during 2002-03 is about 19% of the amount raised a decade back in 1990-91. The amount raised by these companies constituted about 85% of total disbursements by all-India FIs in 1992-93. It decreased to 8.5% in 2002-03. The market appears to have dried up since 1995-96 due to interplay of demand and supply side forces.

Many investors who were lured into the market during 1992-94 seem to be adopting a very cautious approach because of their frustration with some of the issuers and intermediaries associated with the securities market. They have not completely withdrawn from the market, but are looking for quality issues the availability of which has declined due to stricter eligibility criteria for public issues imposed by SEBI and the general slowdown in the economic activity. Simultaneously, issuers have shifted focus to other avenues for raising resources like private placement where compliance is much less. Available data (Table (4), although scanty, indicate that private placement has become a preferred means of raising resources by the corporate sector. It accounted for about 93% of total resources mobilised through domestic issues by the corporate sector during 2002-03. Rapid dismantling of shackles on institutional investments and deregulation of the economy are driving growth of this segment. There are several inherent advantages of relying on private placement route for raising resources. While it is cost and time effective method of raising funds and can be structured to meet the needs of the entrepreneurs, it does not require detailed compliance with formalities as required in public or rights issues.

It is believed in some circles that private placement has crowded out public issues.

Indian market is getting integrated with the global market though in a limited way through euro issues. Since 1992, when they were permitted access, Indian companies have raised over Rs. 40,000 crore through ADRs/GDRs. By the end of December 2003, 517 FIIs were registered with SEBI. They had net cumulative investments over of US$ 23 billion by the end of December 2003.

The market is getting institutionalised as people prefer mutual funds as their investment vehicle, thanks to evolution of a regulatory framework for mutual funds, tax concessions offered by government and preference of investors for passive investing. The net collections by mutual funds picked up during 1990s and increased to Rs. 19,953 crore during 1999-2000 (Table 4). This, however, declined to Rs. 4,580 crore during 2002-03. Starting with an asset base of Rs. 25 crore in 1964, the total assets under management schemes at the end of March 2003 was Rs. 109,297 crore (Rs. 79,464 crore excluding UTI specified undertaking). The number of households owning units of MFs exceeds the number of households owning equity and debentures.

According to SEBI, there were a total of 1.6 crore investors accounts (it is likely that there may be more than one folio of an investor which might have been counted more than once and actual number of investors would be less) holding units of Rs. 79,601 crore as on 31st March 2003. Out of this, 1.56 crore were individual investors accounts, which held units of Rs. 32,691 crore. Individual investor accounts constituted 97.42% of the total number of accounts and 41.07% of the total net assets. Corporates and institutions who formed only 2.04% of the total number of investors accounts in the mutual funds industry, contributed a sizeable amount of Rs.45,470 crore which was 57.12% of the total net assets in the mutual funds industry. The NRIs / OCBs and FIIs constituted a very small percentage of investors accounts (0.54%) and contributed Rs.1440.18 crore (1.81%) of net assets. The details of unit holding pattern are presented in Table 5A.

Table 5B presents the assets under management of 38 mutual funds under 382 schemes. At the end of March, 2003, the mutual funds together had assets under management of about Rs. 80,000 crore.

Government Securities: The primary issues of the Central Government have increased many-fold during the decade of 1990s from Rs. 8,989 crore in 1990-91 to Rs. 151,126 crore in 2002-03 (Table 4). The issues by state governments increased by about twelve times from Rs. 2,569 crore to Rs. 30,853 crore during the same period.

Secondary Market

Corporate Securities: Selected indicators in the secondary market are presented in Table 6. The number of stock exchanges increased from 11 in 1990 to 23 now. All the exchanges are fully computerised and offer 100% on-line trading. 9,413 companies were available for trading on stock exchanges at the end of March 2003. The trading platform of the stock exchanges was accessible to 9,519 members from over 400 cities on the same date.

The market capitalisation grew ten fold between 1990-91 and 1999-2000. All India market capitalisation is estimated at Rs. 631,921 crore at the end of March 2003. The market capitalisation ratio, which indicates the size of the market, increased sharply to 85% by March 2000. It, however, declined to 29% by end March 2003. Traditionally, manufacturing companies and financial services sector accounted for a major share in market capitalisation. However, in the recent past, the importance of these traditional sectors has declined and new sectors like, information technology, pharmaceuticals and fast moving consumer goods have picked up.

The trading volumes on exchanges have been witnessing phenomenal growth during the 1990s. The average daily turnover grew from about Rs.150 crore in 1990 to Rs. 12,000 crore in 2000, peaking at over Rs. 20,000 crore. One-sided turnover on all stock exchanges exceeded Rs. 10,00,000 crore during 1998-99, Rs. 20,00,000 crore during 1999-2000 and approached Rs. 30,00,000 crore during 2000-01. However, it declined substantially to Rs. 986,908 crore in 2002-03. The turnover ratio, which reflects the volume of trading in relation to the size of the market, has been increasing by leaps and bounds after the advent of screen based trading system by the NSE. The turnover ratio for the year 2000-01 increased to 375 but fell substantially due to bad market conditions to 153 during 2002-03. These have picked up substantially by December 2003.

The sectoral distribution of turnover has undergone significant change over last few years. The share of manufacturing companies in turnover of top '50' companies, which was nearly 80% in 1995-96, declined sharply to about 2% in 2002-03. During the same period the share of IT companies in turnover increased sharply from nil in 1995-96 to 75% in 2002-03.

Trades concentrate on a few exchanges/securities/members. The leading stock exchange, the National Stock Exchange of India Limited, alone accounted for 64% of total turnover in cash segments of stock exchanges in 2002-03. Top two exchanges accounted for 96% of total turnover, while over a dozen exchanges reported nil turnover during the said year. Top '5' and '100' securities accounted for 41% and 95% of turnover respectively during 2002-03 on NSE. During the same period, top '5' and '100' members accounted for 10% and 59% of turnover respectively.

Many securities listed on stock exchanges are not traded and trading in many other securities is negligible. On an average about 30% companies at BSE were traded every month during 2002-03. Only 67.7% of companies traded on BSE were traded for more than 100 days. Trading took place for less than 100 days in case of 33% of companies traded at BSE during the year, and for less than 10 days in case of 9% of companies traded. On an average 96% of companies available for trading at NSE were traded every month during 2002-03. Nearly 78% of companies traded on NSE were traded for more than 100 days during 2001-02. There was no trade in several companies

TABLE 4: Resource Mobilisation From The Primary Market.

(Rs. crore)

Issues	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	2000-01	2001-02	2002-03
Corporate Securities	**14,219**	**16,366**	**23,537**	**44,498**	**48,084**	**36,689**	**37,147**	**42,125**	**60,192**	**72,450**	**78,396**	**74,330**	**70,039**
Domestic Issues	14,219	16,366	23,286	37,044	41,974	36,193	33,872	37,738	59,044	68,963	74,199	71,988	66,613
Non-Govt. Public Co.	4,312	6,193	19,803	19,330	26,417	16,075	10,410	3,138	5,013	5,153	4,890	5,692	1,878
PSU Bonds	5,663	5,710	1,062	5,586	3,070	2,292	3,394	2,982	-	-	-	-	-
Govt. Companies	-	-	430	819	888	1,000	650	43	-	-	-	350	-
Banks & FIs	-	-	356	3,843	425	3,465	4,352	1,476	4,352	2,551	1,472	1,070	2,989
Private Placement	4,244	4,463	1,635	7,466	11,174	13,361	15,066	30,099	49,679	61,259	67,836	64,876	61,746
Euro Issues	-	-	702	7,898	6,743	1,297	5,594	4,009	1,148	3,487	4,197	2,342	3,426
Government Securities	**11,558**	**12,284**	**17,690**	**54,533**	**43,231**	**46,783**	**42,688**	**67,386**	**106,067**	**113,336**	**128,483**	**152,508**	**181,979**
Central Government	8,989	8,919	13,885	50,388	38,108	40,509	36,152	59,637	93,953	99,630	115,183	133,801	151,126
State Governments	2,569	3,364	3,805	4,145	5,123	6,274	6,536	7,749	12,114	13,706	13,300	18,707	30,853
Total	**25,777**	**28,650**	**41,227**	**99,031**	**91,315**	**83,472**	**79,835**	**109,511**	**166,259**	**185,786**	**206,879**	**226,838**	**252,018**
Mutual Funds	**7508**	**11,253**	**13,021**	**11,244**	**12274**	**-5,833**	**-2,036**	**4,064**	**3,611**	**19,953**	**11,135**	**7,137**	**4,580**

Source: RBI.

TABLE 5A: Unit Holding Pattern of Mutual Funds Industry as on 31[ST] March, 2003.

Category	Number of Investors Accounts	% to Total Investors Accounts	Net Asset Value (Rs. crore)	% to Total NAV
Individuals	15,557,506	97.42	32,691.12	41.07
NRIs/OCBs	84,311	0.53	878.51	1.10
FIIs	2,058	0.01	561.67	0.71
Corporates/Institutions/Others	324,979	2.04	45,469.53	57.12
Total	**15,968,854**	**100.00**	**79,600.83**	**100.00**

TABLE 5B: Assets Under Management of MFs as on 31[st] March, 2003.

(Rs. crore)

Scheme	Open Ended	Close ended	Assured Return	Total
Income	46587	617	360	47564
Growth	8041	1846	-	9887
Balanced	2449	692	-	3141
Liquid	13734	-	-	13734
Gilt	3910	-	-	3910
ELSS	350	878	-	1228
Total	**75071**	**4033**	**360**	**79464**

TABLE 6: Secondary Market - Selected Indicators

(Amount in Rs. crore)

At the End of Financial Year	Capital Market Segments of Stock Exchanges								
	No. of Brokers	No. of Listed Companies	S & P CNX Nifty	Market Cap	Market Cap Ratio (%)	Turnover	Turnover Ratio (%)	SGL Turnover	Derivatives Turnover
1990-91	—	6,229	366.45	110,279	20.6	—	—	—	—
1991-92	—	6,480	1261.65	354,106	57.4	—	—	—	—
1992-93	—	6,925	660.51	228,780	32.4	—	—	—	—
1993-94	—	7,811	1177.11	400,077	45.6	203,703	50.9	—	—
1994-95	6,711	9,077	990.24	473,349	45.6	162,905	34.4	50,569	—
1995-96	8,476	9,100	985.30	572,257	47.0	227,368	39.7	127,179	—
1996-97	8,867	9,890	968.85	488,332	34.6	646,116	132.3	122,941	—
1997-98	9,005	9,833	1116.65	589,816	37.7	908,681	154.1	185,708	—
1998-99	9,069	9,877	1078.05	574,064	34.1	1,023,382	178.3	227,228	—
1999-00	9,192	9,871	1528.45	1,192,630	84.7	2,067,031	173.3	539,232	—
2000-01	9,782	9,954	1148.20	768,863	54.5	2,880,990	374.7	698,121	4,038
2001-02	9,687	9,644	1129.55	749,248	36.4	895,817	119.6	1,555,653	103,847
2002-03	9,519	9,413	978.20	631,921	28.5	986,908	153.3	1,955,731	442,343

Note: Turnover figures for the respective year; — Information Not Available / there was no trading.

Source: RBI, SEBI, NSE, BSE.

listed on a number of regional stock exchanges. This indicates that trading is concentrated among only a limited number of stocks and is very thin in a large number of stocks.

The two most popular indices used in the market are SENSEX and S&P CNX NIFTY. The movement of the market in terms of the latter has been discussed here as it is maintained by IISL, an entity exclusively engaged in this work. In the very first year of liberalisation, i.e. 1991-92, the S&P CNX NIFTY recorded a growth of 267%, followed by sharp decline of 47% in the next year as certain irregularities in securities transactions were noticed. Since then, the market experienced a roller coaster ride till 1999-2000 when the Nifty firmed up by 42% due to perception about the strength of the government and its commitment towards second generation reforms, improved macroeconomic parameters and better corporate results. The trend got reversed during 2000-01, which witnessed large sell-offs in new economy stocks in global markets, deceleration in the growth of the domestic economy, market turbulence following allegations of large scale irregularities in securities transactions, and revelation of large scale corruption in the procurement of defence equipments. The trend precipitated further during 2001-02 with introduction of rolling settlement and withdrawal of deferral products in July 2002, suspension of repurchase facility under UTI's US-64 scheme, terrorist attack on world Trade Centre in September 2002, etc. It reversed in the year 2003-04 following all-round development in the economy coupled with feel good factor. The movement of S&P CNX Nifty since January 1990 is presented in Chart 1.

CHART 1 : Movements of S & P CNX Nifty

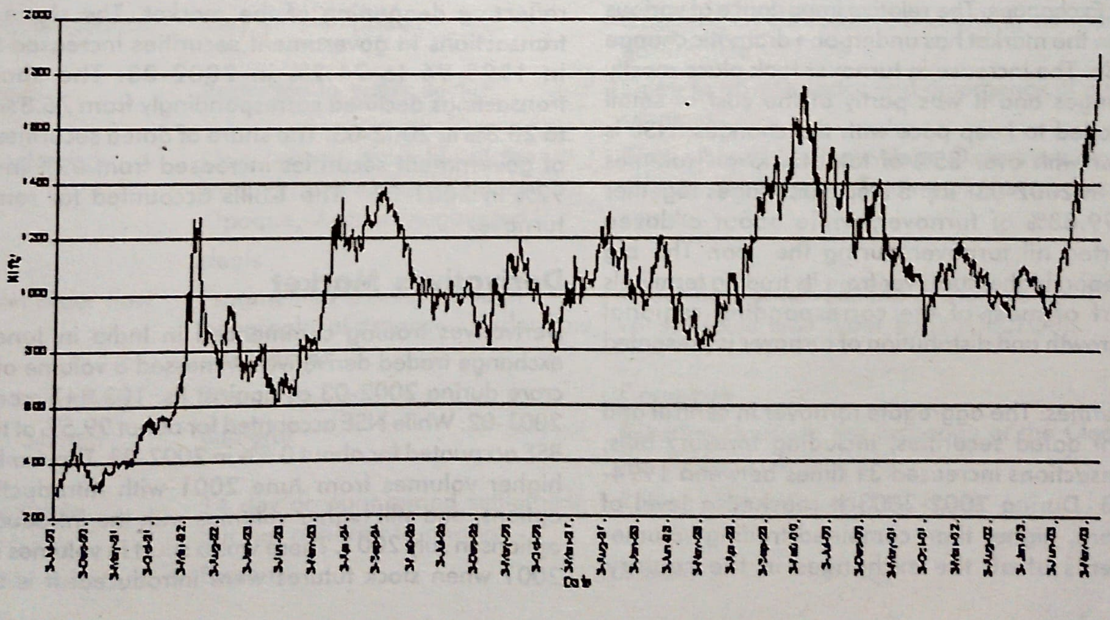


TABLE 7: Growth And Distribution of Turnover on Stock Exchanges

Exchanges	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
NSE	8,509	80,009	336,782	481,197	519,852	1,143,268	1,770,458	1,562,283	2,126,545
Mumbai	67,748	50,064	124,284	207,383	311,999	685,028	1,001,619	309,316	316,552
Calcutta	52,872	62,128	105,664	178,778	171,780	357,166	355,035	27,075	6,523
Delhi	9,083	10,076	48,631	67,840	51,759	93,289	83,871	5,828	11
Ahmedabad	5,651	8,786	20,533	30,771	29,734	37,566	54,035	14,844	15,459
Uttar Pradesh	7,823	2,373	16,070	15,390	18,627	24,048	24,747	25,237	14,763
Ludhiana	2,488	4,849	5,274	8,315	5,978	7,741	9,732	857	0
Pune	3,672	7,071	9,903	8,624	7,453	6,087	6,171	1,171	0
Bangalore	712	890	4,398	8,636	6,779	11,147	6,033	70	0
Hyderabad	1,375	1,285	480	1,860	1,276	1,237	978	41	5
ICSE					1	545	233	55	53
Cochin	597	1,803	1,401	1,783	773	0	187	0	0
OTCEI	365	218	221	125	142	3,588	126	4	0
Madras	3,033		2,315	1,228	370	250	109	24	76
Madhya Pradesh	118	204	12	1	1	10	2	24	0
Magadh	797	1,629	2,755	323	0	8	2	0	0
Vadodara	1,621	1,259	4,268	4,576	1,749	159	1	10	3
Gauhati	285	619	484	20	30	0	0	0	0
Bhubaneshwar	143	226	231	202	77	70	0	0	0
Coimbatore	1,310	2,503	2,398	2,136	395	39	0	27	0
Jaipur	879	1,047	1,519	431	65	2	0	0	0
Mangalore	62	39	373	308	11	0	0	0	0
SKSE	545	564	398	17	0	0	0	0	0
Total	**169,686**	**237,642**	**688,394**	**1,019,944**	**1,128,851**	**2,371,247**	**3,313,338**	**1,946,865**	**2,479,988**

Note: Turnover means total value of transactions of securities in all market segments of an Exchange.

Source: SEBI

Turnover on Stock Exchanges: The relative importance of various stock exchanges in the market has undergone dramatic change during this decade. The increase in turnover took place mostly at the big exchanges and it was partly at the cost of small exchanges that failed to keep pace with the changes. NSE is the market leader with over 85% of total turnover (volumes on all segments) in 2002-03. Top 5 stock exchanges together accounted for 99.88% of turnover, while about a dozen exchanges reported nil turnover during the year. The big exchanges now report higher turnover from its trading terminals in the home turf of most of the corresponding regional exchanges. The growth and distribution of turnover is presented in Table 7.

Government Securities: The aggregate turnover in central and state government dated securities, including treasury bills, through SGL transactions increased 31 times between 1994-95 and 2002-03. During 2002-2003 it reached a level of Rs.1,955,731 crore, higher than combined trading volumes in equity segments of all the exchanges in the country, reflecting deepening of the market. The share of outright transactions in government securities increased from 23.2% in 1995-96 to 71.2% in 2002-03. The share of repo transactions declined correspondingly from 76.8% in 1995-96 to 28.8% in 2002-03. The share of dated securities in turnover of government securities increased from 69% in 1996-97 to 92% in 2001-02. The T-bills accounted for remaining SGL turnover.

Derivatives Market

Derivatives trading commenced in India in June 2000. The exchange traded derivatives witnessed a volume of Rs.442,343 crore during 2002-03 as against Rs. 103,847 crore during the 2001-02. While NSE accounted for about 99.5% of total turnover, BSE accounted for about 0.5% in 2002-03. The market witnessed higher volumes from June 2001 with introduction of index options, and still higher volumes with the introduction of stock options in July 2001. There was a spurt in volumes in November 2001 when stock futures were introduced. It is believed that

India is the largest market in the world for stock futures. It is observed that futures are more popular than options; contracts on securities are more popular than those on indices; call options are more popular than put options; and near month contracts are more popular than not-so-near month contracts. The index futures, stock futures, index options and stock options accounted for 10%, 65%, 2% and 23% respectively of total turnover during 2002-03.

MARKET DESIGN

Reforms in Securities Market

With the objectives of improving market efficiency, enhancing transparency, preventing unfair trade practices and bringing the Indian market up to international standards, a package of reforms consisting of measures to liberalise, regulate and develop the securities market was introduced. The practice of allocation of resources among different competing entities as well as its terms by a central authority was discontinued. The issuers complying with the eligibility criteria were allowed freedom to issue the securities at market determined rates. The secondary market overcame the geographical barriers by moving to screen based trading. All kinds of securities - debt and equity, government and corporate - are traded on exchange side by side. Trades enjoyed counter-party guarantee. The trading cycle shortened to a day and trades are settled within 2 working days, while all deferral products were banned. Physical security certificates almost disappeared. A variety of derivatives were permitted. Corporate governance improved significantly. As a result of these reforms, the market design has changed drastically for better as may be seen from Table 8. This has boosted the confidence of international investors in Indian securities market. Indian market is getting integrated with the global market though in a limited way through euro issues, as may be noted from ADR/GDR issues and FII inflows stated

TABLE 8: Elements of Market Design in Indian Securities Market, 1992 and 2003.

Features	1992	2003
1	2	3
Regulator	No Specific Regulator, but Central Government oversight	A specialized regulator for securities market (SEBI) vested with powers to protect investors' interest and to develop and regulate securities market. SROs strengthened.
Intermediaries	Some of the intermediaries (stock brokers, authorized clerks and remisiers) regulated by the SROs.	A variety of specialized intermediaries emerged. They are registered and regulated by SEBI (also by SROs). They as well as their employees are required to follow a code of conduct and are subject to a number of compliances.
Access to Market	Granted by Central Government	Eligible issuers access the market after complying with the issue requirements.
Pricing of Securities	Determined by Central Government	Determined by market, either by the issuer through fixed price or by the investors through book building
Access to International market	No access	Corporates allowed to issue ADRs/ GDRs and raise ECBs. ADRs/ GDRs have two way fungibilty. FIIs allowed trade in Indian market. MFs also allowed to invest overseas
Corporate Compliance	Very little emphasis	Emphasis on disclosures, accounting standards and corporate governance
Mutual Funds	Restricted to public sector	Open to private sector and emergence of a variety of funds and schemes
Trading Mechanism	Open outcry, Available at the trading rings of the exchanges, Opaque, Auction/negotiated deals	Screen based trading system, Orders are matched on price-time priority, Transparent, Trading platform accessible from all over country
Aggregation order flow	Fragmented market through geographical distance. Order flow unobserved.	Order flow observed. The exchanges have open electronic consolidated limit order book (OECLOB).
Anonymity in Trading	Absent	Complete
Settlement System	Bilateral	Clearing House of the Exchange or the Clearing Corporation is the central counter-party
Settlement Cycle	14 day account period settlement, but not adhered to always	Rolling settlement on T+2 basis
Counterparty risk	Present	Absent

1	2	3
Form of Settlement	Physical	Mostly Electronic
Basis of settlement	Bilateral Netting	Multilateral Netting
Transfer of securities	Cumbersome. Transfer by endorsement on security and registration by issuer	Securities are freely transferable. Transfers are recorded electronically in book entry form by depositories.
Risk Management	No focus on risk management	Comprehensive risk management system encompassing capital adequacy, limits on exposure and turnover, VaR based margining, client level gross margining, on-line position monitoring etc.
Derivatives Trading	Absent	Exchange traded futures and Options available on two indices and select securities.

elsewhere in this paper. One can gauge the extent of reforms in the securities market from the change in transactions costs. The market impact cost of transactions in equity on stock exchanges has reduced from 0.75% in mid-1993 to 0.09% in March 2003. The brokerage has reduced from 3% to 0.15%. Lower transaction cost means higher attraction for investors in securities and issuers of securities to participate in the market on a larger scale.

Primary Market

Corporate Securities: The issue of capital to public by Indian companies is governed by the Disclosure and Investor Protection (DIP) Guidelines of SEBI. The guidelines provide norms relating to eligibility for companies issuing securities, pricing of issues, listing requirements, disclosure, lock-in period for promoters' contribution, contents of offer documents, pre and post issue obligations, etc.

Eligibility: An unlisted company can make public issue of equity shares or any other security convertible into equity shares, on fixed price basis or on book building basis, provided (i) it has net tangible assets of at least Rs. 3 crore in each of the preceding 3 years, (ii) it has a pre-issue net worth of not less than Rs. 1 crore in each of the preceding 3 years, (iii) it has a track record of distributable profits for at least 3 out of the preceding 5 years, and (iv) the issue size does not exceed five times its pre-issue net worth. A listed company can access market upto five times of its pre-issue net worth. If the company, listed or unlisted, does not meet the above criteria, the issue can be made only if it satisfies two conditions: (a) the issue is made through book building with minimum offer of 50% of the issue size to 'Qualified Institutional Buyers' or the project has participation of at least 15% from FIs and 10% is allotted to QIBs; and (b) the minimum post issue face value of capital of the company is Rs. 10 crore or there is market making for at least 2 years from the date of listing. In addition, an unlisted company can not make allotment if the number of prospective allottees is less than 1000. These provisions do not apply to a banking company, an infrastructure company and rights issue by a listed company. Infrastructure companies are exempt from the eligibility norms if their project has been appraised by a public financial institution and not less than 5% of the project cost is financed by any of the institutions, jointly or severally, by way of loan and/or subscription to equity. Public and rights issues of debt instruments, irrespective of their maturities or conversion period, require credit rating of not less than investment grade from two credit rating agencies. All the credit ratings obtained from different agencies for the issue as well as all the ratings obtained for any listed security during last 3 years need to be disclosed in the offer document. Thus the quality of the issue is demonstrated by track record/appraisal by financial institutions/credit rating/subscription by QIBs.

Pricing: An eligible company is free to make public/rights issue of securities of any denomination and at any price. It has option to determine price and justify the same in prospectus or may allow investors to determine the price through book building. In the former case, the price is known in advance to investor and the demand is known at the close of the issue. In case of public issue through book building, demand can be known at the end of everyday but price is known at the close of issue. An issuer company proposing to issue capital through book building has two options viz., 75% book building route and 100% book building route. In case of 100% book building route is adopted, not more than 60% of net offer to public can be allocated to QIBs, not less than 15% of the net offer to the public can be allocated to non-institutional investors applying for more than 1000 shares and not less than 25% of the net offer to public can be allocated to retail investors applying for upto 1000 shares. In case 75% of net public offer is made through book building, not more than 60% of the net offer can be allocated to QIBs and not less than 15% of the net offer can be allocated to non-institutional investors. The balance 25% of the net offer to public, offered at a price determined through book building, are available to retail individual investors who have either not participated in book building or have not received any allocation in the book built portion. The underwriting is compulsory if the issue is made through book building. A company can use the on-line system of exchanges for making public issues (called E-IPO). In such cases, the specified brokers collect application and application moneys from their clients and place orders with the company to buy its securities.

Promoters' Contribution: The promoters' contribution in case of public issues by unlisted companies and promoters' shareholding in case of 'offers for sale' should not be less than 20% of the post issue capital. In case of public issues by listed companies, promoters should contribute to the extent of 20% of the proposed issue or should ensure post-issue holding to the extent of 20% of the post-issue capital. The promoters should bring in the full amount of the promoters contribution including premium at least one day prior to the issue opening date. The minimum promoters contribution is locked in for a period of 3 years. The contribution in excess of minimum contribution is locked in for one year.

The lead merchant banker discharges most of the pre-issue and post-issue obligations. He satisfies himself about all aspects of offering and adequacy of disclosures in the offer document. He issues a due diligence certificate stating that he has examined the prospectus, he finds it in order and that it brings out all the facts and does not contain anything wrong or misleading. He also takes care of allotment, refund and despatch of certificates.

The admission to a depository for dematerialisation of securities is a prerequisite for making a public or rights issue or an offer for sale. The investors, however, have the option of subscribing to securities in either physical form or dematerialised form. All new IPOs are compulsorily traded in dematerialised form. Every public listed company making IPO of any security for Rs. 10 crore or more is required to do so only in dematerialised form.

A company cannot make a public issue unless it has made an application for listing of those securities with stock exchange(s).

Government Securities: The issue is governed by the terms and conditions specified in the general notification of the government and also the terms and conditions specified in the specific notification issued in respect of issue of each security. Government issues securities with fixed coupon rates, floating rate bonds, zero coupon bonds and securities with embedded derivatives. The securities are issued through auction either on price basis or on yield basis.

Where the issue is on price basis, the coupon is pre-determined and the bidders quote price per Rs.100 face value of the security, at which they desire to purchase the security. Where the issue is on yield basis, the coupon of the security is decided in an auction and the security carries the same coupon till maturity. On the basis of the bids received, RBI determines the maximum rate of yield or the minimum offer price as the case may be at which offers for purchase of securities would be accepted at the auction. The auctions for issue of securities (on either yield basis or price basis) are held either on 'Uniform price' method or on 'Multiple price' method. Where an auction is held on 'Uniform price' method, competitive bids offered with rates up to and including the maximum rate of yield or the prices up to and including the minimum offer price, as determined by RBI, are accepted at the maximum rate of yield or minimum offer price so determined. Bids quoted higher than the maximum rate of yield or lower than the minimum price are rejected. Where an auction is held on 'Multiple price' method, competitive bids offered at the maximum rate of yield or the minimum offer price, as determined by RBI, are accepted. Other bids tendered at lower than the maximum rate of yield or higher than the minimum offer price are accepted at the rate of yield or price as quoted in the respective bid. Bids quoted higher than the maximum rate of yield or lower than the minimum price are rejected. Individuals and specified institutions (read 'retail investors') can participate in the auctions on 'non-competitive' basis. Allocation of the securities to non-competitive bidders are made at the discretion of RBI and at a price not higher than the weighted average price arrived at on the basis of the competitive bids accepted at the auction or any other price announced in the specific notification.

Mutual Funds: Mutual fund is a kind of collective investment vehicle which pools the resources of small investors, who generally lack expertise to invest on their own, invests in securities and distributes the returns there form among them on cooperative principles. It is set up in the form of a trust which has sponsor, trustees, asset management company, and custodian. The 1990s witnessed emergence of a large variety of funds. There are funds which invest in growth stocks, funds which specialize in the stocks of a particular sector, funds which assure return to investors, funds which invest in debt instruments and funds which invest aggressively and fund which do not do any of these. Thus there are income funds, growth funds, balanced funds, liquid funds, gilt funds, index funds, sectoral funds, and there are open ended, close ended and assured return funds - there is a fund for every body. At the end of March 2003, there were 38 mutual funds with 382 schemes. The mutual funds are regulated by SEBI regulations which prescribe a code of conduct as well as impose various investment restrictions in the interest of investors.

Secondary Market

Corporate Securities: The stock exchanges, recognized under the SCRA, are the exclusive centres for trading of securities. Though the area of operation/jurisdiction of an exchange is specified at the time of its recognition, they have been allowed recently to set up trading terminals anywhere in the country. The three newly set up exchanges (OTCEI, NSE and ICSE) were permitted since their inception to have nation wide trading. The trading platforms of a few exchanges are now accessible from many locations. Further, with extensive use of information technology, the trading platforms of a few exchanges are also accessible from anywhere through the Internet and mobile devices. This made a huge difference in a geographically vast country like India.

Exchange Management: Only 3 exchanges (Mumbai, Ahmedabad, Madhya Pradesh) are organsised in the form of "Association of Persons", while the balance 20 are organized as companies - either limited by guarantee or by shares. Except one exchange (NSE), all exchanges, whether corporates or association of persons, are not-for-profit organizations.

Most of the stock exchanges in the country are organised as "mutuals" which was considered beneficial in terms of tax benefits and matters of compliance. The trading members, who provide brokering services, also own, control and manage the exchanges. This is not an effective model for self-regulatory organisations as the regulatory and public interest of the exchange conflicts with private interests. Efforts are on to demutualise the exchanges whereby ownership, management and trading membership would be segregated from one another. Two exchanges *viz.* OTCEI and NSE are demutualised from inception, where ownership, management and trading are in the hands of three different sets of people. This model eliminates conflict of interest and helps the exchange to pursue market efficiency and investor interest aggressively. The authorities are working to demutualise all the non-demutualised exchanges.

Membership: The trading platform of an exchange is accessible only to brokers. Demutualised exchange allow free entry and exit of brokers, while others have limited the number of brokers. The broker enters into trades in exchanges either on his own account or on behalf of clients. No stock broker or sub-broker is allowed to buy, sell or deal in securities, unless he or she holds a certificate of registration granted by SEBI. A broker/sub-broker complies with the code of conduct prescribed by SEBI. Over time, a number of brokers - proprietor firms and partnership firms - have converted themselves into corporates. Out of 9,519 brokers registered with SEBI at the end of March 2003, 3,835 brokers, accounting for nearly 40% of total, were corporate entities. At end-March 2003, there were 13,291 sub-brokers registered with SEBI. The standards for admission of members stress on factors, such as corporate structure, capital adequacy, track record, education, experience, etc. and reflect a conscious endeavour to ensure quality broking services.

Listing: A company seeking listing satisfies the exchange that at least 10% of the securities, subject to a minimum of 20 lakh securities, were offered to public for subscription, and the size of the net offer to the public (i.e. the offer price multiplied by the number of securities offered to the public, excluding reservations, firm allotment and promoters' contribution) was not less than Rs. 100 crore, and the issue is made only through book building method with allocation of 60% of the issue size to the qualified institutional buyers. In the alternative, it is required to offer at least 25% of the securities to public. The company is also required to maintain the minimum level of non-promoter holding on a continuous basis.

Before making an application for listing to any stock exchange, a body corporate, mutual fund or collective investment scheme, is required to obtain a letter of recommendation for listing from the Central Listing Authority.

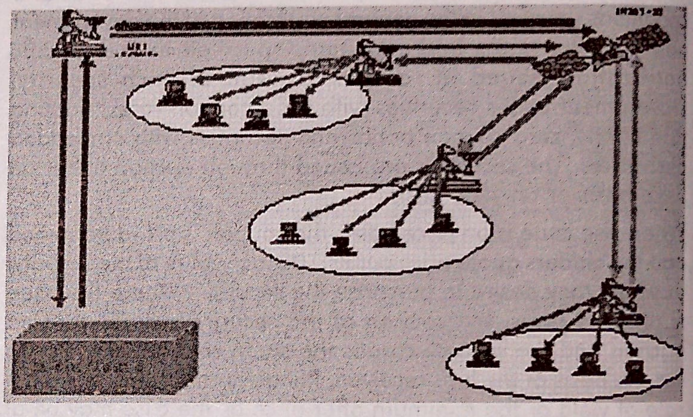
The basic norms for listing of securities on the stock exchanges are uniform for all the exchanges. These norms are specified in the listing agreement entered into between the company and the concerned exchange. The listing agreement prescribes a number of requirements to be continuously complied with by the issuers for continued listing and such compliance is monitored by the exchanges. It also stipulates the disclosures to be made by the companies and the corporate governance practices to be followed by them. SEBI has been issuing guidelines/circulars prescribing certain norms to be included in the listing agreement and to be complied with by the companies.

A listed security is available for trading on the exchange. 9,413 securities were listed on exchanges at the end of March 2003. A security listed on other exchanges is also permitted for trading. The stock exchanges levy listing fees - initial fees and annual fees - from the listed companies. It is a major source of income for many exchanges.

A listed company can voluntary delist its securities from a stock exchanges after providing an exit opportunity to holders of securities at a price determined through reverse book building. An exit opportunity is not necessary, if the security remains listed on an exchange having nationwide trading terminals. An exchange can, however, delist the securities compulsorily following a very stringent procedure.

Trading Mechanism: The exchanges provide an on-line fully-automated screen based trading system (SBTS) where a member can punch into the computer quantities of securities and the prices at which he likes to transact and the transaction is executed as soon as it finds a matching order from a counter party. SBTS electronically matches orders on a strict price/time priority and hence cuts down on time, cost and risk of error, as well as on fraud resulting in improved operational efficiency. It allows faster incorporation of price sensitive information into prevailing prices, thus increasing the informational efficiency of markets. It enables market participants to see the full market on real-time, making the market transparent. It allows a large number of participants, irrespective of their geographical locations, to trade with one another simultaneously, improving the depth and liquidity of the market. It provides full anonymity by accepting orders, big or small, from members without revealing their identity, thus providing equal access to everybody. Trading platform is also accessible to an investor through the Internet and mobile devices such as WAP. It also provides a perfect audit trail, which helps to resolve disputes by logging in the trade execution process in entirety. A typical trading network is presented in Chart 2.

CHART 2: Trading Network.



Trading Rules: SEBI has framed regulations to prevent insider trading as well as unfair trade practices. The acquisitions and takeovers are permitted in a well-defined and orderly manner. Thresholds of shareholding, which require disclosure or public offer, have been prescribed. The companies are permitted to buy back their securities to improve liquidity and enhance the shareholders' wealth.

Price Bands: Stock market volatility is generally a cause of concern for both policy makers as well as investors. To curb excessive volatility, SEBI has prescribed a market wide circuit breaker system which brings about a coordinated trading halt in all equity and equity derivatives markets nation-wide, when the index moves either way by 10%, 15% and 20%. The movement of either S&P CNX Nifty or Sensex, whichever is breached earlier, triggers the breakers. As an additional measure of safety, exchanges have imposed individual scrip-wise price bands, as high as 20% in some securities. However, in respect of securities for which derivative products are available or those included in indices on which derivative products are available, a daily price limit of 10% is applicable.

Demat Trading: There are in place two fully developed depositories which maintain and transfer ownership records in electronic form for the entire range of securities. They encourage broadest direct and indirect industry participation. A large variety of instruments including all securities and money market instruments are held in depositories. These are held in dematerialised form. Investor is sovereign under the depository legislation which gives him right to hold the securities in physical form or demat form. All securities which investor likes to hold in demat form, are held in depositories. All active securities are traded and settled in demat form. More than 99.5% of turnover on stock exchanges settled by delivery is now being settled in demat form. The depositories operate under the Depositories Act, 1996 and SEBI (Depositories and Participants Regulations) 1996, and the systems are in place for smooth inter-depository transfer of securities. Stamp duty on transfer of demat securities have been abolished. Securities held in depositories are freely transferable. Demat securities are preferred collateral in the market. The admission to a depository for dematerialisation of securities has been made a prerequisite for making a public or rights issue or an offer for sale. All new IPOs are compulsorily traded in demat form. It has also been made compulsory for public listed companies making IPO of any security for Rs. 10 crore or more to do the same only in dematerialised form.

Charges: A stock broker is required to pay to SEBI a registration fee of Rs. 5,000 for every financial year, if his annual turnover does not exceed Rs. 1 crore. If the turnover exceeds Rs. 1 crore during any financial year, he has to pay Rs. 5,000 plus one-hundredth of 1% of the turnover in excess of Rs.1 crore. After the expiry of five years from the date of initial registration as a broker, he has to pay Rs. 5,000 for a block of five financial years. Besides, the exchanges collect transaction charges from its trading members. NSE levies Rs. 4 per lakh of turnover.

The maximum brokerage a trading member can levy in respect of securities transactions is 2.5% of the contract price, exclusive of statutory levies like SEBI fee, service tax and stamp duty. However, brokerage charges as low as 0.15% are also observed in the market. This maximum brokerage is inclusive of the brokerage charged by the sub-broker which shall not exceed 1.5% of contract price.

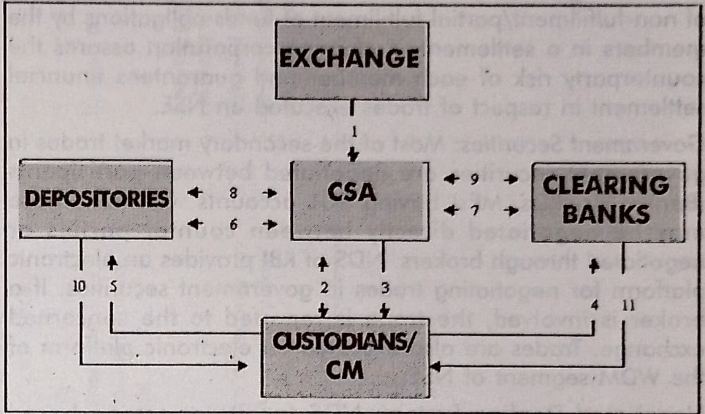
Stamp duties are payable as per the rates prescribed by the relevant state. In Maharastra, it is charged @ Re. 1 for every Rs. 10,000 or part thereof (i.e. 0.01%) of the value of security at the time of its purchase/sale as the case may be. However, if the securities are not delivered, it is levied @ 20 paise for every Rs 10,000/- or part thereof (0.002%).

The depositories provide depository services to investors through depository participants. They do not charge the investors directly, but charge their DPs who are free to have their own free structure for their clients.

Settlement Cycle: The trades accumulate over a trading cycle of one day and at the end of the day, these are clubbed together, and positions are netted and payment of cash and delivery of securities settle the balance after 2 working days. All trades executed on a day 'T' are settled on T+2 day.

Trades are executed on screen and matched trade details are linked to settlement system electronically, and hence matching and confirmation of trades for direct participants are instantaneous. All communications relating to securities settlement is fully electronic and automated. For instance, the clearing agency downloads the obligations and pay-in advices of funds / securities to members electronically through secured networks. It also sends electronic advice to clearing banks and depositories to debit the members' accounts to the extent of their obligations. The banks and the depositories debit accounts of members and credit the account of the clearing agency electronically. The reverse happens when the funds / securities are paid out to members. The exchange is connected electronically to clearing and settlement agency, which in turn is connected electronically to clearing banks, depositories, custodians and members. The depositories have electronic communication with depository participants, clearing agency, custodians, clients and exchanges. Most of these electronic communication are interactive. The typical clearing and settlement process is presented in Chart 3.

CHART 3: Clearing and Settlement Process.



1. Trade details from Exchange to Clearing and Settlement Agency (CSA) (real-time and end of day trade file).
2. CSA notifies the consummated trade details to CMs/ custodians who affirm back. Based on the affirmation, CSA applies multilateral netting and determines obligations.
3. Download of obligation and pay-in advice of funds/securities.
4. Instructions to clearing banks to make funds available by pay-in-time.
5. Instructions to depositories to make securities available by pay-in-time.
6. Pay-in of securities (CSA advises depository to debit pool account of custodians/CMs and credit its account and depository does it).
7. Pay-in of funds (CSA advises Clearing Banks to debit account of custodians/CMs and credit its account and clearing bank does it.) CSA transfers funds between clearing banks to meet the pay-out requirements at each bank.
8. Pay-out of securities (CSA advises depository to credit pool account of custodians/CMs and debit its account and depository does it).
9. Pay-out of funds (CSA advises Clearing Banks to credit account of custodians/CMs and debit its account and clearing bank does it).
10. Depository informs custodians/Clearing Members (CMs) through DPs.
11. Clearing Banks inform custodians/CMs.

Except at the stage of entering orders into trading system, no data is entered manually or electronically in the entire value chain. No fresh inputting of data takes place at any stage. Data flows seamlessly among the entities viz. from exchanges to clearing agency and from clearing agency to clearing banks, depository, members and custodians.

Risk Management: To pre-empt market failures and protect investors, the regulator/exchanges have developed a comprehensive risk management system, which is constantly monitored and upgraded. It encompasses capital adequacy of members, adequate margin requirements, limits on exposure and turnover, indemnity insurance, on-line position monitoring and automatic disablement, etc. They also administer an efficient market surveillance system to curb excessive volatility, detect and prevent price manipulations. Exchanges have set up trade/settlement guarantee funds for meeting shortages arising out of non-fulfillment/partial fulfillment of funds obligations by the members in a settlement. A clearing corporation assures the counterparty risk of each member and guarantees financial settlement in respect of trades executed on NSE.

Government Securities: Most of the secondary market trades in government securities are negotiated between participants (Banks, FIs, PDs, MFs) having SGL accounts with RBI. These may be negotiated directly between counter parties or negotiated through brokers. NDS of RBI provides an electronic platform for negotiating trades in government securities. If a broker is involved, the trade is reported to the concerned exchange. Trades are also executed on electronic platform of the WDM segment of NSE.

Negotiated Dealing System: NDS facilitates screen based negotiated dealing for secondary market transactions in government securities. NDS members concluding deals outside NDS system in government securities are required to report the deal on NDS system within 15 minutes of concluding the deal. The deals reported / negotiated on NDS, without the use of brokers, are required to be settled on T+0 or T+1. The deals executed through brokers need to be reported to exchanges and can be settled on T+0 to T+5 basis. The system is designed to maintain anonymity of buyers and sellers but only the vital information of a transaction viz., ISIN of the security, nomenclature, amount (face value), price/rate and/or indicative yield, in case applicable, are disseminated to the market. NDS interfaces with CCIL for settlement of government securities transactions for both outright and repo trades done/reported by NDS members.

Wholesale Debt Market of NSE: Trading system provides two market sub-types: continuous market and negotiated market. In continuous market, the buyer and seller do not know each other and they put their best buy/sell orders, which are stored in order book with price/time priority. If orders match, it results into a trade. The trades are settled directly between the participants, who take an exposure to the settlement risk attached to any unknown counter-party. A trade does not take place if both the buy/sell participants do not invoke the counter-party exposure limit in the trading system. In the negotiated market, the trades are normally decided by the seller and the buyer outside NSE, and reported to NSE through the broker. Thus, deals negotiated or structured outside the exchange are disclosed to the market through the trading system. As buyers and sellers know each other and have agreed to trade, no counter-party exposure limit needs to be invoked. The trades, reported or executed, on the WDM segment could be either outright trades or repo transactions with flexibility for varying days of settlement (T+0 to T+5) and repo periods (1 to 14 days).

Clearing Corporation of India Limited: The CCIL facilitates settlement of transactions in government securities (both outright and repo) on Delivery versus Payment (DVP-II) basis which provides for settlement of securities on gross basis and settlement of funds on net basis simultaneously. It acts as a central counterparty for clearing and settlement of government securities transactions done on NDS.

Derivatives Market

Only two exchanges, namely the NSE and BSE, offer platform for trading of derivatives of securities. In view of 99.5% market share of NSE, this section discusses market design of derivatives traded on NSE. The derivatives trading system at NSE provides a fully automated screen-based trading for Nifty futures and options, stock futures and options and interest rate derivatives on a nationwide basis as well as an online monitoring and surveillance mechanism. It supports an anonymous order driven market, which operates on a strict price/time priority. It provides tremendous flexibility to users in terms of kinds of orders that can be placed on the system. The contract specification for derivatives are summarised in Table 9.

REGULATORY FRAMEWORK

The four main legislations governing the securities market are: (a) the SEBI Act, 1992 which establishes SEBI to protect investors and develop and regulate securities market; (b) the Companies Act, 1956, which sets out the code of conduct for the corporate sector in relation to issue, allotment and transfer of securities, and disclosures to be made in public issues; (c) the Securities Contracts (Regulation) Act, 1956, which provides for regulation of transactions in securities through control over stock exchanges; and (d) the Depositories Act, 1996 which provides for electronic maintenance and transfer of ownership of demat securities.

Legislations

SEBI Act, 1992: The SEBI Act, 1992 establishes SEBI with statutory powers for (a) protecting the interests of investors in securities, (b) promoting the development of the securities market, and (c) regulating the securities market. Its regulatory jurisdiction extends over corporates in the issuance of capital and transfer of securities, in addition to all intermediaries and persons associated with securities market. It can conduct enquiries, audits and inspection of all concerned and adjudicate offences under the Act. It has powers to register and regulate all market intermediaries and also to penalise them in case of violations of the provisions of the Act, Rules and Regulations made there under. SEBI has full autonomy and authority to regulate and develop an orderly securities market.

Securities Contracts (Regulation) Act, 1956: It provides for direct and indirect control of virtually all aspects of securities trading and the running of stock exchanges and aims to prevent undesirable transactions in securities. It gives central government /SEBI regulatory jurisdiction over (a) stock exchanges through a process of recognition and continued supervision, (b) contracts in securities, and (c) listing of securities on stock exchanges. As

TABLE 9: Contract Specification for F&O Contracts at NSE

Particulars	Index Futures	Stock Futures	Index Options	Stock Options	Interest Rate Derivatives
Security Description	FUTIDX	FUTSTK ——	OPTIDX	OPTSTK —-	FUTNIT
Underlying	S&P CNX Nifty / CNXIT	Individual Securities	S&P CNX Nifty / CNXIT	Individual Securities	Notional 91 day T-Bills and Notional 10 year bonds
Style of Option	NA	NA	European	American	NA
Contract Size (minimum Rs. 2 lakh)	200 or multiples thereof /20	Multiples of 100	200 or multiples thereof / 20	Multiples of 100	2000
Price Band (% of base price)	10	20	99	99	2
Price Steps	Rs. 0.05				Rs. 0.01
Trading Cycle	A maximum of three month trading cycle - the near month (one), the next month (two) and the far month (three). New contract is introduced on the next trading day following the expiry of near month contract. However, there are fixed quarterly contracts for the entire year in case of interest rate derivatives.				
Expiration Day	Last Thursday of the expiry month or the preceding trading day, if last Thursday is a trading holiday				
No. of Strike Prices	NA	NA	Minimum of 5 (two 'in the money', one 'at the money' and two 'out of the money') for every option type (i.e. call and put)	Minimum of 5 (two 'in the money', one 'at the money' and two 'out of the money') for every option type (i.e. call and put)	NA
Strike Price Interval (in Rs.)	NA	NA	10 /100	Between 2.5 and 50 depending on the price of underlying	NA
Settlement	In cash on T+1 basis	In cash on T+1 basis	In cash on T+1 basis	Daily settlement on T+1 basis and final settlement on T+2 basis	In cash on T+1 basis
Daily Settlement Price	Closing price of futures contract	Closing price of futures contract	Premium Value (net	Premium) Value (net)	Closing price of the relevant futures contract
Final Settlement Price	Closing value of index on expiry day	Closing value of securities on expiry dat	Closing value of index on expiry day	Closing price of security on exercise day or expiry day	Value of the notional bond determined using the zero coupon yield curve
Margins	Up-front initial margin on daily basis				

NA: Not applicable.
Source: NSE Website

a condition of recognition, a stock exchange complies with prescribed conditions Central Government. Organised trading activity in securities takes place on a specified recognised stock exchange. The stock exchanges determine their own listing regulations which have to conform to the minimum listing criteria set out in the Rules.

Depositories Act, 1996: The Depositories Act, 1996 provides for the establishment of depositories in securities with the objective of ensuring free transferability of securities with speed, accuracy and security by (a) making securities of public limited companies freely transferable subject to certain exceptions; (b) dematerialising the securities in the depository mode; and (c) providing for maintenance of ownership records in a book entry form. In order to streamline the settlement process, the Act envisages transfer of ownership of securities electronically by book entry without making the securities move from person to person. The Act has made the securities of all public limited companies freely transferable, restricting the company's right to use discretion in effecting the transfer of securities, and the transfer deed and other procedural requirements under the Companies Act have been dispensed with.

Companies Act, 1956: It deals with issue, allotment and transfer of securities and various aspects relating to company management. It provides for standard of disclosure in public issues of capital, particularly in the fields of company management and projects, information about other listed companies under the same management, and management perception of risk factors. It also regulates underwriting, the use of premium and discounts on issues, rights and bonus issues, payment of interest and dividends, supply of annual report and other information.

Rules and Regulations

In order to meet exigencies of the market and to provide flexibility to regulators, they have been delegated substantial powers of subordinate legislation. The Government have framed rules under the SCRA, SEBI Act and the Depositories Act. SEBI has framed regulations under the SEBI Act and the Depositories Act for registration and regulation of all market intermediaries, and for prevention of unfair trade practices, insider trading, etc. The regulated and the market participants are consulted before framing any regulation. Under the Acts, Government and SEBI issue notifications, guidelines, and circulars which need to be complied with by market participants. The SROs like stock exchanges have also laid down their rules and regulations. The list of the regulations, Guidelines and Schemes issued by SEBI is presented in Table 10.

TABLE 10: Regulations, Guidelines, and Schemes Issued by SEBI.

	Regulations
1	SEBI (Stock Brokers and Sub Brokers) Regulations, 1992
2	SEBI (Prohibition of Insider Trading) Regulations, 1992
3	SEBI (Merchant Bankers) Regulations, 1992
4	SEBI (Portfolio Managers) Regulations, 1993
5	SEBI (Registrars to an Issue and Share Transfer Agents) Regulations, 1993
6	SEBI (Underwriters) Regulations, 1993
7	SEBI (Debenture Trustees) Regulations, 1993
8	SEBI (Bankers to an Issue) Regulations, 1994
9	SEBI (Foreign Institutional Investors) Regulations, 1995
10	SEBI (Custodian of Securities) Regulations, 1996
11	SEBI (Depositories and Participants) Regulations, 1996
12	SEBI (Venture Capital Funds) Regulations, 1996
13	SEBI (Mutual Funds) Regulations, 1996
14	SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 1997
15	SEBI (Buy-Back of Securities) Regulations, 1998
16	SEBI (Credit Rating Agencies) Regulations, 1999
17	SEBI (Collective Investment Schemes) Regulations, 1999
18	SEBI (Foreign Venture Capital Investors) Regulations, 2000
19	SEBI (Procedure for Board Meeting) Regulations, 2001
20	SEBI (Issue of Sweat Equity) Regulations, 2002
21	SEBI (Procedure for Holding Enquiry by Enquiry officer and Imposing Penalty) Regulations, 2002
22	SEBI (Prohibition of Fraudulent and Unfair Trade Practices relating to Securities Market) Regulations, 1995
23	SEBI (Central Listing Authority) Regulations, 2003
24	SEBI (Ombudsman) Regulations, 2003
25	SEBI (Central Database of Market Participants) Regulations, 2003
	Guidelines
1	SEBI (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999
2	SEBI (Disclosure & Investor Protection) Guidelines, 2000
3	SEBI (Delisting of Securities) Guidelines, 2003
	Schemes
1	Securities Lending Scheme, 1997
2	SEBI (Informal Guidance) Scheme, 2003

Source: SEBI

Regulators

The responsibility for regulating the securities market is shared by Department of Economic Affairs (DEA), Department of Company Affairs (DCA), Reserve Bank of India (RBI) and SEBI. The activities of these agencies are coordinated by a High Level Committee on Capital and Financial Markets. The orders of SEBI under the securities laws are appellable before a Securities Appellate Tribunal. The orders of the SAT are appellable before the Supreme Court.

Most of the powers under the SCRA are exercisable by DEA while a few others by SEBI. The powers of the DEA under the SCRA are also con-currently exercised by SEBI. The powers in respect of the contracts for sale and purchase of government securities, gold related securities, money market securities and securities derived from these securities and ready forward contracts in debt securities are exercised concurrently by RBI. The SEBI Act and the Depositories Act are mostly administered by SEBI. The rules under the securities laws are framed by government and regulations by SEBI. All these are administered by SEBI. The powers under the Companies Act relating to issue and transfer of securities and non-payment of dividend are administered by SEBI in case of listed public companies and public companies proposing to get their securities listed. The SROs ensure compliance with their own rules as well as with the rules relevant for them under the securities laws. □