1 Securities Markets in India: An Overview

The process of economic reforms and liberalisation was set in motion in the mid-eighties and its pace was accelerated in 1991 when the economy suffered severely from a precariously low foreign exchange reserve, burgeoning imbalance on the external account, declining industrial production, galloping inflation and a rising fiscal deficit. The economic reforms, being an integrated process, included deregulation of industry, liberalisation in foreign investment, regime, restructuring and liberalisation of trade, exchange rate, and tax policies, partial disinvestment of government holding in public sector companies and financial sector reforms. The reforms in the real sectors such as trade, industry and fiscal policy were initiated first in order to create the necessary macroeconomic stability for launching financial sector reforms, which sought to improve the functioning of banking and financial institutions (FIs) and strengthen money and capital markets including securities market. The securities market reforms were based on the recommendations of the Pherwani, Dave, Nadkarni and Narsimham Committees and the Standing High Level Committee on capital markets, and included measures for its liberalisation, regulation and development. Specifically these included: repeal of the Capital Issues (Control) Act, 1947 through which Government used to expropriate seignoirage and allocate resources from capital market for favoured uses; enactment of the Securities and Exchange Board of India Act, 1992 to provide for the establishment of the Securities and Exchange Board of India (SEBI) to regulate and promote development of securities market; setting up of NSE in 1993, passing of the Depositories Act, 1996 to provide for the maintenance and transfer of ownership of securities in book entry form; amendments to the Securities Contracts (Regulation) Act, 1956 (SCRA) in 1999 to provide for the introduction of futures and option. Other measures included free pricing of securities, investor protection measures, use of information technology, dematerialisation of securities, improvement in trading practices, evolution of an efficient and transparent regulatory framework, emergence of several innovative financial products and services and specialised FIs etc. These reforms are aimed at creating efficient and competitive securities market subject to effective regulation by SEBI which would ensure investor protection.

A PROFILE

The corporate securities market in India dates back to the 18th century when the securities of the East India Company were traded in Mumbai and Kolkotta. The brokers used to gather under a Banyan tree in Mumbai and under a neem tree in Kolkotta for the purpose. However the real beginning came in the 1850's with the introduction of joint stock companies with limited liability. The 1860's witnessed feverish dealings in securities and reckless speculation. This brought brokers in Bombay together in July 1875 to form the first formally organised stock exchange in the country viz. The Stock Exchange, Mumbai. Ahmedabad stock exchange in 1894 and 22 others followed this in the 20th century.

The process of reforms has led to a pace of growth almost unparalleled in the history of any country. Securities market in India 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, investor population and price indices. Along with this, the profiles of the investors, issuers and intermediaries have changed significantly. The market has witnessed fundamental institutional changes resulting in drastic reduction in transaction costs and significant improvements in efficiency, transparency and safety, thanks to the National Stock Exchange. Indian market is now comparable to many developed markets in terms of a number of parameters, as may be seen from Table No. 1. There are very few countries who have higher turnover ratio than India. Market capitalisation as a percentage of GNP compares favourably even with advanced countries and much better than emerging markets. In terms of number of companies listed on stock exchanges, India is second to none.

At the end of 1998, the International Finance Corporation (IFC) ranked India as the 21st in terms of market capitalisation, and 19th in terms of total value traded in stock exchanges. 142 Indian stocks, which accounted for 66.4% of market capitalisation and 74.1% of total value traded, had a 5.78% weight in IFC Global Composite Index of emerging market stocks. In the case of the IFC Investable Composite Indices, which include emerging market stocks that are determined by the IFC to be legally and practically available to foreign portfolio investors, India's share was only 2.31%. India has also the distinction of having the second largest investor population in the world. According to a study by the Society for Capital Market Research and Development (Investor Disenchantment with Equities by L. C. Gupta, Indian Financial Markets & Institutions, October 1999), estimated investor population in India is stagnating at 20 million since 1995. These figures indicate the tremendous potential for growth of Indian securities market.

Dependence of Corporate Sector

The decade of the 1990's has witnessed emergence of the securities market as a major source of finance for trade and industry. A growing number of companies are accessing the securities market rather than depending on loans from FIs/banks. The corporate sector is increasingly depending on external sources for meeting its funding requirements. Within the external sources there appears to be increasing preference for direct financing (equity and debt) to indirect financing (bank loan). According to RBI studies (RBI Bulletins, June and October 1999), the external sources continued to have major share with 65% and 67 % of the total funds raised by the public limited companies during 1996-97 and 1997-98 respectively. Borrowings constituted 67% and 69% of external funds raised during the said period.

Table No. 1: International Comparison: End March 1998

Particulars	USA	UK	Japan	Germany	India
No of listed Companies	8450	2399	2416	741	9833
Market Cap ($ MN)	13451352	2374273	2495757	1093962	147454
Market Cap Ratio (%)	173	193	52	47	38
Turnover ($ MN)	13148480	1167382	948522	1390798	227171
Turnover Ratio (%)	106	53	40	145	154

Source: IFC Fact Book, 1999 and RBI Handbook of Statistics on Indian Economy 1999

According to CMIE data as reproduced in Table No.2, external sources accounted for over 77 % of funds raised during 1993-94 and this declined to about 68% during 1997-98. The share of capital market based instruments in total sources of funds peaked at 41 % in 1993-94, which declined to 19.3% in 1997-98. This indicates that the reliance of corporate sector on securities market has gone up substantially following reforms in the financial sector, in particular, in securities market.

Savings of Household sector

The savings of household sector (HHS) are invested either in physical or financial assets. The savings of HHS in physical assets constituted 96% in 51-52. It declined to 43% by 91-92. The share of savings in financial assets changed correspondingly – surpassed that of physical savings on a sustained basis during 1990's, except for an aberration in 1995-96 when it was 47%. It reached a peak of 63% in 1993-94. The shares of savings of HHS in physical and financial assets were 56% and 44% respectively during 1997-98. This indicates widening and deepening of financial system.

The deposits are the most preferred assets of the HHS. Their share in total financial savings of the HHS has witnessed an increasing trend in the recent past and was estimated at 50 % in 1996-97, which declined to 44% in 1998-99, as may be seen from Table No. 3. In contrast the financial savings of the HHS in securities (shares, debentures, public sector bonds and Units of UTI and other mutual funds) is estimated to have gone down from 23% in 1991-92 to less than 3% in 1998-99. Though there was a major shift in the saving pattern of the HHS from physical assets to financial assets and

Table No. 2: Sources of Funds for Corporate Sector *(In Percentages)*

Sources	91-92	92-93	93-94	94-95	95-96	96-97	97-98
Internal Sources:	24.9	24.3	22.6	25.6	28.4	26.2	31.9
Retained Profits	7.0	5.4	10.3	14.3	15.8	8.0	9.8
Depreciation	17.9	18.9	12.2	11.0	12.6	18.1	22.1
External Sources:	75.1	75.7	77.4	74.7	71.6	73.8	68.1
Capital Market	14.4	25.3	41.3	34.7	15.2	15.1	19.3
Bank/Institutional Borrowing	26.5	32.7	13.8	21.8	31.8	40.5	33.5
Current liabilities & Provisions	34.2	17.7	22.3	18.2	24.7	18.2	15.3

Source: Economic Intelligence Service – Corporate Sector, CMIE, May 1999.

Table No. 3: Financial Assets of Household Sector *(In Percentages)*

Year	Currency	Deposits	Insurance, Pension and Provident Funds	Securities	Others
1970-71	16.82	38.91	33.03	3.89	7.35
1980-81	13.41	48.92	25.06	3.66	8.95
1990-91	10.61	34.06	28.44	14.28	12.61
1991-92	11.98	29.52	28.65	23.34	6.51
1992-93	8.16	44.27	27.28	17.20	3.09
1993-94	12.21	43.71	25.37	13.49	5.22
1994-95	10.95	46.35	22.47	11.96	8.28
1995-96	13.39	43.07	29.34	7.38	6.82
1996-97	8.85	49.86	27.07	6.76	7.47
1997-98	7.16	48.88	29.25	2.45	12.26
1998-99	10.65	44.25	29.59	2.65	12.86

Source: RBI Handbook of Statistics of Indian Economy, 1999

within financial assets, from bank deposits to securities, the trend has 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 outcome of issue process as well as of investors in the credibility of the issuers and the systems and dismal performance of mutual funds. The portfolio of HHS continues to be heavily over weighted by physical assets and bank deposits.

The proportion of gross savings of HHS mobilised through public capital market (non-government companies and mutual funds) has reduced to about 2% as may be seen from Table No. 4.

It is believed in some circles that the low level of investment through securities market may not necessarily be due to erosion of faith in the market and may have to do more with relative returns in different markets. The relative rates of return on different alternative investment instruments as presented in Table No.5 probably induce investors to park their savings in fixed income bearing instruments. In addition to being perceived as risk, equity markets have given relatively lower, even negative return in the recent years, while the debt instruments, particularly government securities or the small saving instruments offer about 12% return, at times tax free.

Table No. 4: Household Savings Mobilised Through Public Capital Market *(In Crore)*

Year (1)	New Capital Issues by Non-govt. Companies (2)	Mobilisation by Mutual Funds (3)	Total (4)	Gross Savings of Household Sector (5)	Col.4 as % of Col.5 (6)
1990-91	4312	7508	11820	109623	10.78
1991-92	6193	11253	17446	109359	15.95
1992-93	19803	13021	32824	124825	26.30
1993-94	19330	11243	30573	149673	20.43
1994-95	26417	11274	37691	195403	19.29
1995-96	16075	-5832	10243	210417	4.87
1996-97	10410	-2037	8373	264655	3.16
1997-98	3138	4002	7140	286231	2.49
1998-99	5013	3090	8103	300000	2.70

Source: RBI Handbook of Statistics of Indian Economy, 1999

Table No. 5: Relative Rates (% p.a.) of Return on Investment in Financial Markets
Last Week/Fortnight of March

Investment	1994	1995	1996	1997	1998	1999
Call Money Rate	6.38	16.10	16.28	3.66	8.69	8.49
91-day Treasury Bills	7.46	11.90	12.97	7.96	7.33	8.75
364-day Treasury Bills	9.97	11.94	13.12	10.10	7.98	10.07
Certificates of Deposit	9.60	12.50	17.13	11.38	16.60	10.25
Commercial Paper	11.50	14.50	20.15	11.88	14.86	10.77
Prime Lending Rate	15.00	15.00	16.50	14.5-15	14-14.5	13.00
10-year GOI Securities	12.50	12.35	14.00	13.65	12.15	12.25
Annual Inflation Rate	10.81	10.41	5.00	6.90	5.30	5.00
S&P CNX Nifty*	78.2	-15.9	-0.5	-1.7	15.3	-3.5

** returns for financial year.* ***Source: Report on Currency and Finance & Handbook***

Primary Market

Average annual capital mobilisation from the primary market which used to be about Rs. 70 crore in the 60's and about Rs. 90 crore in the 70's, increased manifold during the 80's, with the amount raised in 90-91 being Rs. 4312 crore. It received a further boost during the 90's with the capital raised by non-government public companies rising sharply to Rs. 26,417 crore in 94-95. The capital raised which used to be less than 1% of gross domestic saving (GDS) in the 70's increased to about 13% in 92-93. In real terms the capital raised increased 7 times between 85-86 and 94-95. During 94-95, the amount raised through new issues of securities from the securities market accounted for about four fifth of the disbursements by FIs. The trend in the primary market is presented in Table No. 6.

The market however, appears to have dried up since 1995-96 due to inter play of demand and supply side forces. In real terms, the amount raised by non-government public companies during 1998-99 is 50% less than the amount raised a decade back in 1988-89. 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

Table No. 6: Primary Market - Capital Raised Through Rights and Public Issues by Non-Government Public Limited Companies

Year	Capital Raised (In Rs. Crore)	% of GDS	% of Disbursements by FIs	Index in Real Terms
1985-86	1,745	3.36	35	100
1986-87	2,581	4.71	46	140
1987-88	1,788	2.57	26	90
1988-89	3,225	3.81	36	150
1989-90	6,510	6.36	65	282
1990-91	4,312	3.32	36	170
1991-92	6,193	4.38	39	214
1992-93	19,803	12.76	86	622
1993-94	19,330	10.09	73	561
1994-95	26,417	10.50	79	691
1995-96	16,075	5.48	42	391
1996-97	10,410	3.02	24	238
1997-98	3,138	0.87	6	68
1998-99	5,013	1.25	8	102

Source: RBI Handbook of Statistics on Indian Economy 1999.

Table No. 7: Mobilisation of Resources from Primary Market *(In Rs. Crore)*

Issues	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99
Non-Govt. Public Companies	4312	6193	19803	19330	26417	16075	10410	3138	5013
PSU Bonds	5663	5710	1062	5586	3070	2292	3394	2982	-
Govt. Companies	-	-	430	819	888	1,000	650	43	-
Banks & FIs	-	-	356	3843	425	3,465	4,352	1476	4352
Private Placement	4244	4463	1635	7466	11174	13361	15066	30099	49664
Total	**14219**	**16366**	**23286**	**37044**	**41974**	**36193**	**33872**	**37738**	**59029**

Source: Annual Reports of RBI and its Reports on Currency & Finance

compliance is much less. Available data (Table No.7), although scanty, indicate that private placement accounted for about 85 % of total resource mobilised from the primary market during 1998-99. It is believed in certain circles that private placements have crowded out public issues.

The public issues market, however, seems to be looking up in the recent past. The buoyancy in the stock market, particularly infotech scrips, in the last few months has helped in the revival of primary market. Sonata Software and KPIT broke the ice in 1998-99 with commendable public issues. During April-December 1999, an amount of Rs. 5723 crore has already been raised. Government offer for sale to retail public of the shares of VSNL at a discount was oversubscribed. The recent issues of Polaris Software, Hughes Software and Kale Consultants, HCL were oversubscribed 20-40 times. The year 1999 also witnessed first ever book-building by Hughes followed by HCL, which witnessed unprecedented success. The revival of primary market, though distinct, is confined mostly to IT sector where retail and institutional interest continues to be high.

Secondary Market

Selected indicators in the secondary market are presented in Table No. 8. The number of listed companies has been rising steadily from 2265 in 1980 to 9890 at the end of March 1997. However, the growth in the number has been lower during 1990's and it even declined during 1997-98. It stood at 9877 at the end of March 1999.

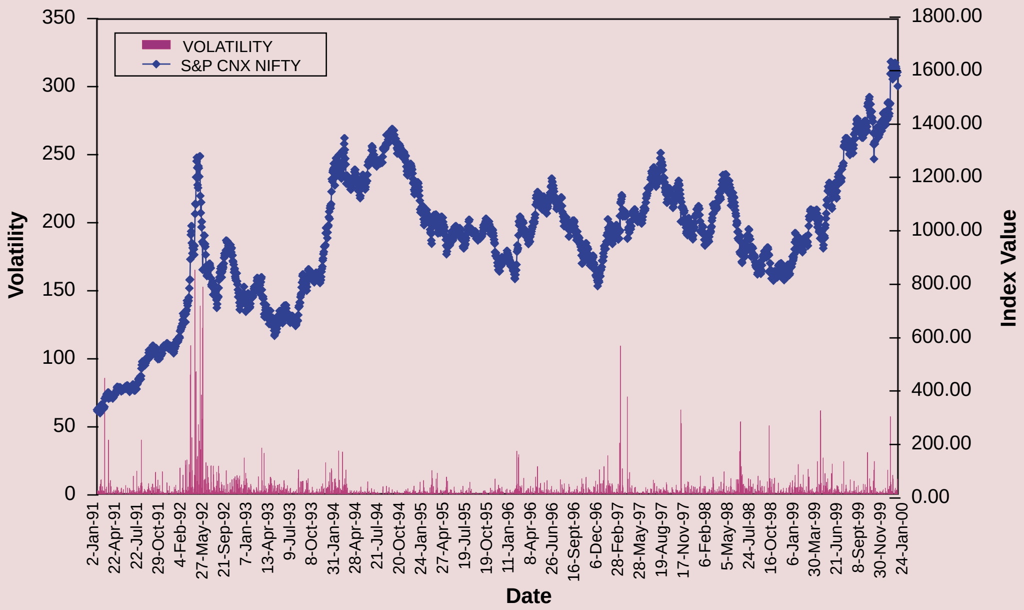
The market capitalisation grew at an average annual rate of 38% during 1990's, despite negative growth rates during three years in between. Market capitalisation increased sharply by 221% during 1991-92. All India market capitalisation stood at Rs. 5,74,064 crore at the end of March 1999. The market capitalisation ratio, which really indicates the size of the market, increased sharply to 57.4% in 1991-92 following spurt in share prices. However, with normalisation of the market, the ratio reduced. The most dramatic development has been improvement in the volume of trading. 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

Table No. 8: Secondary Market - Selected Indicators

At the end of financial year	No. of Listed Companies	Sensex	S&P CNX NIFTY	Market Capitalisation	Market Capitalisation Ratio (%)	Turnover * (In Rs. Crore)	Turnover * Ratio (%)
1986	4344	574.11	—	24302	9.3	—	—
1987	4744	510.36	—	27,572	9.4	—	—
1988	5560	398.37	—	35,521	10.7	—	—
1989	5841	713.60	—	51,379	13.0	—	—
1990	5968	781.05	—	70,521	15.4	—	—
1991	6229	1167.97	366.45	110,279	20.6	—	—
1992	6480	4285.00	1261.65	354,106	57.4	—	—
1993	6925	2280.52	660.51	228,780	32.4	—	—
1994	7811	3778.99	1177.11	400,077	45.6	203,703	50.9
1995	9077	3260.96	990.24	473,349	45.6	162,905	34.4
1996	9100	3366.61	985.30	572,257	47.0	227,368	39.7
1997	9890	3360.89	968.85	488,332	34.6	646,116	132.3
1998	9833	3892.75	1116.65	589,816	37.7	908,681	154.1
1999	9877	3739.96	1078.05	574,064	34.1	1,023,382	178.3

* For the financial year. ***Source: Report on Currency and Finance, 1998-99***

Figure No.1: Movement of S&P CNX NIFTY and its volatility since 1991



turnover increased by 46% during 1995-96, 184% during 1996-97, 40% during 1997-98 and 13 % during 1998-99. One-sided turnover on all stock exchanges exceeded Rs. 1,000,000 crore during 1998-99. The turnover ratio for the year 1998-99 increased to 178, which is one of the highest in the world and is likely to exceed 200 during 1999-2000.

The relative importance of various stock exchanges in the market has undergone dramatic change during this decade. Century old BSE gave way to NSE in the very first year of latter's operation. NSE is the market leader with over 40 % of total turnover in 1998-99. Top 6 stock exchanges accounted for 98 % of turnover while the rest 18 only about 2% during 1998-99.

The movement of the S&P CNX NIFTY, the most widely used indicator of the market, is presented in Figure No. 1. In the very first year of liberalisation, i.e. 1991-92, it recorded a growth of 267%, followed by sharp decline of 47% in the next year as certain irregularities in securities transactions were noticed. The market picked up next year thanks to increased inflow of foreign funds, and increased investor interest. Thereafter the market remained subdued. The index recorded a decline of 3.47% during 1998-99 under the pressure of economic sanctions following detonation of nuclear device, continuing woes of East-Asian financial markets, volatility of Indian currency and worries about financial health of UTI's US-64 scheme. The Union Budget of 1999 brought cheers to the market. Since then, the market has been on a roller coaster ride, but a distinct rising trend has emerged. The market is booming in the current financial year due to all-round positive perception about strength of the Government and also its commitment towards second generation reforms, improved macro-economic parameters and better corporate results. The turnover on NSE touched Rs. 6,212 crore on 8th December 1999 when it was Rs. 4,544 crore on BSE. During April-December 1999, the NIFTY has firmed up by 37%.

The market, however, remained plagued by high volatility and price manipulations. Of the 55 cases taken up by SEBI for investigation during 1998-99, 40 related to price manipulation and price rigging. The prices of scrips of BPL, Videocon, Sterlite and Pentafour witnessed manifold increases during May-June 1998 threatening an imminent payment crisis on the exchanges. A High-to-Low ratio of 2 - 3 during a year is observed in a large number of securities, including index scrips, indicating that the share prices rise to more than double or fall to less than half during a year. Such high fluctuations point at divergence of prices from its fundamentals. Such volatility may be seen in Figure 1.

The secondary market for debentures is not active and the market for preference shares is virtually non-existent. Market does not provide any mechanism to hedge risk and hence suffers from excessive speculation. Derivative market is yet to come into existence. The Securities Laws (Amendment) Act, 1999 was enacted in December 1999 to allow trading of derivatives of securities.

Debt Market

The debt markets are significantly larger and deeper than equity markets in advanced countries. The development of debt market in India has not been as noticeable as in the case of equity market. In India, the turnover ratio in equity market is nearly two as against <0.5 in debt market. While the Primary market is dominated by government and associated institutions, the secondary market is in a very nascent stage.

Government Securities Market

The primary issues of the Central Government have increased ten-fold during the decade of 1990's from Rs. 8,989 crore in 1990-91 to Rs. 93,953 crore in 1998-99. The issues by the state governments increased by about five times from Rs. 2,569 crore to Rs. 12,114 crore during the same period. The gross borrowings of the Central Government and State Governments increased by about 57% in 1998-99 over 1997-98. The gross market borrowing amounted to Rs. 93,953 crore, including 364-day treasury bills of Rs. 10,200 crore. After meeting repayment liabilities of Rs.14,803 crore, and redemption of 364-day treasury bills of Rs. 16,247 crore, net market borrowing was Rs. 62,903 crore for the year 1998-99. Twenty five State Governments collectively raised Rs. 12,114 crore during 1998-99 as against Rs. 7,749 crore in the preceding year. The net borrowings amounted Rs. 10,700 crore after meeting repayment liabilities of Rs. 1,414 crore.

Along with growth of the size of the market, the investor base has become very wide. In addition to banks and insurance companies, corporates and financial institutions are investing government securities. With dismantling of control regime, and gradual lowering of the SLR and CRR Government is borrowing at near–market rates. The weighted average cost of its borrowing at one stage increased to 13.75% in 1995-96, which recently declined to 11.86%. The maturity structure of government debt is also changing. In view of bunching of redemption liabilities in the medium term, long term securities with maturities of 11, 12, 15 and 20 years were issued during 1998-99. During April-November 1999, only one fifth of dated securities were issued for maturities less than 10 years as against 87% in 1998-99. As a result the weighted average maturity of dated securities increased to 7.71 years from 6.6 years in 1997-98 and 5.5 years in 1996-97.

Corporate Securities Market

There is a preference for raising resources in the primary market through debt instruments. Recently private placement of debt has emerged as the major route for raising resources. The share of debt in total collection has been increasing consistently over the years and it was 99% in 1998-99, according to Prime Database. Private placements account for about 90% of total debt mobilisation in recent past. About Rs. 1,25,000 crore has been raised through private placement of debt during last four and half years. Rapid dismantling of shackles on institutional investments and deregulation of the economy are driving growth of this segment. There are several inherent advantages for relying 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.

The primary debt market witnessed heavy activity during 1998-99. A total of 205 issuers raised Rs. 38,748 crore through 445 privately placed issues in 1998-99. This represented a 25% rise over the funds raised through the same route in the preceding year which witnessed 251 issues for Rs. 30, 983 crore.

Secondary Market

The aggregate turnover in central and state government dated securities including treasury bills through SGL transactions during 1998-99 reached a level of Rs. 2,27,228 crore, recording a 22% growth over Rs. 1,85,708 crore in the previous year. The average annual growth in turnover has been as high as 55% for the period 1994-95 and 1998-99. Such growing turnover reflects further deepening of the market.

Government debt, which constitutes 72% of the total outstanding debt, has the highest level of liquidity amongst the fixed income instruments in the secondary market. The share of government securities in total turnover has been increasing over the years. Two-way quotes are available for the active gilt securities from the primary dealers. Most of the trading in the gilts takes place through telephone although large number of trades get routed through NSE brokers.

Only trading mechanism available in the debt market was the telephone market before June 1994 when NSE launched Wholesale Debt Market (WDM) segment. This provides the only formal platform for trading of a wide range of debt securities. The trading system, known as NEAT (National Exchange for Automated Trading) is a fully automated screen based trading system that enables members across the country to trade simultaneously with enormous ease and efficiency. The trading system is an order driven system which matches best buy and sell orders on a price-time priority. The identity of the buyer and seller are completely protected on the system.

The turnover on the WDM segment has been increasing by leaps and bounds. The number of trades per day increased from 5 in 1994-95 to 51 in 1998-99 and to 140 in April-December 1999. Similarly average daily turnover increased from Rs. 30 crore to Rs. 904 crore during the same period. The turnover increased from Rs. 6,781 crore in 1994-95 to Rs. 1,05,469 crore in 1998-99. April-December 1999 witnessed a turnover of Rs. 2,05,287 crore. The share of WDM segment of the NSE in the turnover for government securities and treasury bills, however, decreased from 56% in 1997-98 to 42% in 1998-99. Absence of any requirement to go through a common platform like stock exchanges induces some of the players to enter into non-transparent deals through the telephonic market.

REGULATORY FRAMEWORK

Before 1992, the three principal Acts governing the securities market were: (a) the Capital Issues (Control) Act, 1947, which restricted issuer's access to the securities market and controlled the pricing of issues; (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; and (c) the Securities Contracts (Regulation) Act, 1956, which provides for regulation of transactions in securities through control over stock exchanges. In addition, a number of other Acts, e.g. the Public Debt Act, 1942, the Income Tax Act, 1961, the Banking Regulation Act, 1949, have substantial bearing on the working of the securities market.

Capital Issues (Control) Act, 1947: The Act had its origin during the war in 1943 when the objective was to channel resources to support the war effort. The Act was retained with some modifications as a means of controlling the raising of capital by companies and to ensure that national resources were channelled into proper lines; i.e. for desirable purposes, to serve goals and priorities of the government, and to protect the interests of investors. Under the Act any firm wishing to issue securities had to obtain approval from the Central Government, which also determined the amount, type and price of the issue.

Securities Contracts (Regulation) Act, 1956: The previously self-regulated stock exchanges were brought under statutory regulation through the passage of the SC(R)A which provides for direct and indirect control of virtually all aspects of securities trading and the running of stock exchanges. This gives Central Government 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 a condition of recognition, a stock exchange complies with conditions prescribed by Central Government. Organised trading activity in securities in an area takes place on a specified recognised stock exchange. The stock exchanges determine their own listing regulations which have to conform with the minimum listing criteria set out in the Rules.

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, substantial acquisitions of shares, payment of interest and dividends, supply of annual report and other information etc.

This legal and regulatory framework contained many weaknesses. Jurisdiction over the securities market was split among various agencies and the relevant law was scattered in a number of statutes. This created confusion, not only in the minds of the regulated but also among regulators, and created inefficiency in the enforcement of the regulations. It was the Central Government rather than the market that allocated resources from the securities market to competing issuers and determined the terms of allocation. The allocation was not necessarily based on economic criteria, and as a result the market was not allocating the resources to the best possible investments, leading to a sub-optimal use of resources and low allocational efficiency. Informational efficiency was also low because the provisions of the Companies Act regarding prospectus did not ensure the supply of neccessary, adequate and accurate information, sufficient to enable investors to make an informed decision. The many formalities associated with the issue process under various regulations kept the cost of issue quite high. Under the SCRA, the secondary market was fragmented regionally, with each stock exchange a self-regulating organisation following its own policy of listing, trading and settlement. The listing agreement did not have the force of law, so that issuers could get away with violations. The interests of the brokers, who were market players and dominated the governing boards of stock exchanges, took priority over the interest of investors. The market was narrow and investors did not have an opportunity to build balanced portfolios. The settlement of trades took a long time, because it required physical movement of securities, and the transfer of securities was very cumbersome under the Companies Act and SCRA, thus depriving the investor of liquidity. Options and futures were expressly forbidden by law.

REFORMS

Corporate Securities Market

With the objectives of improving market efficiency, enhancing transparency, checking 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. This has changed corporate securities market beyond recognition in this decade. The practice of allocation of resources among different competing entities as well as its terms by a central authority was discontinued. The secondary market overcame the geographical barriers by moving to screen based trading. Physical security certificates are disappearing very fast. The settlement period has shortened to one week and is approaching to one day. The following paragraphs discuss the principal reform measures undertaken since 1992:

Primary Market

I. Major part of the liberalisation process was the repeal of the Capital Issues (Control) Act, 1947 in May 1992. With this, Government's control over issues of capital, pricing of the issues, fixing of premia and rates of interest on debentures etc. ceased, and the office which administered the Act was abolished: the market was allowed to allocate resources to competing uses. However to ensure effective regulation of the market, SEBI Act, 1992 was enacted to empower 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. SEBI can specify the matters to be disclosed and the standards of disclosure required for the protection of investors in respect of issues; can issue directions to all intermediaries and other persons associated with the securities market in the interest of investors or of orderly development of the securities market; and can conduct enquiries, audits and inspection of all concerned and adjudicate offences under the Act. In short, it has been given necessary autonomy and authority to regulate and develop an orderly securities market. All the intermediaries in the market, such as brokers and sub-brokers, underwriters, merchant bankers, bankers to the issue, share transfer agents and registrars to the issue, are now required to register with SEBI and are governed by its regulations. A code of conduct for each intermediary has been prescribed in the regulations; capital adequacy and other norms have been specified; a system of monitoring and inspecting their operations has been instituted to enforce compliance; and disciplinary actions are being taken against the intermediaries violating any regulation.

As noted above, there were several statutes regulating different aspects of the securities market and jurisdiction over the securities market was split among various agencies, whose roles overlapped and which at times worked at cross-purposes. As a result, there was no coherent policy direction for market participants to follow and no single supervisory agency had an overview of the securities business. Enactment of SEBI Act was the first such attempt towards integrated regulation of the securities market. SEBI was given full authority and jurisdiction over the securities market under the Act, and was given concurrent/delegated powers for various provisions under the Companies Act and the SCRA. The Depositories Act, 1996 is also administered by SEBI. A high level committee on capital markets has been set up to ensure co-ordination among the regulatory agencies in financial markets.

The Companies (Second Amendment) Bill 1999 introduced in Parliament on 23rd December 1999 proposes to entrust SEBI with powers with regard to public issues, transfer of securities, payment of dividend, maintenance of books of accounts, form and contents of balance sheet and profit and loss account in respect of listed companies and in respect of those public companies which purport to be listed.

II. In the interest of investors, SEBI issued Disclosure and Investor Protection (DIP) guidelines. Issuers are now required to comply with guidelines and then access the market. The guidelines contain a substantial body of requirements for issuers/intermediaries, the broad intention being to ensure that all concerned observe high standards of integrity and fair dealing, comply with all the requirements with due skill, diligence and care, and disclose the truth, whole truth and nothing but truth. The guidelines aim to secure fuller disclosure of relevant information about the issuer and the nature of the securities to be issued so that investor can take an informed decision. For example, issuers are required to disclose any material 'risk factors' in their prospectus and the justification for the pricing of the securities is to be given. SEBI placed a responsibility on the lead managers to give a due diligence certificate, stating that they have examined the prospectus, they find it in order and that it brings out all the facts and does not contain anything wrong or misleading. Though the requirement of vetting has now been dispensed with, SEBI has raised standards of disclosures in public issues to enhance the level of investor protection.

III. In order to enhance liquidity in shares and to help corporates in capital restructuring with a view to enhancing the wealth of shareholders, companies have been allowed to buy back their own shares, subject to the condition that the volume of buy back does not exceed 25% of the capital of the buying company.

Secondary Market

I. Before NSE was set up the trading on stock exchanges used in India to take place through open outcry without use of information technology for immediate matching or recording of trades. This was time consuming and inefficient. The practice of physical trading imposed limits on trading volumes and hence the speed with which new information was incorporated into prices. To obviate this, the NSE introduced SBTS where a member can punch into the computer quantities of shares and the prices at which he wants to transact. The transaction is executed as soon as the quote punched by a trading member finds a matching sale or buy quote from a counter party. SBTS electronically matches the buyer and seller in an order-driven system or finds the customer the best price available in a quote-driven system, and hence cuts down on time, cost and risk of error, as well as on fraud. SBTS enables distant participants to trade with each other, improving the liquidity of the markets, and the high speed with which trades are executed and the large number of participants who can trade simultaneously allows faster incorporation of price sensitive information into prevailing prices, thus increasing the informational efficiency of markets. With SBTS, it becomes possible for market participants to see the full market, which helps to make the market more transparent, leading to increased investor confidence. The NSE started nation wide SBTS, which provided completely transparent trading mechanism. Regional exchanges lost a lot of business to NSE, forcing them also to go for SBTS. Today India can boast that almost 100 % trading takes place through electronic order matching.

II. Settlement system on Indian stock exchanges gives rise to settlement risk, due to the time that elapses before trades are settled. Trades are settled by physical movement of papers. This has two aspects. First, the settlement of trade in stock exchanges by delivery of shares by the seller and payment by the purchaser. The stock exchange aggregates trades over a period of time to carry out net settlement through the physical delivery of securities. The process of physically moving the securities from the seller to the ultimate buyer through the seller's broker and buyer's broker takes time with the risk of delay somewhere along the chain. The second aspect relates to transfer of shares in favour of the purchaser by the company. The system of transfer of ownership is grossly inefficient as every transfer involves physical movement of paper securities to the issuer for registration, with the change of ownership being evidenced by an endorsement on the security certificate. In many cases the process of transfer takes much longer than the two months stipulated in the Companies Act, and a significant proportion of transactions end up as bad delivery due to faulty compliance of paper work. Theft, forgery, mutilation of certificates and other irregularities are rampant, and in addition the issuer has the right to refuse the transfer of a security. All this adds to costs, and delays in settlement, restrict liquidity and make investor grievance redressal time consuming and at times intractable.

To obviate these problems, the Depositories Act, 1996 was passed to provide 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 both the stages of settlement process, the Act envisages transfer 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. Two depositories viz. NSDL and CDSL, have come up to provide instantaneous electronic transfer of securities. At the end of December 1999, the securities worth Rs. 3238 billion have been dematerialised. The market capitalisation of the companies that have joined depositories has reached Rs. 6076 billion. 112 depository participants are rendering depository services at 1400 locations all over the country serving 17 lakh investors who have opened beneficial accounts with NSDL. The securities of 549 companies are available for demat trading.

III. The trades accumulate over a trading cycle and at the end of the cycle, these are clubbed together, and positions are netted out and payment of cash and delivery of securities settle the balance. These carry the risks and difficulties of future market without corresponding gains in price discovery and hedging services. Many things can happen between entering in to contract and its performance providing incentives for either of the parties to go back on its promise. This was on several occassion let to defaults and risks in settlement. In order to enforce the trades and prevent market failures, a number of systemic measures have been taken. These include capital adequacy of members, various margin requirements, limits on exposure and turnover, indemnity insurance, position monitoring, etc. Fund settlement takes place through the clearing banks. The exchanges have set up settlement guarantee funds to complete settlements. The NSE has set up a clearing corporation which provides legal counter party guarantee to each trade and thereby eliminates counter party risk. Attempts are being made to reduce the time gap between execution of trade and its settlement through rolling settlement.

The fact that an anonymous electronic order book ushered in by the NSE does not allow members to assess credit risk of the counter-party necessitated some innovation in this area. To effectively address this issue, NSE introduced the concept of a clearing corporation, and set up the first such corporation, viz. National Securities Clearing Corporation Ltd. (NSCCL), which commenced operations in April 1996. The NSCCL assures the counter party risk of each member and guarantees financial settlement. Counter party risk is guaranteed through fine tuned risk management systems and an innovative method of on-line position monitoring and automatic disablement. A large Settlement Guarantee Fund, which stood at Rs. 1,006 crore as on 31st December 1999, provides the cushion for any residual risk. As a consequence, despite the fact that daily traded volumes are now as much as Rs. 7,000 crore on the NSE, credit risk no longer poses any problems in the market place. The market has now full confidence that settlements will take place in time and will be completed irrespective default by isolated trading members. In fact such confidence is driving volumes on exchanges.

Traditionally brokerage firms in India have been proprietory or partnership concerns with unlimited liabilities. This restricts the amount of capital that such firms can raise. The growing volume of transactions made it imperative for such firms to be well capitalised and professional. The necessary legal changes were effected to open up the membership of stock exchanges to corporate members with limited liability, so that brokerage firms may be able to raise capital and retain earnings. In order to boost the process of corporatisation, capital gains tax payable on the difference between the cost of the individual's initial acquisition of membership and the market value of that membership on the date of transfer to the corporate entity was waived. In response an increasing number of brokerage firms are reorganising themselves into corporate entities. At the end of March 1999, 3173 brokers out of 9069 were corporate bodies.

IV. The market offers a very narrow range of securities: options and futures do not exist, and there is only a small and inactive market for bonds. It does not provide a wide range of investment choices to investors, to enable them to design portfolios that matches their risk-return preferences. To assist market participants to manage risks better through hedging, speculation and arbitrage, SC(R)A was amended in 1995 to lift the ban on options in securities. However, trading in derivatives did not take off as there was no suitable legal and regulatory framework to govern these trades. Besides, it needed a lot of preparatory work-the underlying cash markets strengthened with the assistance of the automation of trading and of the settlement system; the exchanges developed adequate infrastructure and the information systems required to implement trading discipline in derivative instruments. The SC(R)A has been amended further in December, 1999 to expand the definition of securities to include derivatives so that the whole regulatory framework governing trading of securities could apply to trading of derivatives also. Derivative trading is most likely to take off during the current financial year.

V. The governing bodies of stock exchanges used to be dominated by brokers, leading inevitably to conflicts of interest. To discipline brokers and cure typical stock market ills such as price rigging, it was considered necessary for stock exchanges to have a professionally managed environment. NSE started with the concept of an independent governing body without any broker representation. It was specified in 1993 that the governing boards of stock exchanges must have 50% non-broker members, and that on committees handling matters of discipline, default etc., brokers would be in the minority. All stock exchanges were mandated to appoint a non-broker executive director who would be accountable to SEBI for implementing the policy directions of the Central Government /SEBI. In course of time, the position of executive director in the management of stock exchange has been strengthened.

VI. Indian securities market is getting increasingly integrated with the rest of the world. FIIs have been permitted to invest in all types of securities, including government securities. Indian companies have been permitted to raise resources from abroad through issue of ADRs, GDRs, FCCBs and ECBs. Indian Stock Exchanges have been permitted to set up trading terminals abroad.

VII. Investors are aggrieved if issue proceeds are used for purposes other than those indicated in the prospectus. With very little post issue monitoring, several fly-by-night operators took unwary investors for a ride. SEBI has through amendments in the listing agreements ensured disclosure of information required for an investor to monitor use of issue proceeds. Companies Act has also been amended to provide for a separate bank account for issue proceeds to enable creation of an audit trail regarding utilisation of funds. To protect investors from take-overs, insider trading, fraudulent and unfair practices, SEBI has framed regulations. SEBI has also a grievance cell, which receives complaints from investors, and takes up the matter with the issuers/intermediaries concerned.

The above reforms have come in stages. As some deficiency is noted or some malpractice surfaces in the working of the market, the authorities initiate further reforms and corrective steps. As such, the process of reform in the securities market is far from complete. At the same time the reforms undertaken so far have aimed to improve operational and informational efficiency in the market by enabling the participants to carry out transactions in a cost effective manner and providing them with full, relevant and accurate information in time. A number of checks and balances have been built up to protect investors, enhance their confidence and avoid systemic failure of the market. Stability of the system as a whole has been protected by allowing for contestability of the market and imposing entry criteria for issuers and intermediaries. Financial integrity of the market is ensured by prudential controls on intermediaries.

Government Securities Market

A host of measures have been undertaken during 1990's to develop government securities market. With giving up responsibility for allocating resources from securities market, government stopped expropriating seigniorage and started borrowing at near - market rates. Major reforms initiated in the government security market include:

I. Delivery versus Payment system was introduced for settling transaction in government securities to reduce settlement risks.

II. Many innovative instruments like zero coupon bonds, capital index bonds, tap stocks, etc. have emerged. 14-day, 91-day, 182-day and 382 day treasury bills are available. Dated securities of different maturities up to 20 years are being issued. Medium and long-term securities are sold through auction.

III. A system of primary and satellite dealers has been introduced to widen investor base and promote retail participation.

IV. Following the pronouncements of the Special Court, Repos became illegal as these violated the Government Notification of June 1969, issued under the SCRA, which banned all types of forward trading. However, in order to impart liquidity in the market for government securities, certain specified entities are being permitted to undertake repo and reverse repo transactions in specified government securities through amendments to 1969 Notification.

Securities Laws (Amendment) Acts

Two Acts seeking far-reaching amendments in the securities laws were enacted on December 16, 1999. These launch second generation reforms in the securities market. The Securities Laws (Amendment) Act, 1999 has expanded the definition of "securities" under the SCRA to include derivatives of securities and instruments of collective investment schemes with a view to developing and regulating markets for them. The Act also authorises Central Government to delegate powers under the SCRA to RBI with a view to enabling the latter to regulate transactions in securities as may be specified by Government from time to time. The Securities Laws (Second Amendment) Act, 1999 has transferred appellate functions of the Central Government under the securities laws to the Securities Appellate Tribunal (SAT) with a view to bringing greater transparency and impartiality in disposal of appeals. In addition to rationalising allocation of powers under the SCRA among SEBI, RBI, Government and SAT, these Acts would help to develop and regulate markets for derivatives as well as units of Collective Investment Scheme and protect the interests of investors therein.

ASSESSMENT OF REFORMS

The securities market is growing exponentially. The number of investors and issuers has increased many times. A wide range of instruments is available. The market structure and design has undergone sea change. The extensive reforms introduced over the last few years have enhanced the integrity, transparency and efficiency of the operations of the securities market. The spreads have dropped by a factor of 10 and volumes have risen hundred fold in respect of many shares.

Professor Ajay Shah has assessed these reforms in a seminal work "Institutional Change on India's Debt Market" that appeared in Economic and Political Weekly (EPW), 16th January 1999 where he has summarised outcome of these reforms in equity and debt markets in India. He believes that the reforms have transformed market practices, sharply lowered transaction costs and improved market efficiency in equity market. In no other part of financial sector such a radical reforms agenda has been executed, in such a short time. The reforms have, however failed to obtain a liquid, efficient debt market. His assessment of changes in qualitative dimensions of liquidity and in elements of market design, both in equity and debt markets are presented in Tables No. 9 and 10.

Transaction Costs in Primary Market

In the primary market the process of public subscription is expensive, time consuming and fraught with uncertainty. The process involves filing a number of documents before and after an issue with SEBI/Central Government and the whole process until allotment takes about 3 months. The process requires setting up of a number of mandatory collection centres across the country for collecting subscriptions from investors and price determination before the date of issue. Once an issue has been subscribed to, post subscription procedures are such that 60 days elapse before the security is listed. The investments remain illiquid or grey market emerges.

An estimate in 1994 by SEBI indicates that for an issue of Rs. 1,500 million, the cost of raising funds in domestic market was 9.6% of the issue size, while that of raising funds through GDRs was only 4%. Average cost of issue for the period 86-91 has been estimated at 8.9% by RBI. According to the Informal Group on Primary Market of the Government, issue cost worked out 9% in 1998, as indicated in Table No. 11. It thus appears that the reforms process has not made much dent on cost of on public issues.

Table No. 9: Qualitative View of Liquidity on India's Securities Market, 1994 and 1998

Component	Equity Market		Debt Market	
	1994	1998	1994	1998
Trading Denial of Access	High	Low	High	High
Market Down time	High	Low	Low	Low
Fees to Intermediaries	High	Low	High	High
Unreliable Order Processing	High	Low	Moderate	Low
Market Inefficiencies	High	Low	High	High
Market Impact Cost	High	Moderate	High	High
Clearing Counterparty Risk	High	0	High	Reduced
Initial Margin	0	Moderate	0	0
Settlement Back Office Cost	High	Low	High	High
Bad Certificates	High	0	High	0
Delay in payment	High	Low	High	Low
Transaction Taxes	Moderate	0	Moderate	Moderate

Source: Institutional Change in India's Capital Markets, EPW, 16-23 January 1999

Table No. 10: Elements of Market Design on India's Securities Market, 1994 and 1998

	Feature	Equity Market		Debt Market	
		1994	1998	1994	1998
1	Product Standardisation	Adequate standardisation	Unchanged	Adequate standardisation	Unchanged
2	Aggregation and revelation order flow	Fragmented market through geographical distance and through phone market. Order flow unobserved.	Order flow observed on nationwide exchanges(s). Fragmentation across exchanges and phone market persists, to a smaller extent.	Fragmented market through geographical distance and through phone market. Order flow unobserved	Unchanged
3	Intermediaries	Broker dealers, fraught with agency problems, Oligopolistic pricing	Brokers, with much reduced agency problems. Competitive pricing.	Broker/dealers, fraught with agency problems	Unchanged
4	Anonymity	Absent	Complete	Absent	Unchanged
5	Counterparty risk	Present	Absent on NSE	Present	Unchanged
6	Settlement	Purely paper	Partly through depository	Purely paper	Purely through depository
7	Futures Trading	Absent	Unchanged	Absent	Unchanged

Source: Institutional Change in India's Capital Markets by Ajay Shah in EPW, 16th January 1999

Table No. 11:Typical Cost Structure for an Equity Issue of Rs. 100 crore

Cost Head	% of Issue Size
Issue Management Team	1.00
Underwriting	2.50
Brokerage	1.50
Addl. Procurement Incentive	1.00
Advertising & Publicity	2.00
Printing & Despatch	0.45
Registrars	0.25
Bankers	0.10
Regulatory Fees & Charges	0.20
Total	**9.00**

In order to reduce the costs and uncertainty associated with the issue, issuers are allowed to place an increasing proportion of the issue firmly with institutions. Underwriting has been made optional. Book building has been introduced for institutional investors. The number of mandatory collection centres have been reduced. These seem to have contributed marginally to reduce the cost of issue. On-line IPOs through book building, which has been introduced recently, would help to reduce the cost both in terms of money and time associated with the issue process.

However simultaneously, the issuers are adopting increasingly expensive means to ensure success of their issues. These add to cost and lower operational efficiency. This also affects informational efficiency as the incentives are intended to distract attention from the underlying properties of the investments.

Transaction costs in Secondary Market

The liquidity refers to ease with which a player can enter into and exit from the market. Liquidity is also influenced to a large extent by the level of transaction costs. Only if the potential gains from the transaction exceeds the transaction costs, it would be profitable to enter into a transaction. If transaction costs are very high, transaction would require a higher bid-ask spread resulting in fewer transactions and lower liquidity.

The transaction costs depend on a host of factors. Prof. Ajay Shah in his paper " Institutional Change in India's Capital Markets" has enumerated 12 components of transaction cost which exist in varying degrees depending on market design. These arise at the stages of trading, clearing and settlement.

Costs at the stage of Trading

The parties to a transaction suffer a loss if they are denied access to trade because of constraints in technology or regulation. Until the use of VSATs by NSE, many parties, particularly in distant locations, were denied access to trade in the market. Access may be denied by closure of the market which was frequent till early 1990s because of less trading hours, holidays, strike by exchange staff/ brokers, payment crisis, technical breakdown, etc. Higher the market down time, higher is the cost. They may not be able to effect a buy/sell transaction of a particular volume of a security without suffering a loss in terms of price and thereby suffer what is known as impact cost i.e. deviation of the actual price from the 'ideal' price. The larger the market for a security, lower is the impact cost. They may also loose if they do not get the best price in view of the market inefficiencies. They may miss a transaction if the broker is careless in processing orders. This probability is reduced with increased competition. They also bear the explicit fees for the services of intermediaries as well as the difference in the execution price and best possible price at the time of execution. These have got reduced recently with increased competition and transparency.

Costs at the stage of Clearing

Since a considerable time elapses between the execution of a trade and its settlement, the parties to the trade run the credit risk of each other. Lower the duration of the settlement cycle, the lower is the risk and hence cost. The existence of clearing corporation which provides novation eliminates this cost. In order to ensure that parties to trade honour their commitments, they put in some money upfront in the form of initial margin. The opportunity cost of the margin adds to transaction cost.

Costs at the stage of settlement

The parties incur certain back office costs like expenses on processing of money and securities. These costs in equity markets have recently declined in view of growing dematerialisation of shares and multilateral netting of transactions. The dematerialisation is also helping to reduce costs on account of bad papers. The parties lose out time value of money if they receive payment late. The situation would improve with electronic fund transfer facility. Transaction taxes like stamp duty, the service tax on brokerage and SEBI transaction fee are borne by the parties. These costs have reduced with abolition of stamp duty on transfer of dematerialised equities.

Prof. Shah finds dramatic gains in terms of reduced transaction costs as compared to the situation of

Table No. 12: Transaction Costs on India's Equity Market *(In Percentages)*

Component	India			Best in World
	1994	Today		
		Physical	Demat	
Trading :				
Fees to intermediary	3.00	0.50	0.25	0.25
Market Impact Cost	0.75	0.25	0.25	0.20
Clearing :				
Counterparty risk	Present	0.00	0.00	0.00
Settlement :				
Paperwork	0.75	0.75	0.10	0.05
Bad paper risk	0.50	0.50	0.00	0.05
Stamp duty	0.25	0.25	0.00	0.50
Total	**>5.25**	**2.25**	**0.60**	**0.50**

1994, as may be seen from Table No. 12. For users of physical papers, transaction costs have halved; for those who have started using NSDL, transaction costs have come down to one-tenth of previous levels. For users of NSDL, transaction costs on India's equity markets are now comparable to those seen on the best markets overseas. This is a remarkable accomplishment, especially considering that these reforms began only recently in late 1994; within the intervening few years, the introduction of NSE, NSCCL and NSDL has dropped transaction costs by a factor of ten, to levels comparable with the best practices observed internationally. The BSE has harnessed similar gains through the introduction of electronic trading and connectivity to NSDL.

SEBI's Estimation of Transaction Costs

The transaction cost varies depending on the market are the type of security (debt or equity, units of mutual fund, government security, physical/ dematerialised), nature of transaction (sale/ purchase), parties to transaction (mutual fund/ development financial institution/FII/retail investor), value of transaction (low/high), and settlement (delivery/squaring off/carry forward, rolling/batch), place of trade (NSE/BSE/any other exchange). Taking these variations into account, SEBI has estimated the explicit transaction costs for different categories of participants as given in Table Nos. 13 and 14.

SEBI concludes that there has been a decline in average transaction costs for all types of investors

Table No. 13: Average Explicit Transaction Costs for Institutions *(In basis points)*

Transaction Costs	Mutual Funds		FIs		FIIs	
	Buy	Sell	Buy	Sell	Buy	Sell
Brokerage + Custodial Charges for dematerialised segment	33-40	32-36	37	33	51-80	51-80
Physical brokerage + Custodial charges for dematerialed segment	83-90	32-36	87	33	87	33
Brokerage + Custodial charges for physical segment	109-134	59-84	126	76	126	76

Table No. 14: Transaction Cost for Retail Investors	
Type of Trade	**Basis Points**
Delivery	100-175
Non-delivery	16
Dematerialised delivery	50-100

in the past few years on account of several factors and primarily on account of dematerialisation and gradual reduction in bad delivery. Average transaction cost has declined sharply by 60-75% for all institutional investors. The average transaction cost for retail investors is higher than that for institutional investors primarily because of higher brokerage which is due to the fact that these attract margin. The explicit transaction cost in Indian market for institutional investors is one of the lowest in the world. Speedier dematerialisation, introduction of rolling settlement, streamlining of margin system, facility of best execution of trades, e-stock trading would further reduce costs.

Based on Table No. 15, SEBI also concludes that the transaction costs for institutional investors is not only competitive but also lower than all the markets except the US and Hongkong.

FURTHER REFORMS

Prime Minister's Council on Trade and Industry

The Subject Group on Capital Markets and Financial Services Initiatives of Prime Minister's Council on Trade and Industry in their report submitted in November 1998 have recommended various measures to improve the working of the capital market. These recommendations would most likely form the basis for second generation reforms in the securities market. These recommendations are reproduced below:

1. Debt Markets

a) Widen investor base through broad banding of pension/provident fund and insurance industries.

b) Liberalise investment norms and encourage active management of contractual funds.

c) Initiate steps to retail GOI securities through primary dealers, NBFC and bank networks.

d) Provide hedging opportunities to facilitate market making by primary dealers.

e) Facilitate introduction of interest rate swaps and bond futures.

f) Allow short selling/borrowing of securities.

g) Make repos applicable across wider range of securities.

Table No. 15: International Comparison of Transaction Costs *(In basis points)*

	USA *	**Australia**	**Malayasia**	**Hongkong**	**Singapore**	**Thailand**	**India MF, FII**
Brokerage	0.006	85	50	30	63	50	26,42
Regulator's fee	0.0003	-	-	0.03	0.03	-	-
Custody	0.00006	1	-	5	5	-	-
Clearing	0.01	-	-	0.01	5	-	9, 16
Stamp duty	-	15	5	-	-	10	-
Total	**0.01636**	**101**	**55**	**35.04**	**73.03**	**60**	**35, 58**

**Figures are in percentages*

h) Make the trading and settlement process efficient through the setting up of depository for fixed income securities.

i) Establish nation wide access to trading infrastructure at affordable costs.

j) Encourage Debt Securitisation.

k) Introduce tax incentives like indexation benefits on long term capital gains in fixed income securities

l) Encourage Foreign Institutional Investors in debt market.

m) Rationalise tax and regulatory norms across players/instruments.

n) Mandate registration of all market intermediaries.

o) Mandate compliance with uniform valuation procedures by all players.

p) Introduce standard disclosure and reporting norms for all trades.

q) Make listing and credit rating of private placement compulsory as per public issuances and introduce guidelines for issue documentation, post-issue reporting and disclosure.

2. Equity Markets

a) Encourage book building (involves close dialogue with prospective institutional investors) and auctions (which can be done over computer systems to thousands of market participants) whereby the IPO does not come to the market with a stated offer price.

b) Give a strong thrust to the government divestment programme.

c) Divest PSU stocks at marked down prices.

d) Improve disclosure norms.

e) Mandate market making.

f) Introduce rolling settlements and compulsory dematerialisation of securities.

g) Amend the SCRA to allow for derivatives trading.

h) Encourage individual investment accounts for high income/high net worth individuals/corporates.

i) Ease entry for FIIs/foreign venture capital funds.

j) Amend taxation norms on capital losses.

k) Remove restrictions on lending against shares by the banks.

l) Amend taxation norms on borrowings against shares.

m) Encourage retail investment in the markets through mutual funds.

3. Mutual Funds

a) Empower mutual funds that meet defined criteria to manage retirement funds in the economy.

b) Increase capital adequacy in proportion to the assets managed and reintroduce minimum corpus criteria for mutual fund entry.

c) Prescribe stringent norms for intermediaries.

d) Encourage development of fund supermarkets.

e) Prescribe regulations on investing in unlisted companies including intra-group companies.

f) Introduce "Funds of Funds" concept.

g) Mandate active investor education and stringent disclosure norms.

h) Make valuation norms uniform.

i) Strengthen the role of trustees.

j) Amend money market mutual fund regulations.

k) Impose strict penalties on sponsors not fulfilling their commitments.

l) Appoint Ombudsmen.

m) Strengthen Unit Trust of India.

4. Pension/Provident Funds

a) Convert the Government Pension System to fully funded accounts.

b) Move towards a privately managed pension/provident fund management system.

c) Have a strong regulatory authority oversee the functioning of the fund managers.

d) Stipulate minimum reserve and capital adequacy norms linked to percentage of funds managed.

e) Stipulate strong disclosure and valuation norms.

f) Gradually liberalise investment limits.

5. Insurance

a) Liberalise investment norms for insurance companies.

b) Allow for insurance intermediaries.

c) Simplify tariff for pricing of general insurance products.

d) Provide for life re-insurance cession to LIC.

e) Provide tax benefits.

AGENDA FOR FUTURE

I. Exchange Governance

Despite significant changes in composition of the governing councils of Exchanges in recent years, an impression is gathering that the present governing council composition is only theoretically a 50:50 ratio between brokers and non-brokers, while in practice, it is tilted in favour of brokers. Massive price-rigging in certain scrips during May-June, 1998 and investigation findings of SEBI thereon, leading to eviction of President and Executive Directors of concerned exchange corroborate this. The model followed by NSE where ownership and use are divorced may be emulated by other exchanges to avoid conflict of interest.

II. Small Regional Exchanges

Internationally, most small exchanges have either merged with larger ones or have developed niche markets. If small regional exchanges in India are to retain their separate identity, they have to provide investors with best price quotes available through electronic links with other exchanges and thereby help reduce search costs for the best price.

III. Derivatives Trading

Second generation reforms has been kick started with the legislation relating to derivatives of securities. NSE has been working for last three years to build skills and systems and to disseminate knowledge in this area. As soon as regulatory approvals are in place, NSE will be in the forefront of the developments in derivatives segment of the markets as well.

A doubt is being raised in certain circles if Indian market is ready for derivative trading. The securities market in India is accustomed to the style of settlement in the futures market. Market participants are used to trading, clearing and settlement systems which are akin to futures market. In addition, the basic requirements of a futures markets such as Initial Margin, Daily Mark to Market Margin, Clearing Corporations for Trade Guarantee, Surveillance System, Netting of Trades for a Specific Period etc. have been in place for quite some time now. All the stocks in the Sensex and Nifty are traded in demat form. There is complete transparency in order execution through on-line trading system and 100% of the trades are conducted on-line. The NSE collects the margin from its members through EFT facility. Prof J. R. Varma Committee has worked out risk containment measures, which include the collection of initial margin based on 99% value-at-risk in advance. The Dr. L. C. Gupta Committee recognised the state of preparedness of the market and therefore had recommended a phased introduction of derivatives products in the sequence of index futures, index options and options on stocks. For improving market efficiency it is necessary to separate cash market from futures market, which would shift some of the speculative transactions from the former to the latter. This is being achieved by introducing rolling settlement for all transactions on stock exchanges. There is, however, no barometer to judge the preparedness of the market for introduction of derivatives trading.

Contract on index futures will soon become a reality. These contracts are essentially cash settled. As the law stands today, it might be possible for the Income Tax department to term index futures contracts as speculative transactions and if so, any loss arising out of the trading in index futures will not be eligible for set off against any other income. Derivatives including index futures are essentially hedging instruments, which are used by the investors to hedge against the potential loss, which they may incur in their investments in securities. Therefore, the trading in index futures may be excluded from the purview of speculative transactions.

IV. 1969 Notification

Even though the notification of 1969, which bans all types of forward trading in securities, is in force, exceptions have been carved out in course of time as market needs changed. Carry forward transactions in shares are being permitted on stock exchanges through amendments in their byelaws and regulations. Ready forward/reverse ready forward transactions in specified government securities are being permitted among specified entities by periodic amendments to 1969 notification. Thus, on the one hand there is a notification, which prohibits forward trading and on the other, some form of forward trading is prevalent. Further, in the changed financial environment, the relevance of the 1969 notification is vastly reduced, particularly when derivatives trading and repo facilities for public sector bonds and privately placed debentures are being contemplated. The repeal of the June 1969 notification is desirable to further the process of market reform and to make way for the introduction of derivatives.

V. Repo Transactions

In order to impart liquidity in the market for government securities, certain specified entities have been permitted to undertake repo transactions in specified government securities by amendments to 1969 Notification. Specific entity as well as specific security needs approval of RBI as well as of Central Government. Securities other than government securities do not have this facility. The mechanism does not permit players to go short. There is no standard documentation/master agreement governing repo transaction. There is no clearing house to take counterparty risk for repos. As a result, the market is neither deep nor liquid. These issues need to be addressed.

VI. Regulatory Jurisdiction

The Securities Laws (Amendment) Act, 1999 has empowered Government to delegate powers to RBI in addition to SEBI. Government needs to demarcate regulatory jurisdiction between RBI, SEBI and itself in such a manner that there is no regulatory overlap or gaps. A view needs to be taken as to what powers in respect of which transactions and in which securities should be delegated to RBI. Presently powers under specific sections of the Act, irrespective of the type of transactions/securities, have been made exercisable also by SEBI. If RBI is to exercise similar powers as SEBI in respect of certain transaction or securities, all earlier notifications delegating powers to SEBI may have to be modified.

VII. Screen Based Trading

The market would gain substantially in liquidity and efficiency if the trading framework of equity market is replicated in the debt market also. That is, four key principles - anonymity, price time priority, nation wide market and free entry into intermediation – must apply to trading of debt instruments. SEBI has taken the initiative in this regard by prohibiting 'negotiated deals' in respect of listed corporate debt securities and prescribing that all such trades would be executed on the basis of price and order matching mechanism of stock exchanges as in case of equities. Similar prescription is needed in respect of other debt instruments.

VIII. Business Continuity Plan

NSE established a disaster back-up site at Pune alongwith its entire infrastructure including the satellite earth station and the high speed optical fibre link with its main site at Mumbai. The site at Pune is a mirror replica of the complete production environment at Mumbai. The transaction data is backed up on near real time basis from the main site to the disaster back-up site through the 2 mbps high-speed link to keep both the sites all the time synchronized with each other. Such business continuity plans need to be replicated by all stock exchanges and depositories to provide uninterrupted service to investors.

IX. Dematerialisation

The progress on dematerialisation in India has been a success story during 1998-99. All the significant stocks are held, traded and settled in demat form by the end of 1999. SEBI can gradually increase the number of scrips which have to be traded and settled in the demat form. This is time consuming and expensive, because fresh physical securities are getting listed while the listed ones are dematerialised. One effective way to prevent physical certificates sneaking into the market is making demat compulsory at the stage of listing.

For smooth transfer of securities among the investors holding accounts in different depositories, continuous "connectivity" between them has to be ensured. There has to be mutual obligation to carry out the instructions of the investors immediately. This would also require segregation of inter-depository transfer resulting from settlement at the level of clearing corporation. Based on advice from the clearing corporation regarding net inter-depository transfer of securities, each depository would debit/credit each other's account. Full benefits of dematerialisation can be realised if electronic fund transfer facility is available.

X. Stamp Duty on Transfer of Debt Instruments

With a view to modernising debt market and introducing paperless trading in this segment also, the Finance Minister in his Budget Speech dated 27th February 1999 announced Government's proposal to abolish stamp duty on transfer of debt instruments within the depository mode. The dematerialisation of debt instruments did not take off and Government's proposal did not materialise because it exempted stamp duty only on transfer of beneficial ownership within a depository. It did not exempt stamp duty on transfer of registered ownership of debt instruments from a person to a depository or from a depository to a beneficial owner. Further, it inadvertently exempted stamp duty on transfer of debentures only, while Government's proposal was to exempt all debt instruments. What is, in fact, required is exemption of stamp duty in respect of transfer of debt instruments at par with shares.

XI. Single Clearing Corporation

The experience of working of Clearing House of the Stock Exchange, Mumbai underlies the need for an arms' length relationship between the stock exchanges and their clearing and settlement agencies. Given its functions, a clearing & settlement agency may not necessarily have the presence of traders on its management. Further, it may not be necessary that each stock exchange must have its own exclusive clearing and settlement agency. It may be better if all the stock exchanges are made to use the services of only one clearing corporation, as the depository services are used by them. The international practice seems to lend support for a single clearing corporation for all the stock exchanges. The single clearing agency would have an overall view of gross exposure position of traders across the stock exchanges and would be much better geared to manage the risk.

The stock exchanges supervise the buying and selling activities of the brokers, but do not guarantee financial settlement of trades.These are guaranteed by a Clearing Corporation which creates a fund called 'Settlement Guarantee Fund' to ensure settlement of trades on the appointed day and time irrespective of default by trading members to bring in the required funds and/or securities. This arrangement has revolutionised the secondary market investments in India by bringing in a large number of retailer investors to the market and has also encouraged foreign investors to invest in Indian securities market in a large way. It is important to keep improving the value of the Settlement Guarantee Fund by adding back all the accruals to the fund, subject to administrative expenses, to retain and build up the faith that the retail and foreign investment have reposed in the settlement mechanism. For this purpose, it is necessary to exempt the income of the Clearing Corporation from the purview of income tax.

XII. Rolling Settlement

All major markets except India and France have moved to rolling settlement and are in the process of moving to 'T+2'. Even in India, there is rolling settlement in respect of trading in government securities as well as in the demat segment. The emerging consensus among financial institutions, industry, market intermediaries, depositories, stock exchanges, academicians, expert committees including those set up by SEBI and the regulator itself indicates mandatory rolling settlement in all segments of trading in stock exchanges to be the next important reform measure for the securities market. SEBI has selected 10 scrips for rolling settlement on the basis of the criteria that they should be in the compulsory demat list and have daily turnover of about Rs. 1 crore. This list needs to expand by adding more liquid scrips.

XIII. Investor Protection

The investor is still left high and dry despite a plethora of legislation that purportedly protect his interests. He still has to rely on the civil courts for redressal of his grievances. A recent field survey, by Society for Capital Market Research and Development, revealed that 90% of the respondents felt that the system of dealing with investor complaints was not effective, 85% amongst shareholding respondents felt that they were not adequately protected and 70% of them reported having actually suffered. If securities market is to continue to serve as a major source of resource for corporate sector, the interest of investors need to be vigorously protected.

XIV. Disclosure about intermediaries

An investor normally does business through an intermediary, whose acts of omission and commission can cause loss to him. In order for the investor to choose the right intermediary through whom he may transact business, it may be useful to help him in taking informed decision by making details of intermediaries available to him. One way to do so would be to display details of SEBI registered intermediaries on web site. The details may include the form of organisation, management, capital adequacy, liabilities, defaults and penal actions taken by regulator and self-regulatory organisations against the intermediary in the past.

XV. Quality Personnel

In order to dispense quality service, personnel working with market intermediaries need to have requisite skills and knowledge. To ensure this, it has become an international practice for market intermediaries to be certified. NSE took the initiative to introduce such a facility for testing and certification viz., NSE's Certification in Financial Markets (NCFM), which is the only of its kind today in the country. The system is a web based automated examination/testing system that provides for self-administration for the purpose of certification. It needs to be specified that only NCFM qualified personnel can be employed in the securities market.

XVI. Private Placement

The convenience of structuring of the issues to match the needs of issuers with those of investors coupled with savings in terms of time and cost has contributed to rapid growth of market for private placement. If this route is to continue as a major source of resources, this requires to be subjected to regulatory discipline.

XVII. Asset Based Securitisation

The market for securitisation has not developed appreciably in India because of lack of legal clarity and conducive regulatory environment. Experts believe that a host of legislations need to be amended before securitisation can really take off. These include Transfer of Property Act, Indian Stamps Act, Income Tax Act, Securities Contracts (Regulation) Act, Registration Act etc. This could be one of the priority areas for government to boost infrastructure funding.

XVIII. Internet Broking

Now that every possible participants in the securities market, viz. Stock exchanges, Clearing Corporation, Custodians, Depository and Depository Participant, Clearing Banks are wired and information flows among them on real time basis, the next step is to loop the investors in to this network. This can be done by web based solution. Trading platform, which was converted from trading hall to computer terminals at the broker's premises, would be further shifted to the homes of investors. An investor will know precisely when and what rate his order was processed. This will create an end-to-end audit trail and boost confidence of investor significantly.

XIX. Investor Protection Fund

In accordance with the directive of Ministry of Finance and SEBI, stock exchanges are required to set up Investor Protection Fund Trusts to compensate the investors who may suffer a loss in the event of a broker becoming a defaulter. The fund boosts the confidence of the investors who are the back bone of the securities market.

These Trusts qualify only for partial exemption as Charitable Trusts under the Income Tax Act, 1961. The income which is not used for the specified purposes is tax exempt only for 10 years at the end of which it is taxable. There are also restrictions on investments of the money and the discretion vests with the assessing officer to allow or disallow such exemption. These trusts need to be given complete automatic exemption under Section 10(23C) of the Act. This will go a long way in maintaining the corpus of the fund, which in turn, will enhance the confidence of the investing public.

XX Depreciation Rates for Telecom Equipments

In view of very high obsolescence rate, depreciation rate under the Income Tax Act for computer equipments has been enhanced to 60% to give thrust to the growth of IT industry and to encourage use of IT in business. It may, however, be noted that the growth of IT industry critically depends on the advances in internet and satellite based telecommunication systems. The obsolescence rate in telecommunication equipments matches that in IT industry today to keep pace with the ever-growing band-with requirements. Therefore, it is necessary to allow the same depreciation rate of 60% to telecommunication equipments as applicable to computer equipments.

These measures are required to bring back particularly small individual investors to the securities market. It is only by broadening and deepening the securities market through active participation of millions of individual investors across the length and breadth of the country that flow of investible funds to the corporate sector and in particular infrastructure projects can be augmented.