Volume IX 2006

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Stock of the nation

Indian Securities Market
A Review

NATIONAL STOCK EXCHANGE OF INDIA LIMITED

Indian Securities Market

A Review

Volume IX 2006

This publication reviews the developments in the securities market in India

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National Stock Exchange of India Limited

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Contents

Abbreviations

ADB	Asian Development Bank
ADRs	American Depository Receipts
AIFIs	All India Financial Institutions
ALBM	Automated Lending and Borrowing Mechanism
ALBRS	Automated Lending and Borrowing under Rolling Settlement
AMC	Asset Management Company
AMFI	Association of Mutual Funds in India
ASC	Accounting Standards Committee
ATM	At-The-Money
ATSs	Alternative Trading system
B2B	Business-to-Business
BIFR	Board for Industrial and Financial Reconstruction
BIS	Bank for International Settlement
BLESS	Borrowing and Lending Securities Scheme
BMC	Base Minimum Capital
BSE	The Stock Exchange, Mumbai
CBDT	Central Board of Direct Taxes
CC	Clearing Corporation
CDs	Certificate of Deposits
CH	Clearing House
CCIL	Clearing Corporation of India Limited
CDSL	Central Depository Services (India) Limited
CFM	Carry Forward Margin
CFRS	Carry Forward under Rolling Settlement
CIMC	Collective Investment Management Company
CISs	Collective Investment Schemes
CIVs	Collective Investment Vehicles
CLA	Central Listing Authority
CLF	Collateralised Lending Facility
CM	Clearing Member
CM Segment	Capital Market Segment of NSE
CMIE	Centre for Monitoring Indian Economy

COSI	Committee on Settlement Issues
COTI	Committee of Trade Issues
CP	Custodial Participant
CPs	Commercial Papers
CPSS	Committee on Payment and Settlement Issues
CRAs	Credit Rating Agencies
CRISIL	The Credit Rating Information Services of India Limited
CRR	Cash Reserve Ratio
CSD	Collateral Security Deposit
CSE	Calcutta Stock Exchange
DCA	Department of Company Affairs
DDBs	Deep Discount Bonds
DEA	Department of Economic Affairs
DFIs	Development Financial Institutions
DIP	Disclosure and Investor Protection
DNS	Deferred Net Settlement
DPs	Depository Participants
DRR	Debenture Redemption Reserve
DSCE	Debt Securities Convertible into Equity
DvP	Delivery versus Payment
ECBs	External Commercial Bodies
ECNS	Electronic communication Networks
EDGAR	Electronic Data Gathering, Analysis and Retrieval
EDIFAR	Electronic Data Information Filing and Retrieval
EFT	Eletronic Fund Transfer
ELN	Equity Linked Notes
ELSS	Equity Linked Saving Schemes
EPS	Earning Per Share
ETFs	Exchange Traded Funds
FIA	Futures Industry Association
F&O	Futures and Options
FCCBs	Foreign Currency Convertible Bonds
FCDs	Fully Convertible Debentures
FDI	Foreign Direct Investment
FDRs	Foreign Deposit Receipts
FDs	Fixed Deposits
FEMA	Foreign Exchange Management Act

FIBV	International World Federation of Stock Exchanges
FIIs	Foreign Institutional Investors
FIMMDA	Fixed Income Money Markets and Derivatives Association
FIs	Financial Institutions
FMPs	Fixed Maturity Plans
FoFs	Fund of Funds
FRAs	Forward Rate Agreements
FSAP	Financial Sector Assesment Program
FVCIs	Foreign Venture Capital Investors
GDP	Gross Domestic Product
GDRs	Global Deposit Receipts
GDRs	Gross Domestic Savings
GNP	Gross National Product
GOI	Government of India
G-Sec	Government Securities
GSO	Green Shoe Option
i-BEX	ICICI Securities Bond Index
ICAI	Institute of Chartered Accountants of India
ICICI	Industrial Credit and Investment Corporation of India Limited.
ICSE	Inter-Connected Stock Exchange of India Limited
IBRD	International Bank for Reconstruction and Development
IDBI	Industrial Development Bank of India
IDRs	Indian Depository Receipts
IEPF	Investors Education and Protection Fund
IFC	International Finance Corporation
IFSD	Interest Free Security Deposit
IIM	Indian Institute of Management
IISL	India Index Services and Products Limited
IMF	International Monetary Fund
IOSCO	International Organisation of Securities Commission
IDFC	Infrastructure Development Finance Corporation
IPF	Investor Protection Fund
IPOs	Initial Public Offers
IRDA	Insurance Regulatory and Development Authority
IRS	Interest Rate Swap
ISIN	International Securities Identification Number
ISSA	International Securities Services Association

IT	Information Technology
ITM	In-The-Money
JPC	Joint Parliamentary Committee
LAF	Liquidity Adjustment Facility
LIC	Life Insurance Corporation of India Limited
MCFS	Modified Carry Forward System
MFs	Mutual Funds
MFSS	Mutual Fund Service System
MIBID	Mumbai Inter-bank Bid Rate
MIBOR	Mumbai Inter-bank Offer Rate
MMMF	Money Market Mutual Fund
MNCs	Multi National Companies
MOU	Memorandum of Understanding
MoF	Ministry of Finance
MTM	Mark-To-Market
NASDAQ	National Association of Securities Dealers Automated Quotation System
NAV	Net Asset Value
NBFCs	Non-Banking Financial Companies
NCAER	National Council for Applied Economic Research
NCDs	Non-convertible Debentures
NCDS	Non-convertible Debt Securities
NCFM	NSE's Certification in Financial Markets
NDS	Negotiatied Dealing System
NEAT	National Exchange for Automated Trading
NGOs	Non-Government Organisations
NIBIS	NSE's Internet-based Information System
NIC	National Informatics Centre
NPAs	Non Performing Assets
NRIs	Non Resident Indians
NSCCL	National Securities Clearing Corporation of India Limited
NSDL	National Securities Depository Limited
NSE	National Stock Exchange of India Limited
OCBs	Overseas Corporate Bodies
OECLOB	Open Electronic Consolidated Limit Order Book
OLTL	On-line Trade Loading
OPMS	On-line Position Monitoring System
ORS	Order Routing System

OSL	Open Strata Link
OTC	Over the Counter
OTCEI	Over the Counter Exchange of India Limited
OTM	Out-of the-Money
P/E	Price Earning Ratio
PAN	Permanent Account Number
PCDs	Partly Convertible Debentures
PCM	Professional Clearing Member
PDAI	Primary Dealers Association of India
PDO	Public Debt Office
PDs	Primary Dealers
PFI	Public Finance Institution
PFRDA	Pension Fund Redulatory Development Authority
PRI	Principal Return Index
PRISM	Parallel Risk Management System
PSUs	Public Sector Undertakings
PV	Present Value
QIBs	Qualified Institutional Buyers
RBI	Reserve Bank of India
ROCs	Registrar of Companies
RTGS	Real Time Gross Settlement
SA	Stabilising Agent
SBTS	Screen Based Trading System
SCMRD	Society for Capital Market Research and Development
S&P	Standard and Poor's
SAT	Securities Appellate Tribunal
SC(R)A	Securities Contracts (Regulation) Act, 1956
SC(R)R	Securities Contracts (Regulation) Rules, 1957
SCBs	Scheduled Commercial Banks
SDs	Satellite Dealers
SEBI	Securities and Exchange Board of India
SEC	Securities Exchange Commission
SGF	Settlement Guarantee Fund
SGL	Subsidiary General Ledger
SGX-DT	The Singapore Exchange Derivatives Trading Limited
SIPC	Securities Investor Protection Corporation
SLB	Securities Lending and Borrowing

SLR	Statutory Liquidity Ratio
SPAN	Standard Portfolio Analysis of Risks
SDL	State Development Loans
SPICE	Sensex Prudential ICICI Exchange Traded Fund
SPV	Special Purpose Vehicle
SROs	Self Regulatory Orgaisations
SSS	Securities Settlement System
STA	Share Transfer Agent
STP	Straight Through Processing
STRIPS	Separate Trading of Registered Interest and Principal of Securities
SUS 99	Special Unit Scheme 99
T-Bills	Treasury Bills
TDS	Tax Deducted at Source
TM	Trading Member
TRI	Total Return Index
UIN	Unique Identification Number
UTI	Unit Trust of India
VaR	Value at Risk
VCFs	Venture Capital Funds
VCUs	Venture Capital Undertakings
VSAT	Very Small Aperture Terminal
WAN	Wide Area Network
WAP	Wireless Application Protocol
WDM	Wholesale Debt Market Segment of NSE
YTM	Yield to Maturity
ZCYC	Zero Coupon Yield Curve

Securities Market in India – An Overview

Introduction

The securities market has essentially three categories of participants, viz., the issuer of securities, the investors in the securities and the intermediaries. The issuers are the borrowers or deficit savers, who issue securities to raise funds. The investors, who are surplus savers, deploy their savings by subscribing to these securities. The intermediaries' are the agents who match the needs of users and suppliers of funds for a commission. These intermediaries perform functions to help both the issuers and investors to achieve their respective goals. There are large variety and number of intermediaries providing various services in the Indian securities market (Table 1.1). This process of mobilisations of resources is carried out under the supervision and overview of the regulators. The regulators develop fair market practices and

Table 1-1: Market Participants in Securities Market

Market Participants	Number as on March 31	
	2005	2006
Securities Appellate Tribunal	1	1
Regulators*	4	4
Depositories	2	2
Stock Exchanges		
With Equities Trading	23	23
With Debt Market Segment	1	1
With Derivative Trading	2	2
Brokers	9,128	9,339
Corporate Brokers	3,733	3,933
Sub-brokers	13,684	23,479
FIIs	685	882
Portfolio Managers	84	132
Custodians	11	11
Share Transfer Agents	83	83
Primary Dealers	17	17
Merchant Bankers	128	130
Bankers to an Issue	59	60
Debenture Trustees	35	32
Underwriters	59	57
Venture Capital Funds	50	80
Foreign Venture Capital Investors	14	39
Mutual Funds	39	38
Collective Investment Schemes	--	--

** DCA, DEA, RBI & SEBI.*
Source: SEBI Bulletin.

regulate the conduct of issuers of securities and the intermediaries. They are also in charge of protecting the interests of the investors. The regulator ensures a high service standard from the intermediaries and supply of quality securities and non-manipulated demand for them in the market.

Market Segments

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 creation and sale of new securities, while the secondary market deals in securities previously issued. The securities issued in the primary market are issued by public limited companies or by government agencies. The resources in this kind of market are mobilized either through the public issue or through private placement route. It is a public issue if anybody and everybody can subscribe for it, whereas if the issue is made available to a selected group of persons it is termed as private placement. There are two major types of issuers of securities, the corporate entities who issue mainly debt and equity instruments and the government (central as well as state) who issue debt securities (dated securities and treasury bills).

The secondary market enables participants who hold securities to adjust their holdings in response to changes in their assessment of risks and returns. Once the new securities are issued in the primary market they are traded in the stock (secondary) market. The secondary market operated through two mediums, namely, the over-the-counter (OTC) market and the exchange-traded market. OTC markets are informal markets where trades are negotiated. Most of the trades in the 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 other option is to trade using the infrastructure provided by the stock exchanges. There are 23 exchanges in India and all of them follow a systematic settlement period. All the trades taking place over a trading cycle (day=T) are settled together after a certain time (T+2 day). The trades executed on the National Stock Exchange (NSE) are cleared and settled by a clearing corporation. The clearing corporation acts as a counterparty and guarantees settlement. Nearly 100% of the trades in capital market segment are settled through demat delivery. NSE also provides a formal trading platform for trading of a wide range of debt securities, including government securities. A variant of the secondary market is the forward market, where securities are traded for future delivery and payment. A variant of the forward market is Futures and Options market. Presently only two exchanges viz., NSE and Stock Exchange, Mumbai (BSE) provides trading in the derivatives of securities.

International Scenario

Following the implementation of reforms in the securities industry during the last decade, Indian stock markets have stood out in the world ranking as well as in the developed and emerging markets. As may be seen from Table 1-2, India has a turnover ratio of 94.2%, which is quite comparable to the other developed market like the US and UK which has turnover ratios of 129.1% and 141.9% respectively. As per Standard and Poor's Fact book India ranked 17th in terms of market capitalization (18th in 2004) and 18th in terms of total value traded in stock exchanges and 20th in terms of turnover ratio as on December 2005. (15th in 2004).

Table 1-2: International Comparison: end December 2005

Particulars	USA	UK	Japan	Germany	Singa-pore	Hong-kong	China	India
No. of listed Companies	5,143	2,759	3,279	648	557	1,126	1,387	4,763
Market Capitalisation ($ Bn.)	16,998	3,058	4,737	1,221	208	1,006	781	553
Market Capitalisation Ratio (%)	139.7	151.9	100.0	48.2	198.4	548.3	40.3	82.2
Turnover ($ Bn.)	21,510	4,167	4,997	1,763	120	460	586	443
Turnover Ratio (%)	129.1	141.9	118.8	146.0	63.1	49.3	82.5	94.2

Source: S&P Emerging Stock Market Factbook, 2006.

A comparative study of concentration of market indices and indices stocks in different world markets is presented in the table below. It is seen that the index stocks' share of total market capitalization in India is 77.9% whereas US index accounted for 92.7%. The ten largest index stocks share of total market capitalization is 33.9% in India and 13.9% in case of US.

Market Concentration in the World Index as on End 2005

(In Percent)

Market	Index Stocks Share of Total Market Capitalization	10 largest Index Stocks' Share of total Market Capitalization
Japan	98.5	18.0
Singapore	91.9	49.3
France	95.1	42.9
Germany	92.3	46.0
Italy	98.1	55.0
United Kingdom	86.8	36.4
United States	92.7	13.9
India	77.9	33.9

Source: S&P Emerging Stock Market Factbook, 2006. Data is for the S&P CNX 500 Index.

The stock markets worldwide have grown in size as well as depth over last one decade. As can be observed from Table 1-3, the turnover on all markets taken together though have grown from US $ 29.70 trillion in 2003 to $47.32 trillion in 2005. It is significant to note that US alone accounted for about 45.46% of worldwide turnover in 2005. Despite having a large number of companies listed on its exchanges, India accounted for a meager 0.94% in total world turnover in 2005. The market capitalization of all listed companies taken together on all markets stood at US$ 43.64 trillion in 2005 ($38.90 trillion in2004). The share of US in worldwide market capitalization decreased from 41.96% as at end-2004 to 38.95% in end-2005, while Indian listed companies accounted for 1.27% of total market capitalization in 2005.

There has also been an increase in market capitalization as per cent of GDP in some of the major country groups as is evident from Table 1-4. The increase, however, has not been uniform across countries. The market capitalization as a percent of GDP was the highest at 108.9% for the high income countries as at end-2004 and lowest for middle income countries at 43.7%. Market capitalisation as percent for GDP in India stood at 56.1% as at end-2004. The turnover ratio, which is a measure of liquidity, however was approximately same for both the high-income countries and low-income countries 114% and 107.6%, respectively. The total number of listed companies stood at 28,001 for high-income countries, 14,117 for middle-income countries and 6,756 for low-income countries as at end-2005.

Table 1-3 : Market Capitalisation and Turnover for Major Markets

(US $ million)

Country/Region	Market Capitalisation (end of period)			Turnover		
	2003	2004	2005	2003	2004	2005
Developed Markets	**28,370,952**	**34,173,600**	**36,538,248**	**26,805,163**	**35,341,782**	**41,715,492**
Australia	585,475	776,403	804,074	369,845	514,249	616,115
Japan	3,040,665	3,678,262	4,736,513	2,272,989	3,430,420	4,997,414
UK	2,460,064	2,815,928	3,058,182	2,211,533	3,707,191	4,167,020
USA	14,266,266	16,323,726	16,997,982	15,547,431	19,354,899	21,509,979
All Emerging Markets	**3,656,292**	**4,730,418**	**7,103,800**	**2,896,804**	**3,967,806**	**5,604,092**
China	681,204	639,765	780,763	476,813	748,274	586,301
India	279,093	387,851	553,074	284,802	379,085	443,175
Indonesia	54,659	73,251	81,428	14,774	27,561	41,900
Korea	329,616	428,649	718,180	682,706	638,891	1,202,976
Malaysia	168,376	190,011	181,236	50,135	59,878	49,881
Philippines	23,565	28,948	40,153	2,635	3,664	6,951
Taiwan	379,023	441,436	485,617	592,012	718,619	618,207
World Total	**32,027,244**	**38,904,018**	**43,642,048**	**29,701,967**	**39,309,589**	**47,319,584**
US as % of World	**44.54**	**41.96**	**38.95**	**52.34**	**49.24**	**45.46**
India as % of World	**0.87**	**1.00**	**1.27**	**0.96**	**0.96**	**0.94**

Source: S&P Emerging Stock Market Factbook, 2006

Share holding pattern

In the interest of transparency, the issuers are required to disclose share holding pattern on a quarterly basis. Table 1.5 presents the sector wise shareholding pattern of 1069 companies listed on NSE at end March 06. Though the non-promoters holding is about 48%, the public held only 15.26% and the institutional holdings by (FIIs, MFs, FIs) accounted for 20.67%. There is not much significant difference in the shareholding pattern of companies in different sectors. About 80% of shares in companies in Infrastructure sector are held by Indian Promoters.

Households

According to the RBI data, household sector accounted for 85.4% of gross domestic savings during 2004-05. However, this has decreased to 83.9% in 2005-06. In the last fiscal 2005-06, they have invested 47.4% of financial savings in deposits, 24.2% in insurance/provident funds, 12.3% on small savings, and 7.2% in securities (out of which the investment in Gilts has been 2.4%), including government securities and units of mutual funds (Table 1-6). Thus the fixed income bearing instruments are the most preferred assets of the household sector.

Primary Market

An aggregate of Rs. 3,164,130 million were raised by the government and corporate sector during 2005-06 as against Rs. 2,548,990 million during the preceding year. Government raised about three fifths of the total resources, with central government alone raising nearly Rs. 1,600,180 million.

Table 1.4: Select Stock Market Indicators

Markets	Market Capitalisation as % of GDP					Turnover Ratio (%)				Listed Domestic Companies				
	1990	2000	2002	2003	2004	1990	2003	2004	2005	1990	2001	2003	2004	2005
High Income	**51.6**	**120.6**	**83.4**	**100.1**	**108.9**	**59.4**	**137.9**	**110.1**	**114.0**	**17,747**	**25,548**	**23,097**	**27,594**	**28,001**
Middle Income	**19.4**	**41.2**	**35.3**	**44.5**	**43.7**	**78.3**	**44.1**	**60.9**	**41.6**	**4,231**	**15,364**	**13,307**	**14,456**	**14,117**
Low & Middle Income	**18.8**	**38.7**	**33.3**	**43.5**	**43.8**	**70.7**	**57.8**	**72.4**	**53.7**	**7,677**	**23,097**	**20,629**	**22,444**	**20,873**
East Asia & Pacific	16.4	48.3	40.4	53.5	41	118.1	72.7	103.5	50.0	774	3,486	3,132	3,582	3,794
Europe & Central Asia	2.2	20.5	22.7	29.7	32.8	--	53.6	37.9	59.0	110	8,220	6,781	7,776	7,023
Latin America & Caribbean	7.7	34	27.4	33.2	39.6	29.8	21.7	22.0	26.1	1,734	1,567	1,381	1,468	1,525
Middle East & N. Africa	27.4	34.8	26.1	47.3	37.1	--	19.6	64.4	16.5	817	1,596	1,585	1,803	1,627
South Asia	10.8	27	22.7	39.8	48.7	54.0	180.3	131.2	120.6	3,231	7,159	6,839	6,909	6,000
Sub-Saharan Africa	52.3	102.3	47.3	105.9	129.6	--	23.7	39.3	27.6	1,011	1,069	911	906	904
Low Income	**9.8**	**23.6**	**22.6**	**37.3**	**44.5**	**53.8**	**139.6**	**130.5**	**107.6**	**3,446**	**7,733**	**7,322**	**7,988**	**6,756**
India	**12.2**	**32.4**	**25.7**	**46.5**	**56.1**	**65.9**	**14.1**	**115.5**	**93.6**	**2,435**	**5,795**	**5,644**	**4,730**	**4,763**
World	**48.0**	**105.1**	**74.6**	**89.7**	**96.3**	**57.2**	**123.0**	**72.4**	**53.7**	**25,424**	**48,645**	**47,576**	**50,038**	**48,874**

Source: World Development Indicators 2005, World Bank.

Table 1-5 : Shareholding Pattern at the end of March 2006 of Companies Listed on NSE

(In per cent)

Sectors	Non-Pomoters' Holding							Promoters' Holding		
	Institutional Investors			Non - Institutional Investors						
	FIs/Banks/ Insurance Companies	FIIs	MFs & UTI	Indian Public	NRIs/ OCBs	Private Corporate Bodies	Others	Indian Promoters	Foreign Promoters	Persons Acting in Concert
Banks	4.94	17.70	2.66	14.94	0.82	4.22	10.15	40.38	1.08	3.10
Engineering	10.19	10.71	8.50	25.49	0.64	7.05	6.72	25.43	5.00	0.27
Finance	10.24	21.48	1.53	21.20	1.06	7.33	8.18	27.13	0.26	1.59
FMCG	15.66	12.17	10.96	14.01	0.86	3.29	23.31	16.60	2.96	0.18
Information Technology	2.43	13.69	2.68	19.24	1.75	7.80	5.37	42.94	2.50	1.60
Infrastructure	2.78	7.79	1.25	5.05	0.23	1.52	0.79	79.97	0.31	0.32
Manufacturing	7.84	10.33	3.44	16.47	1.47	5.22	3.27	39.93	9.57	2.47
Media & Entertainment	2.66	13.59	5.63	26.16	0.71	7.85	2.07	34.17	6.94	0.22
MIS	3.78	5.61	2.23	23.24	2.32	8.15	5.76	42.61	3.00	3.30
Petrochemicals	4.59	6.45	1.75	13.28	0.91	3.93	8.39	56.16	1.09	3.44
Pharmaceuticals	4.27	11.27	2.96	21.17	1.32	5.65	4.62	41.97	4.50	2.28
Services	5.44	11.06	3.52	16.07	0.79	4.89	1.36	48.42	7.53	0.91
Telecommunication	4.44	14.26	1.74	14.03	0.81	5.24	8.55	49.64	0.60	0.69
No of shares	6906688313	12705483257	3371705060	16960783390	1231552645	5359697385	6800859745	50681774051	4858425542	2274785939
%age to total no of shares	6.21	11.43	3.03	15.26	1.11	4.82	6.12	45.60	4.37	2.05

Table 1-6: Savings of Household Sector in Financial Assets

(In per cent)

Financial Assets	2002-03 (P)	2003-04 (P)	2004-05 #	2005-06 #
Currency	**8.9**	**11.2**	**8.5**	**8.8**
Fixed income investments	**86.9**	**81.6**	**85.4**	**83.9**
Deposits	40.9	38.8	37	47.4
Insurance/Provident/Pension Funds	31.1	27.3	28.9	24.2
Small Savings	14.9	15.5	19.5	12.3
Securities Market	**4.2**	**7.5**	**6.0**	**7.2**
Mutual Funds	1.3	1.2	0.4	3.6
Government Securities	2.5	7.5	4.9	2.4
Other Securities	0.4	-1.2	0.7	1.2
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: RBI.
P: Provisional Figures
Preliminary Figures

Corporate Securities

The average annual capital mobilisation from the primary market has grown manifold since the last two-three decades. Data in table 1-7 shows that there is a high preference for raising resources in the primary market through private placement route. Private placements accounted for 71.6% of total resources mobilized through domestic issues by corporate sector during 2005-06.

As may be seen from the Table 1-7, Indian market is getting integrated with the global market, though in a limited way through Euro Issues. Since they were permitted access in 1992, Indian companies have raised about Rs. 113,580 million through American Depository Receipts (ADRs)/Global Depository Receipts (GDRs).

FIIs have invested heavily in Indian market in 2005-06. They had net cumulative investments of US$ 45.26 billion as at end of March 2006. There were 882 FIIs registered with SEBI as of end March 2006.

It appears that more and more people prefer mutual funds (MFs) as their investment vehicle. This change in investor behavior is induced by the evolution of a regulatory framework for MFs, tax concessions offered by government and preference of investors for passive investing. Starting with an asset base of Rs. 250 million in 1964, the total assets under management at the end of March 2006 has risen to Rs. 2,318,620 million. During the last one decade, the resources mobilized by the MFs are increased from Rs. 112,440 million in 1993-94 to Rs. 527,800 million in 2005-06.

Government Securities

The primary issues of the Central Government have increased manifold during the decade of 1990s from Rs. 89,890 million in 1990-91 to Rs. 1,600,180 million in 2005-06, however it witnessed a slight dip in the year 2004-05 to Rs. 1,065,010 million (Table 1-7). The issues by state governments have also increased from Rs. 25,690 million in 1990-91 to Rs. 505,210 million in 2003-04, However for the last two years it has been witnessing a slight dip to Rs. 391,010 million in 2004-05 and Rs.217,290 million in 2005-06. The central government mobilized Rs.1,310,000 million through the issue of dated securitites and Rs.290,180 million

Table 1-7: Resource Mobilisation from the Primary Market

(Rs. mn.)

Issues	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Corporate Securities	**366,890**	**371,470**	**421,250**	**601,920**	**724,500**	**783,956**	**744,032**	**752,411**	**748,500**	**1,092,970**	**1,346,660**
Domestic Issues	361,930	338,720	377,380	590,440	689,630	741,986	720,612	718,147	717,520	1,059,440	1,233,080
Non-Govt. Public Companies	160,750	104,100	31,380	50,130	51,530	48,900	56,920	18,777	36,750	134,820	211,540
PSU Bonds	22,920	33,940	29,820			-	--	--	--	--	--
Govt. Companies	10,000	6500	430			-	3,500	--	1,000	26,840	3,730
Banks & FIs	34,650	43,520	14,760	43,520	25,510	14,720	10,700	29,890	40,760	57,260	54,130
Private Placement	133,610	150,660	300,990	496,790	612,590	678,360	649,500	669,480	639,010	840,520	963,680
Euro Issues	12,970	55,940	40,090	11,480	34,870	41,970	23,420	34,264	30,980	33,530	113,580
Government Securities	**467,830**	**426,880**	**673,860**	**1,060,670**	**1,133,360**	**1,284,830**	**1,525,080**	**1,819,790**	**1,981,570**	**1,456,020**	**1,817,470**
Central Government	405,090	361,520	596,370	939,530	996,300	1,151,830	1,338,010	1,511,260	1,476,360	1,065,010	1,600,180
State Governments	62,740	65,360	77,490	121,140	137,060	133,000	187,070	308,530	505,210	391,010	217,290
Total	**834,720**	**798,350**	**1,095,110**	**1,662,590**	**1,857,860**	**2,068,786**	**2,269,112**	**2,572,201**	**2,730,070**	**2,548,990**	**3,164,130**

Source: RBI.

through the issue of T-bills. After meeting repayment liabilities of Rs. 356,300 million for dated securities and redemption of T-bills of Rs.261,510 million, net market borrowing of Central Government amounted to Rs. 982,370 million for the year 2005-06. The state governments collectively raised Rs 217,290 million during 2005-06 as against Rs.391,010 million in the preceding year. The net borrowings of State Governments in 2005-06 amounted to Rs. 154,550 million.

Along with growth of the market, the investor base has also widened. In addition to banks and insurance companies, corporates and individual investors are also investing in government securities. The weighted average cost of borrowing has increased to 7.34% in 2005-06. The maturity structure of government debt is also changing. About 74% of primary issues were raised through securities with maturities above 5 years and up to 10 years. As a result the weighted average maturity of dated securities increased to 16.9 years in 2005-06.

Secondary Market

Corporate Securities

Exchanges in the country, which offer screen, based trading system. The trading system is connected using the VSAT technology from over 281 cities. There were 9,335 trading members registered with SEBI as at end March 2006 (Table 1-8).

The market capitalization has grown over the period indicating more companies using the trading platform of the stock exchange. The all India market capitalization is estimated at Rs. 30,257,720 million at the end of March 2006. The market capitalization ratio defined as the value of stocks divided by GDP is sued as a measure of stock market size. It is of economic significance since market is positively correlated with the ability to mobilize capital and diversify risk. It increased sharply to 85.6% in 2005-06 against 54.41% in the previous year.

The trading volumes on exchanges have been witnessing phenomenal growth over the past decade. The trading volume, which peaked at Rs. 28,809,900 million in 2000-01, fell substantially to Rs. 9,689,098 million in 2002-03, started rising again and finally stood at Rs. 23,901,030 million in 2005-06. The turnover ratio, which reflects the volume of trading in relation to the size of the market, stood at 79.1% for the year 2005-06.

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. The NSE yet again registered as the market leader with more than 89% of total turnover (volumes on all segment) in 2005-06. Top 2 stock exchanges accounted for 99.9% of turnover, while the rest 21 exchange had negligible volumes during 2005-06 (Table 1-9).

The movement of the S&P CNX (Nifty), the most widely used indicator of the market, is presented in Chart 1-1. The index movement has been responding to changes in the government's economic policies, the increase in FIIs inflows, etc. However, the year 2005-06 witnessed a favorable movement in the Nifty, wherein it registered its all time high in March 30, 2006 of 3418.95. The point-to-point return of Nifty was 67.15% for 2005-06.

Table 1-8: Secondary Market - Selected Indicators

(Amount in Rs. mn.)

At the End of Financial Year	Capital Market Segment of Stock Exchanges								Turnover of Non-Repo Government Securities		Turnover of Derivatives Segment of Exchanges
	No. of Brokers	No. of Listed Companies	S&P CNX Nifty	Sensex	Market Capitalisation	Market Capitalisation Ratio (%)	Turnover	Turnover Ratio (%)	On WDM Segment of NSE	On SGL	
1995-96	8,476	9,100	985.30	3366.61	5,722,570	47.0	2,273,680	39.7	92,433	295,300	--
1996-97	8,867	9,890	968.85	3360.89	4,883,320	34.6	6,461,160	132.3	381,023	939,210	--
1997-98	9,005	9,833	1116.65	3892.75	5,898,160	37.7	9,086,810	154.1	975,152	1,610,900	--
1998-99	9,069	9,877	1078.05	3739.96	5,740,640	34.1	10,233,820	178.3	904,158	1,875,310	--
1999-00	9,192	9,871	1528.45	5001.28	11,926,300	84.7	20,670,310	173.3	2,915,915	4,564,910	--
2000-01	9,782	9,954	1148.20	3604.38	7,688,630	54.5	28,809,900	374.7	4,124,958	5,721,456	40,180
2001-02	9,687	9,644	1129.55	3469.35	7,492,480	36.4	8,958,180	119.6	9,269,955	12,119,658	1,038,480
2002-03	9,519	9,413	978.20	3048.72	6,319,212	28.5	9,689,098	153.3	10,305,497	13,923,834	4,423,333
2003-04	9,368	--	1771.90	5590.60	13,187,953	52.3	16,209,326	122.9	12,741,190	17,013,632	21,422,690
2004-05	9,128	--	2035.65	6492.82	17,021,360	54.4	16,668,960	97.9	8,493,250	12,608,667	25,641,269
2005-06	9,335	--	3402.55	11280.00	30,257,720	85.6	23,901,030	79.0	4,508,016	7,080,147	48,242,590

Note: Turnover figures for the respective year.

-- Not Available.

Source: SEBI & NSE.

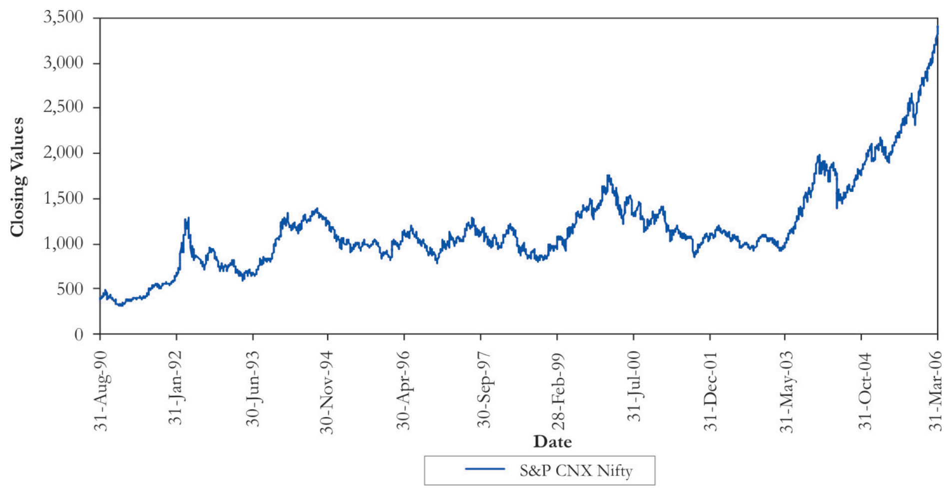
Table 1-9: Growth and Distribution of Turnover on Stock Exchanges

(Rs. mn.)

Sr. No.	Stock Exchanges	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1	NSE	800,090	3,367,820	4,811,970	5,198,520	11,432,680	17,704,580	15,622,830	21,265,445	45,462,793	45,744,186	68,693,315
2	Mumbai	500,640	1,242,840	2,073,830	3,119,990	6,850,282	10,016,190	3,093,156	3,165,516	5,146,730	5,357,913	8,160,830
3	Calcutta	621,280	1,056,640	1,787,780	1,717,804	3,571,655	3,550,354	270,747	65,399	19,275	27,150	28,000
4	Delhi	100,760	486,310	678,400	517,593	932,889	838,711	58,280	111	34	–	0
5	Ahmedabad	87,860	205,330	307,710	297,342	375,656	540,352	148,435	154,586	45,445	80	0
6	Uttar Pradesh	23,730	160,700	153,900	186,267	240,478	247,467	252,373	147,634	117,510	53,430	14,860
7	Ludhiana	48,490	52,740	83,150	59,779	77,405	97,322	8,566	0	0	–	0
8	Pune	70,710	99,030	86,240	74,528	60,868	61,705	11,710	18	0	3	0
9	Bangalore	8,900	43,980	86,360	67,790	111,474	60,328	703	0	1	–	0
10	Hyderabad	12,850	4,800	18,600	12,759	12,365	9,778	413	46	20	140	890
11	ICSE	–	–	–	7	5,452	2,331	554	648	1	–	0
12	Cochin	18,030	14,010	17,830	7,730	0	1,866	0	0	0	–	0
13	OCTEI	2,180	2,210	1,250	1,422	35,879	1,259	38	1	158	–	0.1
14	Madras		23,150	12,280	3,696	2,502	1,092	241	0	1,009	270	50
15	Madhya Pradesh	2,040	120	10	9	97	24	235	0	0	–	0
16	Magadh	16,290	27,550	3,230	0	80	16	0	5	1	–	910
17	Vadodara	12,590	42,680	45,760	17,491	1,593	9	101	25	1	–	0
18	Gauhati	6,190	4,840	200	302	0	0	1	1	0	–	0
19	Bhubaneshwar	2,260	2,310	2,020	770	701	0	0	0	0	–	0
20	Coimbatore	25,030	23,980	21,360	3,947	388	0	266	0	0	–	0
21	Jaipur	10,470	15,190	4,310	648	21	0	0	0	0	–	0
22	Mangalore	390	3,730	3,080	112	1	0	0	0	0	0	0
23	SKSE	5,640	3,980	170	0	0	0	0	0	0	0	0
	Total	**2,376,420**	**6,883,940**	**10,199,440**	**11,288,506**	**23,712,466**	**33,133,385**	**19,468,650**	**24,799,434**	**50,792,977**	**51,183,172**	**76,898,855**

Note: Turnover means total value of transactions of securities in all market segments of an Exchange. For NSE, all three segments viz., CM, F&O and WDM and BSE, two segments viz., CM and F&O are included.

Chart 1-1: Movement of S&P CNX Nifty



Government Securities

The trading in non-repo government securities declined considerably in the year 2005-06 as compared to the previous year. The aggregate trading volumes in central and state government dated securities on SGL declined from Rs. 12,608,667 million in 2004-05 to Rs. 7,080,147 million in 2005-06 (Table 1-8). The share of WDM segment of NSE in the total of Non-repo government securities decreased marginally from 67.36% in 2004-05 to 63.67% in 2005-06.

Derivatives Market

The number of instruments available in derivatives has been expanded. To begin with, SEBI only approved trading in index futures contracts based on S&P CNX Nifty Index and BSE-30 (Sensex) Index. This was followed by approval for trading in options based on these indices and options on individual securities and also futures on interest rates derivative instruments*(91-day Notional T-bills and 10-year Notional 6% coupon bearing as well as zero coupon bonds)*. Now, there are futures and options based on benchmark index S&P CNX Nifty, CNX IT Index and Bank Nifty Index as well as options and futures on single stocks (122 stocks).

The total exchange traded derivatives witnessed a value of Rs. 48,242,592 million during 2005-06 as against Rs. 25,641,269 million during the preceding year. NSE proved itself as the market leader contributing 99.9% of the total turnover in 2005-06 in India. Not only in Indian scenario, but also in the global market NSE has created a niche for itself in terms of derivatives trading in various instruments (discussed in detail with statistics in chapter 7 on derivatives of this publication).

Regulatory Framework

The four main legislations governing the securities market are (a) the SEBI Act, 1992 (b) the Companies Act, 1956 (c) the Securities Contracts (Regulation) Act, 1956, and (d) the Depositories Act, 1996. A brief about these legislations are as given below:

SEBI Act, 1992: The 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 issuing capital and all intermediaries and persons associated with securities market. It can conduct enquiries, audits and inspection of all concerned participants and adjudicate offences under this Act. It has powers to register and regulate all the market intermediaries. Further it can also penalize 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 the securities trading including the running of stock exchanges with a aims to prevent undesirable transactions in securities. It gives the 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 the requirements prescribed by the Central Government. The stock exchanges frame their own listing regulations in consonance with the minimum listing criteria set out in the Rules.

Depositories Act, 1996: The Depositories Act, 1996 provides for the establishment of depositories for securities to ensure transferability of securities with speed, accuracy and security. For this, these provisions have been made: (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 moving the securities from persons to persons. 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 standards of disclosure in the public issues, 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, Regulations & Regulators

The Government has framed rules under the SCRA, the SEBI Act and the Depositories Act. The SEBI has framed regulations under these acts for registration and regulation of the market intermediaries and for prevention of unfair trade practices. Under these Acts, the Government and the SEBI issue notifications, guidelines and circulars, which the market participants comply with. The SROs like the stock exchanges have also laid down their rules and regulations for the market participants to follow.

The regulator has to ensure that the market participants abide by and adhere to the rules and regulations prescribed to them. This in turn shall ensure that the securities market continues to be a major source of finance for corporate and government and also protect the interest of investors.

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

Most of the powers under the SCRA are exercisable by DEA, while a few others by SEBI. The powers of DEA under SCRA are also con-currently exercised by SEBI. The regulation of the contracts for sale and purchase of securities, gold related securities, money market securities and securities derived from these securities and ready forward contracts in debt securities are exercised concurrently with the 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 the SEBI. All rules 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.

Reforms in Indian Securities Markets

Corporate Securities Market

During the last decade, there have been substantial regulatory, structural, institutional and operational changes in the securities industry. These have been brought in with the objective of improving market efficiency, enhancing transparency, preventing unfair trade practices and bringing the Indian market up to the international standards. The following paragraphs list the principal reform measures undertaken since 1992.

SEBI Act, 1992: It created the securities market regulator, the SEBI, with the main objective and responsibility 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 corporate in the issuance of capital and transfer of securities, in addition to all intermediaries and persons associated with securities market.The courts have upheld the powers of SEBI to impose monetary penalties and to levy fees from market intermediaries.

Enactment of the SEBI Act was the first 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.

DIP Guidelines: With the repeal of the Capital Issues (Control) Act, 1947 in May 1992, Government's control over issue of capital, pricing of the issues, fixing of premia and rates of interest on debentures etc. ceased. Thereafter, the market has been allowed to allocate resources among the competing uses. In the interest of investors, SEBI issued the Disclosure and Investor Protection (DIP) guidelines. These guidelines contain a substantial body of requirements for issuers/intermediaries, with a broad intention to ensure that all the concerned entities observe high standards of integrity and fair dealing. The guidelines cast a responsibility on the lead managers to issue a due diligence certificate, stating that they have examined the prospectus and that it brings out all the facts and does not contain anything wrong or misleading. Issuers are now required to comply with the guidelines and then access the market. The companies can access the market only if they fulfill minimum eligibility norms in terms of their track record of distributable profits and net worth.

Screen Based Trading: Prior to setting up of NSE, the trading on stock exchanges in India used to take place through an open outcry system. This system did not allow immediate matching or recording of trades. This was time consuming and imposed limits on trading. In order to provide efficiency, liquidity and transparency, NSE introduced a nation-wide on-line fully-automated screen based trading system (SBTS). In this system a member can punch into the computer, quantities of securities and the prices at which he desires to transact and the transaction is executed as soon as it finds a matching sale or buy order from a counter partyIt 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. Given the efficiency and cost effectiveness delivered by the NSE's trading system, it became the leading stock exchange in the country in its very first year of operation. This forced the other stock exchanges to adopt SBTS. As a result, open out-cry system has disappeared from India. Today, India can boast that almost 100% trading takes place through electronic order matching.

Technology has been harnessed to carry the trading platform to the premises of brokers. NSE carried the trading platform further to the PCs in the residence of investors through the internet and to hand-held devises through WAP for convenience of mobile investors. This has made a huge difference in terms of equal access to investors in a geographically vast country like India.

Trading Cycle: Initially, the trading cycle varied from 14 days for specified securities to 30 days for others and settlement took another fortnight. The exchanges, however, continued to have different weekly trading cycles, which enabled shifting of positions from one exchange to another. Rolling settlement on T+5 basis was introduced in respect of specified scrips reducing the trading cycle to one day. It was made mandatory for all exchanges to follow a uniform weekly trading cycle in respect of scrips not under rolling settlement. All scrips moved to rolling settlement from December 2001. The settlement period has been reduced progressively from T+5 to T+3 days. Currently T+2 day settlement cycle is being followed.

Derivatives Trading: 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 took off much later after the suitable legal and regulatory framework was out in place. The market presently offers index futures and index options on S&P CNX Nifty, CNX IT Index, CNX Bank Nifty Index, BSE 30 Index and stock options and stock futures on individual stocks (in NSE 122 as of October 2006) and futures in interest rate products like notional 91-day T-Bills and notional 10-year bonds.

Demutualisation: Historically, brokers owned, controlled and managed the stock exchanges. In case of disputes, integrity of the exchange suffered. Therefore regulators focused on reducing the dominance of trading members in the management of stock exchanges and advised them to reconstitute their governing councils to provide for at least 50% non-broker representation. management and trading membership would be segregated from one another. A few exchanges have already initiated demutualisation process. NSE, however, adopted a pure demutualised governance structure where ownership, management and trading are with three different sets of people. This completely eliminates any conflict of interest and helped NSE to aggressively pursue policies.

Depositories Act: The earlier settlement system gave rise to settlement risk. This was due to the time taken for settlement and due to the physical movement of paper. Further, the transfer of shares in favour of the purchaser by the company also consumed considerable amount of time. 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 and accuracy. This act brought in changes by (a) making securities of public limited companies freely transferable subject to certain exceptions; (b) dematerialising of securities in the depository mode; In order to promote dematerialisation, the regulator has been promoting settlement in demat form in a phased manner in an ever-increasing number of securities. The stamp duty on transfer of demat securities has been waived. There are two depositories in India, viz. NSDL and CDSL. They have been set up to provide instantaneous electronic transfer of securities. At the end of March 2006, the number of companies connected to NSDL and CDSL were 6,022 and 5,479 respectively. The number of dematerialised securities increased to 201.9 billion at the end of March 2006 from 147.7 billion at the end of March 2005. As on the same date, the value of dematerialsied securities was Rs. 27,147 billion and the number of investor accounts was 9,421,587. All actively traded scrips are held, traded and settled in demat form. Demat settlement accounts for over 99.9% of turnover settled by delivery. This has almost eliminated the bad deliveries and associated problems.

To prevent physical certificates from sneaking into circulation, it has been mandatory for all new securities issued should be compulsorily traded in dematerialised form. 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. It has also been made compulsory for public listed companies making IPO of any security for Rs. 10 crore or more only in dematerialised form.

Risk Management: With a view to avoid any kind of market failures, the regulator/ exchanges have developed a comprehensive risk management system. This system 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 detect and prevent price manipulations. The clearing corporation has also put in place a system which tracks online real time client level portfolio based upfront margining. 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. As a part of the risk management system, index based market wide circuit breakers have also been put in place.

The anonymous electronic order book ushered in by the NSE did not permit members to assess credit risk of the counter-party necessitated some innovation in this area. To address this concern, NSE had set up the first clearing corporation, viz. National Securities Clearing Corporation Ltd. (NSCCL), which commenced its operations in April 1996. The NSCCL assured the counterparty risk of each member and guaranteed financial settlement. NSCCL established a Settlement Guarantee Fund (SGF). The SGF provides a cushion for any residual risk and operates like a self-insurance mechanism wherein members contribute to the Fund. In event of failure of a trading member to meet his obligations, the fund is utilized to the extent required for successful completion of the settlement. This has eliminated counter-party risk of trading on the Exchange.

Investor Protection: The SEBI Act established SEBI with the primary objective of protecting the interests of investors in securities and empowers it to achieve this objective. SEBI specifies that critical data should be disclosed in the specified formats regarding all the concerned market participants. The Central Government has established a fund called Investor Education and Protection Fund (IEPF) in October 2001 for the promotion of awareness amongst investors and protection of the interest of investors.

DEA, DCA, the SEBI and the stock exchanges have set up investor grievance cells for redressal of investor grievance. The exchanges maintain investor protection funds to take care of investor claims. The DCA has also set up an investor education and protection fund for the promotion of investors' awareness and protection of interest of investors. All these agencies and investor associations are organising investor education and awareness programmes. In January 2003, SEBI launched a nation-wide Securities Market Awareness Campaign that aims at educating investors about the risks associated with the market as well as the rights and obligations of investors. The NSE has also taken special measures for educating the investors, it conducts seminars, workshops and comes out with advertisement both in print and electronic media to communicate to the investors.

Globalisation: Indian securities market is getting increasingly integrated with the rest of the world. Indian companies have been permitted to raise resources from abroad through issue of ADRs, GDRs, FCCBs and ECBs. Further, foreign companies are allowed to tap the domestic stock markets.

Indian companies are permitted to list their securities on foreign stock exchanges by sponsoring ADR/GDR issues against block shareholding. NRIs and OCBs are allowed to invest in Indian companies. FIIs have been permitted to invest in all types of securities, including government securities. The investments by FIIs enjoy full capital account convertibility. They can invest in a company under portfolio investment route upto 24% of the paid up capital of the company. This can be increased up to the sectoral cap/ statutory ceiling, as applicable. The Indian Stock Exchanges have been permitted to set up trading terminals abroad. The trading platform of Indian exchanges is now accessed through the Internet from anywhere in the world.

RBI permitted two-way fungibility for ADRs/GDRs, which meant that the investors (foreign institutional or domestic) who holds ADRs/GDRs can cancel them with the depository and sell the underlying shares in the market. The company can then issue fresh ADRs to the extent of the shares cancelled. Previously, once a company issued ADR/ GDR and if the holder anted to obtain the underlying equity shares of the Indian Company, then, such ADR/GDR would be converted into shared of the Indian Company. Once such conversion took place, it was not possible to recovery the equity shares into ADR/ GDR. The result was, every time a conversion took place, companies had to seek Government permission to reissue the depositories.

Government Securities Market

The Government securities market has witnessed significant transformation in the nineties. There have been major institutional and operational changes in the government securities market. In the primary market, securities are issued through the auction system at market related rates. They are issued across maturities to develop a yield curve from short to long end, which is used as a benchmark. Also, the types of bonds issued have diversified include floating rate bonds, capital index bonds, zero coupon bonds. Further, non-competitive bids are accepted from retail investors in order to widen investor base. The reforms in the secondary market include setting up a system of primary dealers, who provide with two way quotes for transactions in securities, setting up of Clearing Corporation of India as the central clearing agency wherein delivery versus payment (DvP) system is used for settlement, and negotiated dealing screen for reporting of all the trades. Further, to facilitate retail investors to invest in government securities, RBI permitted select entities to provide custody (Constituent SGL) accounts. Other measures include abolition of TDS on government securities and stamp duty on transfer of demat debt securities.

Market Infrastructure: As part of the ongoing efforts to build debt market infrastructure, two new systems/set-up have been made operational the Negotiated Dealing System (NDS) and the Clearing Corporation of India Limited (CCIL). NDS, interalia, facilitates screen based negotiated dealing for secondary market transactions in government securities and money market instruments, online reporting of transactions and dissemination of trade information to the market. Government Securities (including T-bills), call money, notice/ term money, repos in eligible securities, Commercial Papers and Certificate of Deposits are available for negotiated dealing through NDS among the members. Initially, the settlement of trades was carried out on individually, that is, irrespective of couterparties each trade was settled separately. Further, there was no central agency to guarantee the trades. Therefore, the CCIL was set up to facilitate settlement using the higher versions of Delivery versus Payment mechanism. It began by settling the securities on gross basis and settlement of funds on net basis. Subsequently, both the securities and funds are settled on net basis. It, also, acts as a central counterparty for clearing and settlement of government securities transactions done on NDS. Recently, RBI also introduced an electronic order matching system in the Indian gilts market a a part of NDS which is referred to as the NDS-OM. This system is purely order driven, has anonymous order matching, provides timely information both pre-trade and post trade, allows straight-through processing, allows traders to set their preferences in terms of orders, facilitates trading by members on behalf of their constituents and last but not the least provides a precise audit trail of transaction especially in light of the extant guidelines of sale of government securities and D*v*P III mode of settlements.

The major reforms planned include strengthening and modernizing legislative framework through a government securities Act and switching over to order-driven screen based trading in government securities on the stock exchanges.

Research in Securities Market

In order to deepen the understanding and to assist in policy-making, SEBI has been promoting high quality research in the Indian capital market. Its monthly bulletin carries research articles pertaining to issues in the capital market. In order to improve market efficiency further and to set international benchmarks in the securities industry, NSE also administers a scheme called the NSE Research Initiative. The objective of this initiative is to foster research to better design market microstructure. The NSE Research Initiative has so far come out with 40 Working Papers.

Testing and Certification

With a view to improve the quality of intermediation, a system of testing and certification has been used in some of the developed and developing markets. This ensures that a person dealing with financial products has a minimum knowledge about them, the markets and regulations. As a result, not only the intermediaries benefit due to the improvement in the quality of their services, but also the career prospectus of the certified professionals is better. Thus, the confidence of the investors in the market increases.

NSE has evolved a testing and certification mechanism known as the National Stock Exchange's Certification in Financial Markets (NCFM). It is an on-line fully automated nation-wide testing and certification system where the entire process from generation of question paper, invigilation, testing, assessing, scores reporting and certifying is fully automated. It tests practical knowledge and skills, that are required to operate in financial markets. A certificate is awarded to those personnel who qualify the tests, which indicates that they have a proper understanding of the market and skills to service different constituents of the market. It offers 14 securities market related modules.

Primary Market

Introduction

The issuers issue fresh securities through public issues as well as private placement. The resources, raised by them from domestic as well as international markets, are presented in table 2.1. During 2005-06, a total of Rs. 3,164,130 million were mobilized (increase of 24.13% over the previous year) by both the government and corporate sector from the primary market through public issues and private placement. This chapter presents developments in primary market for corporate securities in India, both equity and debt, while the primary market for government securities is discussed separately in Chapter 6.

Table 2.1: Resource Mobilisation by Government and Corporate Sector

(Rs. mn.)

Issues	2004-05	2005-06 P
Corporate Securities	**1,092,970**	**1,346,660**
Domestic Issues	1,059,440	1,233,080
Public Issues	218,920	269,400
Non-Govt. Public Companies	134,820	211,540
PSU Bonds	--	--
Govt. Companies	26,840	3,730
Banks & FIs	57,260	54,130
Private Placement	840,520	963,680
Euro Issues	33,530	113,580
Government Securities	**1,456,020**	**1,817,470**
Central Government	1,065,010	1,600,180
State Governments	391,010	217,290
Total	**2,548,990**	**3,164,130**

Source: RBI Annual Report 2005-06
P - Provisional Figures

After a long period of subdued activity, there were signs of revival in the public issues in 2003-04 and this state was maintained till the year 2005-06. This trend was further reinforced by the high confidence showed by the retail investors and the rate of return given by most of the public issues. The private placement market accounted for 78.15% of the total resources mobilized domestically, whereas the public issues accounted for 21.85%. The resources raised by Indian corporates from the international capital market through the issuance of FCCBs, GDRs and ADRs have increased marginally during 2005-06 raising Rs. 113,580 million.

Policy Developments

In order to refine the primary market design various measures have been taken by the Government, RBI and SEBI. This section throws light on the policy measures initiated during the financial year 2005-06 and April 2006 to June 2006.

I. Revised guidelines regarding Indian Depository Receipts (IDR) with effect from April, 03rd 2006

The issuer can make an issue IDRs only if the below conditions are fulfilled :

a) It fulfills the eligibility criteria as specified in Rule 4 of the IDR Rules

b) It is listed in its home country;

c) It has not been prohibited to issue securities by any Regulatory Body; and,

d) It has good track record with respect to compliance with securities market regulations

INVESTORS

a) NRIs and FIIs cannot purchase or possess IDRs unless special permission of the Reserve Bank of India is taken.

b) Investments by Indian Companies in IDRs shall not exceed the investment limits, if any, prescribed for them under applicable laws.

c) Automatic fungibility of IDRs is not permitted.

d) An issue of IDRs is open to QIBs (as defined in clause 2.2.2.B. of these Guidelines) only.

e) The minimum application amount in an IDR issue shall be Rs.2,00,000/-

f) Procedure to be followed by each class of applicant for applying shall be mentioned in the prospectus.

Minimum Issue Price And Subscription

If the company issuing the IDRs does not receive the minimum subscription of 90% of the issued amount on the date of closure of the issue, or if the subscription level falls below 90% after the closure of issue on account of cheques having being returned unpaid or withdrawal of applications, the company shall forthwith refund the entire subscription amount received. If there is a delay beyond 8 days after the company becomes liable to pay the amount, the company shall pay interest at the rate of 15% per annum for the period of delay. The size of an IDR issue shall not be less than Rs.50 crores

Disclosures In a Prospectus For IDRs

A prospectus for issue of. IDRs shall contain all details as prescribed herein

General instructions with respect to contents of the prospectus

The Merchant Banker has the option to file the draft prospectus as a public filing or a confidential filing. In both the cases, the initial fee as prescribed in Rule 5 (i) (b) of the IDR Rules shall accompany such filing.

The contents of the prospectus including the financial statements of the issuer company, its subsidiaries and associates shall be in plain English.

a) "Associate" for the purpose of this chapter would mean "associate" as defined in Indian GAAP or IFRS or US GAAP in which the financial statements of the issuer are disclosed.

b) The prospectus shall contain all material information which shall be true and adequate so as to enable the investors to make informed decision on the investments in the issue.

c) The prospectus shall also contain the information and statements specified herein

d) The issuing company shall, through a Merchant Banker file a prospectus or letter of offer certified by two authorized signatories of the issuing company, one of whom shall be a whole-time director and other the Chief Accounts Officer or the Chief Financial Officer, stating the particulars of the resolution of the Board or the shareholders by which it was approved, with the SEBI and Registrar of Companies, New Delhi, before such issue. They shall also certify that all the disclosures made in the prospectus are true and correct.

e) The agreement made with the domestic depository shall also be furnished along with the prospectus.

Disclamer

a) A disclaimer shall be made by the Merchant Banker (including a due diligence certificate) in the format specified in Schedule III

b) A statement will be made by the Issuer disclaiming responsibility for statements made otherwise than in the prospectus, as follows:

c) "Our company, our directors and the Merchant Banker accept no responsibility for statements made otherwise than in the prospectus or in the advertisements or any other material issued by at our instance and anyone placing reliance on any other source of information including our website shall be doing so at his or her own risk."

The Issue

Summary of the terms of offer shall be incorporated, including:

a) Offer and Listing Details

b) Plan of Distribution

c) Markets

d) Selling Shareholders, if any

e) Dilution

f) Expenses of the Issue

Forward Looking Statements.

A paragraph on the statements that are forward looking statements and not matters of historical facts shall be incorporated. A statement on the sources of data used in the prospectus and their accuracy shall also be incorporated. A line should also be incorporated on whether these have been independently verified

General Information.

In General Information the following points have to be incorporated:

a) Definitions/terms used in the prospectus

b) Name, address and contact information of the registered office of the company;

c) Name, address and contact information of the Domestic Depository, the Overseas Custodian Bank with the address of its office in India, the Merchant Banker, the

Underwriter to the issue, Advisors to the issue and any other intermediary which may be appointed in connection with the issue of IDRs;

d) Interest of Experts and Counsel

e) Name, address and contact information of the compliance officer in relation to the issue of IDRs. The compliance officer should be placed in India

f) Name, address and contact information of Stock Exchanges where applications are made or proposed to be made for listing of the IDRs;

g) Disclosure about provisions relating to punishment for fictitious applications;

h) Statement/declaration for refund of excess subscription

i) Statement that an interest of 15% p.a. would be paid to the investors if the allotments letters / refund orders are not despatched within 30 days of the closure of the public issue

j) Declaration about issue of allotment letters/certificates/ IDRs within the stipulated period;

k) Date of opening of issue;

l) Date of closing of issue;

m) Method and Expected Timetable of the issue

n) A statement that subscription to the issue shall be kept open for atleast 3 working days and not more than 10 working days

o) Date of earliest closing of the issue;

p) Declaration by the Merchant Banker with regard to adequacy of resources of underwriters to discharge their respective obligations, in case of being required to do so;

q) A statement by the issuing company that all moneys received out of issue of IDRs shall be transferred to a separate domestic bank account, name and address of the bank and the nature and number of the account to which the amount shall be credited;

r) Details of availability of prospectus and forms, i.e., date, time, place etc;

s) Amount and mode of payment seeking issue of IDRs

t) Disclosure on Investor Grievances and Redressal System:

The arrangements or any mechanism evolved by the company for redressal of investor grievances.

The past record (for a min period of 3 years before the date of the prospectus) of investor grievance redressal of the company and its listed subsidiaries/associates including details as to the time normally taken by it for disposal of various types of investor grievances. That the company undertakes to subject itself to the jurisdiction of Indian Courts having jurisdiction over the place where the stock exchange is situated regarding grievances of the applicants for IDRs

Risk Factors & Management Perception, If any shall be disclosed as follows:

a) Risk factors associated with the company's business

b) Risk factors associated with the country of the company proposing to issue IDRs

c) Risk factors associated with the IDRs / underlying shares

Risk factors shall be classified as those which are specific to the project and internal to the issuer company and those which are external and beyond the control of the issuer company and shall be determined on the basis of their materiality. Materiality shall be decided taking the following factors into account:

a) Some events may not be material individually but may be found material collectively.

b) Some events may have material impact qualitatively instead of quantitatively.

c) Some events may not be material at present but may be having material impacts in future.

The Risk factors shall appear in the prospectus in the following manner:

a) Risks envisaged by Management.

b) Proposals, if any, to address the risks.

c) Any 'notes' required to be given prominence shall appear immediately after the Risk factors.

Market Price Information And Other Information Concerning The Shares In The Domestic Market Of The Issuer

a) Market price of shares for each quarter of the last three calendar years preceding the calendar year preceding the year of the issue of Prospectus (High, Low, Average Daily Trading Volume)

b) Market price of shares for each month of the calendar year preceding the year of the issue of Prospectus (High, Low, Average Daily Trading Volume)

c) Market price of shares for the month preceding the date of Prospectus (High, Low, Average Daily Trading Volume)

d) The Opening and Closing price on the last day of the preceding month of the date of Prospectus along with the volume

e) This information should be provided, exchange wise, if the securities are listed in more than one exchange

f) This information should updated as on last available date before the date of prospectus

g) If it is a further issue of IDRs which are already listed in India, the above information should be given about such IDRs also

Dividends

a) Dividend policy of the Company

b) Rate of Dividend and Amount of Dividend paid for the last five financial years

c) Regulatory framework in the Country of Incorporation/share listed concerning Dividends

d) Details of Arrangement with the Depositories for payment of Dividend to the IDR holders

e) Information about changes, if any, in dividends announced and dividends paid and time gap between the dividends announced and dividends paid.

f) Information about Dividend Yield.

g) Taxation aspects of dividend distribution

Exchange Rates

a) Brief history of the pattern of Exchange rates between the Country of Incorporation/ where shares are listed and India

b) High, Low, Average Rates for the last five years

c) High, Low, Average Rates for the last twelve months.

Foreign Investment And Exchange Controls Of The Country Of Incorporation/ Where Shares Are Listed

Information relating to the relevant foreign investment laws and exchange control regulations of the Country of Incorporation or country where the underlying equity shares are listed.

Objects Of The Issue / Use Of Proceeds

The following shall be disclosed:

a) Purpose of the issue;

b) Break-up of the cost of project for which the money is raised through the IDR issue;

c) The means of financing such project; and

d) Proposed deployment status of the proceeds at each stage of the project.

Capitalisation Statement

	Pre-issue as *(Figures in Rs.crores)*
Short-Term Debt	
Long Term Debt	
Shareholders Funds	
Share Capital	
Reserves	
Total Shareholders Funds	
Long Term Debt/Equity	

Capital Structure

a) Authorised, issued, subscribed and paid up capital (Number of instruments, description, aggregate nominal value).

b) Size of present issue.

c) Paid-up Capital:
   - before the issue;
   - after the issue (if the IDR issue involves issue of fresh equity shares); and
   - share premium account (before and after the issue)

d) Detailed notes to Capital Structure

e) Capital Structure shall also contain details regarding holdings of major shareholders i.e., the person or persons who are in over-all control of the company.

Financial Information

The audited consolidated or unconsolidated financial statements prepared in accordance with Indian GAAP or IFRS or US GAAP shall contain the following:

a) Report of Independent Auditors on the Financial Statements
b) Balance Sheets
c) Statements of Income
d) Schedules to Accounts
e) Statements of Changes in Stockholders' Equity
f) Statements of Cash Flows
g) Statement of Accounting Policies
h) Notes to Financial Statements
i) Statement Relating to Subsidiary Companies (in case of unconsolidated financial statements)

Report of the statutory auditor on the financial results and financial status of the company for each of the five financial years immediately preceding the issue of prospectus including the profits or losses and assets & liabilities of the issuing company at the last date to which the accounts of the company were made in the specified form; provided that the gap between date of issue and date of report shall not be more than 120 days up to a period not being more than 120 days before the opening of the issue, wherever statutory audit is required under the law of the country in which the issuing company is incorporated;

The above report needs to be stated in Indian Rupees in addition to home country currency and shall be prepared either in Indian GAAP (including all Accounting Standards issued by the Institute of Chartered Accountants of India) or with the International Financial Reporting Standards (IFRS) [including the International Accounting Standards (IAS)] or US GAAP, with a reconciliation statement vis-à-vis Indian GAAP. If the same is prepared according to IFRS or US GAAP, a paragraph on summary of significant differences between Indian GAAP and IFRS or Indian GAAP and US GAAP, as the case may be, shall also be incorporated

Further, in case the report is prepared as per IFRS or US GAAP, the annual and quarterly financial results shall be audited by a professional accountant or certified public accountant or equivalent (by whatever name called in the issuer country) in accordance with the International Standards on Auditing (ISA). The auditor's report shall also be prepared in accordance with the ISA.

The above report needs to be stated on consolidated Basis or stand alone basis. In case issuer country's accounting norms do not require a statutory Audit, such accounts shall be audited by a professional accountant or a certified public accountant

A report by domestic depository, as certified by an Accountant who is member of Institute of Chartered Accountants of India holding certificate of practice, upon profits or losses of the issuing company for each of the five financial years immediately preceding the issue of prospectus and upon the assets and liabilities of the issuing company at the last date to which the accounts of the company were made in the specified form; provided that the gap between date of issue and date of report shall not be more than 120 days.

If the proceeds of the IDR issue are used for investing in other body(ies) corporate, then following details of such body(ies) corporate shall be given :

- Names and address(es) of the bodies corporate;
- The reports as stated above in respect of those bodies corporate also

Related Party transactions

Liquidity and Capital Resources

Statement On Material Developments Subsequent To The Date Of The Last Financial Statements As Disclosed In The Prospectus

An statement by the directors whether in their opinion there have arisen any circumstances since the date of the last financial statements as disclosed in the prospectus any which materially and adversely affect or is likely to affect the trading or profitability of the company, or the value of its assets, or its ability to pay its liabilities within the next twelve months, and if so, an outline of such circumstances and an assessment of their likely impact.

Management Discussion And Analysis Of The Financial Statements (By Comparing The Recent Financial Year With The Previous Three Financial Years

- A summary of past financial results after adjustments as given in the auditors report for the past three years containing significant items of income and expenditure shall be given.
- Overview of the business of the issuer company.
- Factors that may affect Results of the Operations.
- An analysis of reasons for the changes in significant items of income and expenditure shall also be given, inter alia, containing the following:
  - Unusual or infrequent events or transaction;
  - Significant economic changes that materially affected or (are likely to effect income from continuing operations;
  - Known trends or uncertainties that have had or are expected to have a material adverse impact on sales, revenue or income from continuing operations;
  - Future changes in relationship between costs and revenues, in case of events such as future increase in labour or material costs or prices that will cause a material change are known;
  - The extent to which material increases in net sales or revenue are due to increased sales volume, introduction of new products or services or increased sales prices;
  - Total turnover of each major industry segment in which the company operated
  - Status of any publicly announced new products or business segment;
  - The extent to which business is seasonal;
  - Any significant dependence on a single or few suppliers or customers;
  - Competitive conditions.

Industry And Business Overview

Market including details of the competition, past production figures for the industry, existing industry capacity, past trends and future prospects regarding exports (if, applicable), demand

and supply forecasts (if given, should be essentially with assumptions unless sourced from a market research agency of repute), etc. to be given. Source of data used shall be mentioned.

Details Of The Issuer

a) Main object, history and present business of the company;

b) location of the project, if any;

c) Installed capacity and the details of plant and machinery, infrastructure facilities, technology etc., where applicable;

d) Schedule of implementation of project and progress made so far, if applicable;

e) Nature of product(s), consumer(s), industrial users;

f) Research and Development, Patents and Licenses, etc.

g) Property, Plants and Equipment

h) Particulars of financial and other defaults, if any;

i) Underwriting

j) Experts

k) Where You Can Find Additional Information

l) Enforcement of Civil Liabilities Against Foreign Persons

Subsidiaries And Associates Of The Issuer

The following information for the last 3 years based on the audited statements in respect of subsidiaries and associates of the Issuing Company:

a. Date of Incorporation;

b. Nature of activities;

c. Equity Capital;

d. Reserves (excluding revaluation reserve);

e. Sales;

f. Profit after tax (PAT);

g. Earnings per share (EPS); and

h. Net Asset Value (NAV);

If the subsidiaries and associates are not required to prepare such audited statements as per the laws prevailing in those countries, the same may be certified as true and correct by the Board of Directors and the management of such companies, provided a certificate from a certified public accountant or equivalent practicing in the concerned country is submitted to SEBI.

Management

a) Controlling shareholders and their Background

b) Details of the Board of Directors and the Key Managerial Personnel (i.e. Name, address(es) of Directors, Manager, Managing Director or other principal officers of the company, age, qualification, industry experience, other directorships)

c) Remuneration of the Directors and the Key managerial personnel with detailed breakup, sitting fees, their relation with promoters / controlling shareholder(s), if any, their equity holding in the company, duration of their association with the company.

d) Organisational Structure

e) Board Practices

f) Employees

Securities Market Of The Country Of Incorporation/ Where Shares Are Listed

a) Brief History

b) Stock Exchange Regulation

c) Listing Regulations

d) Details of the Securities market regulator of the country of the issuer company

e) Whether the Securities market regulator of the country of the issuer company has signed any MoU with SEBI/IOSCO

f) Disclosure under the Companies Act and Securities Regulations (or equivalent thereof)

g) Stock Exchanges

h) Takeover Code/Buyback Code

i) Reforms in Some Key Sectors of the Economy

j) Restriction on Foreign Ownership of Securities

k) Overview of the Financial Sector

l) Nature of the Securities Trading Market in that country

m) A statement of how the enforcement of Indian Securities Laws would be affected by the fact that the issuer is located outside India

Description Of The Indian Depository Receipts And Rights Of IDR Holders

a) Brief description of the Indian Depository Receipts

b) Dividends, Other Distributions and Rights of IDR holders

c) Voting rights and their manner of exercise by IDR holders, if any.

d) Record dates and how the same will be disclosed.

e) Reports and other communication to which the IDR holders will be entitled.

f) Conversion procedure of IDRs into shares

g) Governing Law regarding various aspects of IDRs and transactions therein.

Provisions Regarding Transfer Of Shares And Depository Receipts

a) Provisions regarding transfer of IDRs

b) Outline of provisions regarding transfer of underlying shares after conversion

Information Relating To The Depositary - Indian & International

Brief details of the Domestic Depositary, Overseas Custodian Bank and Depositary Agreement.

Approvals Of The Government/Regulatory Authorities

Information relating to statutory and regulatory approvals required in home country for the Issue and the related aspects and their status, and approvals from Indian Regulatory authorities.

Taxation Framework In India And The Country Of Incorporation / Where Shares Are Listed

Information relating to relevant provisions of Taxation law, Tax Treaties and their impact for IDR holders.

Outstanding Litigations And Defaults

Material litigation / liabilities/defaults including arrears / potential liabilities of the issuer, its promoters / controlling shareholders / directors and its subsidiaries and associates.

Materiality shall be determined on the basis of factors which are specific to the project and to the issuer, its promoters / controlling shareholders / directors, its subsidiaries and associates, which may have a bearing on the performance of the issuer company.

Materiality shall be decided taking the following factors into account:

– Some litigation/defaults may not be material individually but may be found material collectively.
– Some litigation/defaults may have material impact qualitatively instead of quantitatively.
– Some litigation/defaults may not be material at present but may be having a material impact in future.

Basis Of Issue Price

a) Earnings per share i.e. EPS pre-issue for the last three years (as adjusted for changes in capital);
b) P/E pre-issue
c) Average return on net worth in the last three years
d) Minimum return on increased net worth required to maintain pre-issue EPS;
e) Net Asset Value per share based on last balance sheet;
f) Net Asset Value per share after issue and comparison thereof with the issue price.
g) Comparison of all the accounting ratios of the issuer company as mentioned above with the industry average and with the accounting ratios of the peer group (i.e companies of comparable size in the same industry.(Indicate the source from which industry average and accounting ratios of the peer group has been taken)
h) The face value of shares (including the statement about the issue price being "X" times of the face value) and that of the IDRs. The aggregate face value of the total equity shares underlying a single IDR also shall be given.

Provided that the projected earnings shall not be used as a justification for the issue price in the prospectus. Provided further that the accounting ratios disclosed in the prospectus in support of basis of the issue price shall be calculated after giving effect to the consequent increase in capital on account of compulsory conversions outstanding, as well as on the assumption that the options outstanding, if any, to subscribe for additional capital will be exercised.

FCCBs Ordinary Shares

Companies going in for an offering in the domestic market and a simultaneous or immediate follow on offering (within 30 days of domestic issue) through ADR/GDR issues wherein GDRs/ADRs are priced at or above the domestic price, would be exempt from the requirement of the revised pricing guidelines.

Companies going for such simultaneous or immediate follow on offering in the ADR/GDR market will have to take SEBI's approval for such issue, which will specify the percentage to be offered in the domestic and ADR/GDR markets.

In terms of amendment to the "Issue of Foreign Currency Convertible Bonds and Ordinary Shares (Through Depository Receipt Mechanism) Scheme, 1993" dated August 31, 2005, unlisted companies, which have already issue GDR/FCCB in the international market, and are to list in the domestic market, would be required to do so by March 31, 2006.

II. External commercial Policy (ECP)

ECBs can be accessed under the Automatic Route and Approval Route. ECB for investment in the real sector – Industrial sector is under the Automatic Route. The maximum amount of ECB which can be raised by an eligible borrower under the Automatic Route is USD 500 million during a financial year.

ECB up to USD 20 million or equivalent with minimum average maturity of 3 years and ECB above USD 20 million and up to USD 500 million or equivalent with minimum average maturity of 5 years are permissible under the Automatic Route NGOs engaged in micro-finance activities can raise ECB up to USD 5 million during the financial year through the Automatic Route.

All cases, which fall outside the purview of the Automatic Route, will be decided by an powered committee of RBI. Corporates registered under the Companies Act, 1956 except banks, FIs, HFCs and NBFCs are eligible in the approval route. The eligibility criteria for ECM's through the Approval Route has been extended to :

a) NBFCs from multilateral FIs, reputed regional FIs, official export agencies and international banks towards import of infrastructure equipment for leasing to infrastructure projects with a minimum average maturity of 5 years.

b) FCCBs by HFCs with strong financials satisfying criteria to be notified by RBI

c) FIs dealing exclusively with infrastructure or export finance such as IDFC, IL&FS, Power Finance Corporation, Power Trading Corporation, IRCON and Exim Bank are considered on a case-by-case basis i.e. through the approval route

d) Banks and FIs which had participated in the textile or steel sector restructuring package as approved by the Government are permitted to the extent of their investment in the package and assessment by RBI based on prudential norms. Any ECB availed for this purpose so far is deducted from their entitlement.

e) International banks, international capital markets, multilateral financial institutions, export credit agencies and suppliers of equipment, foreign collaborators and foreign equity holders

All ECBs are subject to the following maximum spreads over six month LIBOR, for the respective currency of borrowing or the applicable benchmark(s) as the case may be. Minimum

Average All-in-cost Ceilings over Maturity Period 6 months LIBOR* 3 years and up to 5 years 200 basis points More than 5 years 350 basis points. All-in-cost ceilings include rate of interest, other fees and expense in foreign currency except commitment fee, pre-payment fee and fees payable in India Rupees. Moreover, the payment of withholding tax in Indian rupees is excluded for calculating the all-in-cost.

Permissible end-use restrictions :

ECB can be raised only for investment in real sector industrial sector including SME and infrastructure sector in India

ECB proceeds can be utilized for overseas direct investment in joint ventures (JV)/ wholly owned subsidiaries (WOS) subject to the existing guidelines on Indian Direct Investment in JV/WOS abroad .

Utilization of ECB proceeds is permitted in the first stage acquisition of shares in the disinvestment process and also in the mandatory second stage offer to the public under

The Governments disinvestment programme of PSU shares.

Utilization of ECB proceeds is not permitted for investment in capital markets by corporate or for on-lending and in real estate. The term 'real estate' excludes development of townships/ housing and other infrastructure and construction development projects defined by the Ministry of Commerce .

End uses of ECB for working capital, general corporate purpose and repayment of existing Rupee loans.

ECB proceed should be parked overseas until actual requirement in India. Prepayment of ECB up to USD 200 million is allowed subject to minimum average maturity of 5 years. Pre-payment of ECB for amounts exceeding USD 200 million or prepayment of ECBs with minimum average maturity of 3-5 years would be on the approval route.

Refinancing of existing ECB by raising fresh ECBs at lower cost is permitted subject to the condition that the outstanding maturity of the original loan is maintained.

The housing policy for ECB is also applicable to FCCBs in all respect except in the case of HFCs for which criteria will be notified by RBI.

Market Design

The primary market is governed by the provisions of the Companies Act, 1956, which deals with issues, listing and allotment of securities. Additionally the SEBI (Disclosure and Investor Protection) guidelines issued under the securities law prescribes a series of eligibility and disclosure norms to be complied by the issuer, promoter for accessing the market. However, in this section we only discuss the market design as stipulated in the SEBI (DIP) guidelines.

DIP Guidelines, 2000

Disclosure and Investor Protection (DIP) Guidelines of SEBI, was issued in June 1992. SEBI has since then been issuing clarifications/amendments to these guidelines from time to time, in order to streamline the public issue process. The guidelines apply to all public issues, offer for sale, and rights issues by listed and unlisted companies. This section attempts to highlight some of the important clauses in the guideline in a precise manner.

Eligibility Norms

Any company issuing securities has to satisfy the following conditions at the time of filing the draft offer document and the final offer document with SEBI and Registrar of Companies (ROCs)/Designated Stock Exchange respectively.

A company making a public issue of securities has to file a draft prospectus with SEBI, through an eligible merchant banker, at least 21 days prior to the filing of prospectus with the Registrar Of Companies (ROCs).

For a rights issue, filing of offer document is mandatory where the aggregate value of securities, including premium, if any, exceeds Rs. 50 lakh. An application for listing of those securities with stock exchange(s) is also to be made. Further, the company must enter into an agreement with the depository for dematerialisation of its securities and should give an option to subscribers/shareholders/investors to receive the security certificates either in physical or in dematerialised form. An unlisted company can make an IPO of equity shares or any other security, which may be converted into equity shares, only if it has a track record of profitability and required net worth and net tangible assets. Some of the conditions are specified hereunder: (i) it has net tangible assets of at least Rs. 3 crore in each of the preceding 3 full years, of which not more than 50% is held in monetary assets; (ii) it has a net worth of at least Rs. 1 crore in each of the preceding 3 full years; (iii) it has a track record of distributable profits in terms of section 205 of the Companies Act, 1956, for at least 3 out of the immediately preceding 5 years; (iv) the aggregate of the proposed issue and all previous issues made in the same financial year in terms of size (offer through offer document plus firm allotment plus promoters contribution through the offer document) does not exceed five times its pre-issue net worth and (v) in case the company has changed its name within the last one year, at least 50% of the revenue for the preceding one full year is earned by the company from the activity suggested by the new name.

Even if the above mentioned conditions are not satisfied, an unlisted company can still make an IPO on compliance of the guidelines as specified: (a)(i) issue should be made through the book building process with at least 50% of the issue size being allotted to the QIBs, if not, then the full subscription monies has to be refunded, OR (a)(ii) the project should have at least 15% participation by FIs/SCBs of which at least 10% should come from the appraiser. In addition, at least 10% of the issue size should be allotted to QIBs, otherwise, the full subscription monies would be refunded; AND (b)(i) minimum post-issue face value capital of the company should be Rs. 10 crore, OR (b)(ii) there should be compulsory market making for at least 2 years from the date of listing subject to certain conditions as specified in the guidelines.

For a listed company the aggregate of the proposed issue and all previous issues made in the same financial year in terms of issue size should not exceed 5 times its pre-issue net worth. In case of the change in name of the issuer company within the last 1 year, the revenue accounted for by the activity suggested by the new name should not be less than 50% of its total revenue in the preceding one full year period.

Infrastructure companies are exempt from the requirement of eligibility norms if their project has been appraised by a public financial institution (PFI) or Infrastructure Development Finance Corporation (IDFC) or Infrastructure Leasing and Financing Services Ltd. (ILFS) or a bank which was earlier a PFI and not less than 5% of the project cost is financed by any of the institutions referred above, jointly or individually, by way of loan and/or subscription to equity or a combination of both.

No public issue or rights issue of debt instruments (whether convertible or not) can be made unless (a) it has a credit rating of not less than investment grade from not less than two credit rating agencies registered with SEBI, all the credit ratings, including the rejected ones, needs to be disclosed. (b) company has not defaulted on payment of interest or repayment of principal of debentures issued to the public, if any for a period more than 6 months.

Pricing of Issues

The companies, including the eligible infrastructure companies, have the freedom to price their equity shares or any security convertible into equity in public or rights issues as the case may be. The banks, however, can price their shares subject to the approval by the RBI. A company (listed or unlisted) should issue shares to applicants in the firm allotment category at a different price from the one at which the net offer to the public is made. That is, at a higher price than at which the securities are offered to the public. (4) of section 13 of the Companies Act, 1956 and norms as specified by SEBI from time to time.

In case of initial public offerings by unlisted company, if the issue price is Rs. 500 or more, the issuer company shall have the discretion to fix the face value below Rs. 10 per share, subject to the condition that the face value shall in no case be less than Rs. 1 per share. However, in case the issue price is less than Rs. 500 per share, the face value shall be Rs. 10 per share.

Contribution of Promoters and lock-in

The promoters' contribution in case of public issues by unlisted companies 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 share holding to the extent of 20% of the post-issue capital. For a composite issue, the promoters' contribution should either be 20% of the proposed public issue or 20% of the post-issue capital. At least one day prior to the opening of the issue, the promoters should bring in the full amount of the promoters contribution including premium. Except for (i) public issue of securities which have been listed for at least 3 years and has a track record of dividend payment for at least 3 immediate preceding years, (ii) companies wherein no identifiable promoter or promoter group exists, and (iii) rights issues.

The minimum promoters' contribution should be locked in for a period of 3 years in case of all types of issues. However, if the promoters' contribution exceeds the required minimum, then the excess is locked in for a period of one year. The lock-in period starts from the date of allotment in the proposed public issue and the last date of the lock-in is to be reckoned as three years from the date of commencement of commercial production or the date of allotment in the public issue whichever is later. In case of pre-issue share capital of unlisted company, the entire pre-issue share capital, other than that locked in as promoters contribution, is locked for a period of one year from the date of commencement of commercial production or the date of allotment in the public issue, whichever is later. Securities allotted in firm allotment basis are also locked in for a period of one year. The locked-in securities held by promoters may be pledged only with banks or FIs as collateral security for loans granted by such banks or FIs.

Issue Obligations

Each company issuing securities has to enter into a Memorandum of Understanding with the lead merchant banker, which specifies their mutual rights, liabilities and obligations. The lead merchant banker has to exercises due diligence and satisfies himself about all aspects of offering, veracity and adequacy of disclosures in the offer document. All the other formalities like, allotment, refund and despatch of certificates are also taken care by the lead merchant banker. The lead manager should also ensure that the issuer company has entered into agreements with all the depositories for dematerialization of securities. The merchant banker has to appoint a compliance officer who will directly liaise between the Board and the issuer company with regard to compliance of various laws, rules, regulations and other directives issued by the Board. Twenty-one days after the draft offer document has been made public, the lead merchant banker should file a statement with the SEBI giving a list of complaints received, a statement as to whether it is proposed to amend the draft offer document or not, and highlighting those amendments.

Subsequent to the post issue, the lead merchant banker should ensure that the post-issue monitoring reports are submitted irrespective of the level of subscription. Also, the merchant banker should be associated with allotment, refund and dispatch and also monitor the redressal of investor grievances arising therefrom. In a public issue, the Managing Director of the Designated Stock Exchange along with the post issue Lead Merchant Banker and the Registrars to the Issue would be responsible for the finalization of allotment in a fair and proper manner. Allotment should be on proportionate basis within the specified categories rounded off to the nearest integer subject to the minimum allotment being equal to the minimum application size as fixed and disclosed by the issuer..

Book Building

Book building is a price discovery mechanism based on the bids received at various prices from the investors, for which demand is assessed and then the price of the securities is discovered.

The issuer proposing to issue capital through book-building has two options, *viz.*, 75% book building route and 100% book building route. In case of issue of securities through the first route, 75% of the net offer to the public is made through book-building process and 25% at the price determined by book-building. In this case not more than 50% should be available for allocation to QIBs and not less than 25% to non-QIBsIn case of under subscription in any category, the unsubscribed portions can be allocated to the bidders in other categories.

Besides, book building also requires that: issuer should provide indicative floor price and no ceiling price, bids to remain open for at least 3 working days and not more than 7 working days (which may be extended to a maximum of 10 working days in case the price band is revised, only electronic bidding is permitted, bids are submitted through syndicate members, investors can bid at any price, retail investors have option to bid at cut off price, bidding demand is displayed at the end of every day, the lead manager analyses the demand generated and determines the issue price in consultation with the issuer, etc.

e-IPOs

A company proposing to issue capital to public through the on-line system of the stock exchanges has to enter into an agreement with the Stock Exchange(s). SEBI registered brokers should be appointed for the purpose of accepting applications and placing orders with the company. The issuer company should also appoint a Registrar to the Issue having electronic connectivity with the Exchanges. The issuer company can apply for listing of its securities on any Exchange other than the Exchange through which it has offered its securities. The lead manager co-ordinates all the activities amongst various intermediaries connected in the issue/system.

Credit Rating

Credit rating agencies (CRA) can be promoted by public financial institutions, scheduled commercial banks, foreign banks operating in India, and by any body corporate having continuous minimum net worth of Rs.100 crore for the previous five years. Further, foreign credit rating agencies having at least five years experience in rating can also operate in the country. The SEBI (Credit Rating Agencies) Regulations, 1999 cover the rating of the securities listed and not fixed deposits, foreign exchange, country ratings and real estates.

For debt securities with issue size greater than or equal to Rs. 100 crore, two ratings from different CRAs are required. The issuer should disclose in the offer documents all the ratings it has got during the previous 3 years for any of its listed securities, irrespective of whether it has been accepted or not. CRAs should continuously monitor the securities rated by them and disseminate any changes in its ratings, along with its history through websites, press releases etc.

Merchant Banking

The merchant banking activity in India is governed by SEBI (Merchant Bankers) Regulations, 1992. Consequently, all the merchant bankers have to be registered with SEBI. The details about them are presented in the table below:

Category of Merchant Banker	Permitted Activity	Net worth (Rs. Million)
Category I	To carry on activity of the issue management, to act as adviser, consultant, manager, underwriter, portfolio manager	50.00
Category II	To act as adviser, consultant, co-manager, underwriter, portfolio manager	5.00
Category III	To act as underwriter, adviser, consultant to an issue	2.00
Category IV	To act only as adviser or consultant to an issue	Nil

Only a corporate body other than a non-banking financial company having necessary infrastructure, with at least two experienced persons employed can apply for registration as a merchant banker. The applicant has to fulfill the capital adequacy requirements, with prescribed minimum net worth. The regulations cover the code of conduct to be followed by merchant bankers, responsibilities of lead managers, payments of fees and disclosures to SEBI.

Demat issues

SEBI has mandated that all new IPOs compulsorily should be traded in dematerialised form only. Further, the section 68B of the Companies Act, 1956, requires that every listed public company making IPO of any security for Rs. 10 crore or more should issue the same only in dematerialised form. The investors, however, would have the option of either subscribing to securities in physical or dematerialised form.

Private Placement

The private placement involves issue of securities, debt or equity, to selected subscribers, such as banks, FIs, MFs and high net worth individuals. It is arranged through a merchant/ investment banker, who acts as an agent of the issuer and brings together the issuer and the investor(s). Since these securities are allotted to a few sophisticated and experienced investors, the stringent public disclosure regulations and registration requirements are relaxed. The Companies Act, 1956, states that an offer of securities to more than 50 persons is deemed to be public issue.

Market Outcome

Public Issues

The year 2005-06 witnessed an upsurge in the primary market activity of issues both public as well as private of listed companies. This is mainly because of sharp economic recovery, political stability and an buoyant secondary market. The resource mobilization by way of new issues by listed companies leaped to Rs. 164,460 million in 2005-06 from Rs. 158,740 million in 2004-05. As compared with 60 total schemes in 2004-05, there were total of 139 issues in this year (Table 2.2). In case of IPOs though the total schemes have gone up from 23 to 79, there has been a slight drop in the resource mobilization from Rs. 123,820 million in 2004-05 to Rs. 109,360 million in 2005-06. The share of public issues in the total resources mobilized witnessed a slight ascend from 43.38% in 2004-05 to 45.13% in 2005-06. Mobilization of resources through right issues recorded a rise in the year 2005-06. It witnessed a jump from Rs. 36,160 in 2004-05 to Rs. 40,880 in 2005-06. By number, the year witnessed 36 companies using the rights route. This was higher by 38.46% over the previous year that had seen 26 issues. The largest rights issue in the year was from Hindalco Industries Ltd. (Rs. 22,270 million) followed by Nicholas Piramal Ltd. (Rs. 3,330 million)

A downward surge can be seen in the total resource mobilization from the public issues as shown in the Table 2.2. The listed companies mobilised Rs. 164,460 million through 60 issues during 2005-06, while in 2004-05, there were 37 issues by listed companies for Rs. 158,740 million.

Table 2.2: Resource Mobilisation from Public Issues

(Amount in Rs. mn.)

Issue	2004-05		2005-06	
	Number	Amount	Number	Amount
IPOs	23	123,820	79	109,360
Issues by Listed Companies	37	158,740	60	164,460
Public Issues	11	122,580	24	123,580
Rights Issues	26	36,160	36	40,880
Total	**60**	**282,560**	**139**	**273,820**

Source: SEBI Annaul Report 2005-06

During 2005-06, there were 17 mega issues (Rs.3,000 million and above), the largest issue being ICICI Bank Ltd. (Rs. 51,010 million), followed by Hindalco Industries Ltd. (Rs. 22,270 milion). The average size of an issue was Rs. 1,970 million in 2005-06 as against Rs. 4,709 million in 2004-05.

Most of the issues were made by private sector companies. Of the 139 issuers which tapped the market in 2005-06, 131 issues where by private sector issuers. They mobilized around 73.77% of the total resources raised. The public sector companies made 8 issues mobilizing 26.23% to the total resources mobilized (Table 2.3). The joint sector has not been making any issue of capital for the past few years.

Table 2-3: Sector-wise Distribution of Resources Mobilised

(Amount in Rs. mn)

Sector	2004-05		2005-06	
	Number	Amount	Number	Amount
Private	55	171,620	131	201,990
Joint	--	--	--	--
Public	5	110,940	8	71,830
Total	**60**	**282,560**	**139**	**273,820**

Source: SEBI Annaul Report 2005-06

For the past few years, debentures have been pre-dominant in the public issues. However, since 2003-04 there has been a reversal in this trend. The share of debt in resource mobilization through public issues was only 16.1% in 2004-05 (Table 2.4). The year 2005-06 has seen a striking change completely eliminating the share of debt in resource mobilization through public issue. While, the amount raised through equity issues has been the highest ever in the history so far of the Indian capital market accounting for 100%

The Banks and Financial Institutions (FIs) had assumed a dominant role in fund mobilization in the early 2000's. However, the year 2004-05 saw a significant fall to only 40% (Table 2.5). The year 2005-06 witnessed a turnaround in its resource mobilization, with 45.4%. The chemical and the Information Technology (IT) industry contributed approximately 0.47% and 3.29% in the resource mobilization in 2006-06 respectively.

Table 2-4 Resources Mobilised through Debt and Equity

Year	Percentage Share	
	Equity	Debt
1995-96	72.39	27.61
1996-97	55.99	44.01
1997-98	41.17	58.83
1998-99	15.34	84.66
1999-00	58.41	41.59
2000-01	52.79	47.21
2001-02	16.88	83.12
2002-03	18.00	82.00
2003-04	80.47	19.53
2004-05	83.96	16.04
2005-06	100.00	0.00

Source: Prime Annual Report

Table 2-5 Industry-wise Resource Mobilisation

Industry	Percentage Share	
	2004-05	2005-06
Banking/FIs	40.03	45.43
Cement & Construction	0.60	3.73
Chemical	0.45	0.47
Entertainment	0.55	2.59
Finance	0.41	3.01
Information Technology	18.03	3.29
Paper & Pulp	0.21	0.66
Telecom	0.09	0.00
Textile	0.00	2.82
Others	39.63	38
Total	**100.00**	**100.00**

Source: SEBI Annual Report 2005-06

Euro Issues

Indian companies raise resources from international markets through the issue of Foreign Currency Convertible Bonds (FCCBs), GDRs and ADRs. GDRs/ADRs are similar to Indian shares and are traded on overseas stock exchanges. In India, they are reckoned as part of foreign direct investment and hence, need to conform to the existing FDI policy. During 2005-06, there is a significant spurt in the resources mobilised through Euro issues, that increased to Rs. 113,580 million as against Rs. 33,530 million raised during 2004-05 (Table 2.1).

Performance of IPOs

During 2005-06, sixty two (62) IPOs were listed on NSE which belonged to various different sectors. Overall there was an appreciation in the marker price of most of the IPO's. A total of 52 IPO's market price rose substantially on the first day of trading. The price of Shree Renuka Sugars Limited rose by a whooping 431.33% followed by Amar Remedies Limited (238.57%) and Saksoft Limited (223.50%). Around 10 IPOs's showed negative returns on the first day of listing/trading and 13 IPOs' showed negative returns on the day of listing/trading till end March 06. (Table 2.6).

Book Building through On-line IPO System

Book building is basically a process used in IPO for efficient price discovery, wherein during the period when the offer is open, bids are collected from investors at various prices, which are above or equal to the floor price. The offer price is determined after the bid closing date. In its endeavor to continuously improve the Indian securities market, NSE has offered an infrastructure for conducting online IPOs through book building. It helps to discover prices as well as demand for the security to be issued through a process of bidding. The advantages are: a),.the investor parts with money only after the allotment, b) it eliminates refunds except in case of direct applications and c) it reduces the time taken to process the issue. Till March 2006, 120 issuers have used the NSE online IPO system for making IPO issues.

Table 2-6: Performance of IPOs Listed on NSE During Aptil 01, 2005 to March 31, 2006

Sl. No.	Name of Company	Date of Listing	Issue Price (Rs.)	Close Price on first day of Trading (Rs.)	Close Price as at end-March, 2006 (Rs.)	Price Appreciation/ Depreciation on first day of Trading (%)	Price Appreciation/ Depreciation upto end-March 2006 (%)
1	Jaiprakash Hydro-Power Limited	18-Apr-2005	32	31.15	29.45	-2.66	-7.97
2	3i Infotech Limited	22-Apr-2005	100	98.10	182.35	-1.90	82.35
3	Gokaldas Exports Limited	27-Apr-2005	425	629.60	784.15	48.14	84.51
4	Shringar Cinemas Limited	29-Apr-2005	53	44.95	64.60	-15.19	21.89
5	Allsec Technologies Limited	9-May-2005	135	128.15	261.60	-5.07	93.78
6	Saksoft Limited	9-May-2005	30	100.80	97.05	236.00	223.50
7	India Infoline Limited	17-May-2005	76	78.05	177.75	2.70	133.88
8	Mangalam Drugs And Organics Limited	23-May-2005	22	35.70	16.10	62.27	-26.82
9	Shopper's Stop Limited	23-May-2005	238	371.60	547.10	56.13	129.87
10	Cyber Media (India) Limited	10-Jun-2005	60	105.85	88.55	76.42	47.58
11	Provogue (India) Limited	7-Jul-2005	150	247.95	352.25	65.30	134.83
12	Yes Bank Limited	12-Jul-2005	45	60.85	100.55	35.22	123.44
13	MSP Steel & Power Limited	18-Jul-2005	10	15.30	11.85	53.00	18.50
14	Nectar Lifesciences Limited	18-Jul-2005	240	260.10	265.45	8.38	10.60
15	SPL Industries Limited	26-Jul-2005	70	103.35	75.00	47.64	7.14
16	IL&FS Investsmart Limited	27-Jul-2005	125	185.15	213.80	48.12	71.04
17	Shri Ramrupai Balaji Steels Limited	2-Aug-2005	22	23.65	16.05	7.50	-27.05
18	Infrastructure Development Finance Company Limited	12-Aug-2005	34	69.50	66.60	104.41	95.88
19	Vivimed Labs Limited	17-Aug-2005	70	218.65	219.75	212.36	213.93
20	HT Media Limited	1-Sep-2005	530	556.80	466.15	5.06	-12.05
21	Sasken Communication Technologies Limited	9-Sep-2005	260	464.60	342.75	78.69	31.83
22	Amar Remedies Limited	16-Sep-2005	28	56.20	94.80	100.71	238.57
23	FCS Software Solutions Limited	21-Sep-2005	50	178.50	85.50	257.00	71.00
24	Suzlon Energy Limited	19-Oct-2005	510	692.85	1302.20	35.85	155.33
25	Aurionpro Solutions Limited	25-Oct-2005	90	106.55	91.80	18.39	2.00
26	Shree Renuka Sugars Limited	31-Oct-2005	285	260.30	1514.30	-8.67	431.33
27	Paradyne Infotech Limited	10-Nov-2005	42	76.10	69.45	81.19	65.36
28	Bannari Amman Spinning Mills Limited	14-Nov-2005	135	133.05	101.60	-1.44	-24.74
29	Prithvi Information Solutions Limited	16-Nov-2005	270	282.60	371.35	4.67	37.54

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Table 2-6: Performance of IPOs Listed on NSE During Aptil 01, 2005 to March 31, 2006

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30	PBA Infrastructure Limited	24-Nov-2005	60	68.80	163.95	14.67	173.25
31	Vikash Metal & Power Limited	28-Nov-2005	20	20.05	11.90	0.25	-40.50
32	Bombay Rayon Fashions Limited	5-Dec-2005	70	83.50	132.15	19.29	88.79
33	Piramyd Retail Limited	6-Dec-2005	120	131.75	213.70	9.79	78.08
34	AIA Engineering Limited	14-Dec-2005	315	491.50	615.55	56.03	95.41
35	Everest Kanto Cylinder Limited	15-Dec-2005	160	201.95	416.05	26.22	160.03
36	Kernex Microsystems (India) Limited	20-Dec-2005	250	344.85	270.30	37.94	8.12
37	Repro India Limited	22-Dec-2005	165	235.45	221.80	42.70	34.42
38	Compulink Systems Limited	28-Dec-2005	60	73.80	34.50	23.00	-42.50
39	PVR Limited	4-Jan-2006	225	294.95	308.10	31.09	36.93
40	Tulip IT Services Limited	5-Jan-2006	120	183.80	309.85	53.17	158.21
41	Punj Lloyd Limited	6-Jan-2006	700	1058.15	1084.75	51.16	54.96
42	Bartronics India Limited	12-Jan-2006	75	110.75	91.25	47.67	21.67
43	Celebrity Fashions Limited	12-Jan-2006	180	228.90	200.05	27.17	11.14
44	Educomp Solutions Limited	13-Jan-2006	125	284.05	383.65	127.24	206.92
45	Nitin Spinners Limited	2-Feb-2006	21	26.00	16.95	23.81	-19.29
46	Royal Orchid Hotels Limited	6-Feb-2006	165	231.40	205.55	40.24	24.58
47	Entertainment Network (India) Limited	15-Feb-2006	162	264.70	219.50	63.40	35.49
48	Gujarat State Petronet Limited	16-Feb-2006	27	40.45	36.75	49.81	36.11
49	Jagran Prakashan Limited	22-Feb-2006	320	270.90	294.45	-15.34	-7.98
50	INOX Leisure Limited	23-Feb-2006	120	175.25	211.80	46.04	76.50
51	GVK Power & Infrastructure Limited	27-Feb-2006	310	315.85	250.50	1.89	-19.19
52	Sadbhav Engineering Limited	1-Mar-2006	185	320.65	391.60	73.32	111.68
53	Sunil Hitech Engr. Ltd	2-Mar-2006	100	157.20	130.75	57.20	30.75
54	Sakuma Exports Limited	8-Mar-2006	50	47.10	36.10	-5.80	-27.80
55	Gitanjali Gems Limited	10-Mar-2006	195	167.60	171.45	-14.05	-12.08
56	JK Cement Limited	14-Mar-2006	148	155.50	175.30	5.07	18.45
57	Indo Tech Transformers Limited	16-Mar-2006	130	239.10	215.85	83.92	66.04

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Table 2-6: Performance of IPOs Listed on NSE During Aptil 01, 2005 to March 31, 2006

Sl. No.	Name of Company	Date of Listing	Issue Price (Rs.)	Close Price on first day of Trading (Rs.)	Close Price as at end-March, 2006 (Rs.)	Price Appreciation/ Depreciation on first day of Trading (%)	Price Appreciation/ Depreciation upto end-March 2006 (%)
58	Pratibha Industries Limited	16-Mar-2006	120	181.30	264.05	51.08	120.04
59	B. L. Kashyap and Sons Limited	17-Mar-2006	685	973.30	1165.10	42.09	70.09
60	Mahindra & Mahindra Financial Services Limited	17-Mar-2006	200	232.55	242.15	16.28	21.08
61	Visa Steel Limited	17-Mar-2006	57	56.80	53.00	-0.35	-7.02
62	Nitco Tiles Limited	21-Mar-2006	168	183.25	201.35	9.08	19.85

Source: NSE

Debt Issues

Government and corporate sector collectively raised a total of Rs. 2,611,928 million from primary market during 2005-06. About 69.58% has been raised by the Government, while the balance by the corporate sector through public issues and private placement (Table 2.7).

Table 2-7: Resources Raised from Debt Markets

(Rs. mn.)

Issuer	2004-05	2005-06
Corporate	592,788	794,458
Public Issues	40,950	0
Private Placement*	551,838	794,458
Government	1,456,020	1,817,470
Total	**2,048,808**	**2,611,928**

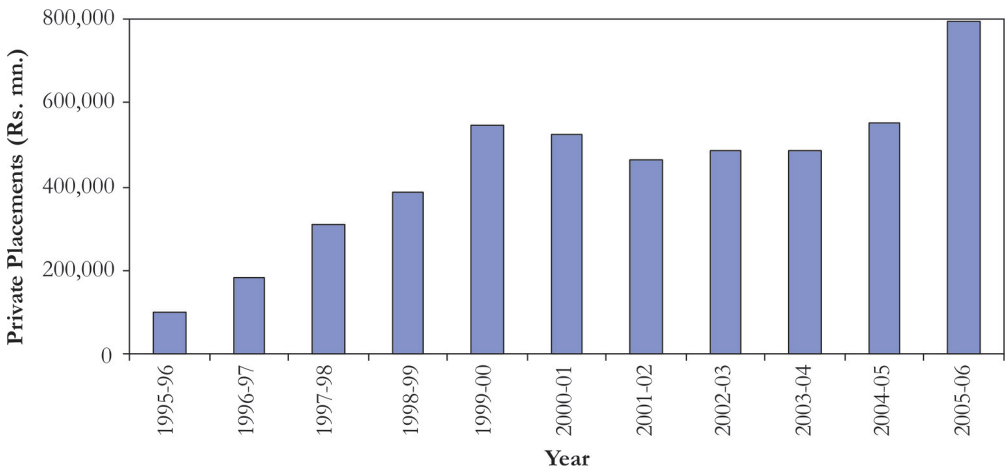
* Only debt placements with a tenor and put / call option of 1 year or more.
Source: Prime Database (for corporate debt) & RBI (for Government debt).

Private Placement of Debt

According to Prime Database estimates, a total of 99 issuers (institutional and corporates) raised Rs. 794,458 million through 362 privately placed issues in 2005-06. 215 issues out of 362 were made by the government sector units, which together mobilized 59% of the total. The amount raised through the private placement of debt issues have been on an increasing trend over the past few years (Chart 2.1).

Mostly, debt securities were privately placed. Though, there were some instances of private placements of equity shares, there is no comprehensive data coverage of this. The two sources of information regarding private placement market in India are Prime Database and RBI. The former data set, however, pertains exclusively to debt issues. RBI data, which is complied from information gathered from arrangers, covers equity private placements also. RBI estimates the share of equity in total private placements as rather insignificant. Some

Chart 2.1: Growth of Private Placement of Debt



idea, however, can be derived from the equity shares issued by NSE-listed companies on private placement basis.

Of the 362 debt private placements, 215 (59%) were from the government/banking sector that together mobilized 90% of the total amount mobilized. The All India Financial Institutions (AIFIs) & Banks continued to top the list with 75% (Rs. 592,896 million), followed by the Public Sector Undertakings with 13% share (Rs. 78,294 million) (Table 2.8 and Chart 2.2). By number of issues, the all India financial institutions dominated with 174 placements.

Sectoral distribution shows that the banking and financial services continued to dominate the private placement market, raising 68% in 2005-06 followed by power sector, which accounted for 10% during the year (Table 2.9).

Table 2-8: Issuer-wise Distribution of Private Placement of Debt

Issuer	Issue Amount (Rs. mn.)		% of Issue Amount	
	2004-05	2005-06	2004-05	2005-06
All India Financial Institutions/Banks	326,522	592,896	59.17	74.63
State Financial Institutions	23,808	7,185	4.31	0.90
Public Sector Undertakings	64,412	107,194	11.67	13.49
State Level Undertakings	35,186	8,889	6.38	1.12
Private Sector	101,910	78,294	18.47	9.86
Total	**551,838**	**794,458**	**100.00**	**100.00**

Source: Prime Annual Report

Chart 2.2: Issuer-wise Distribution of Private Placement of Debt, 2005-06

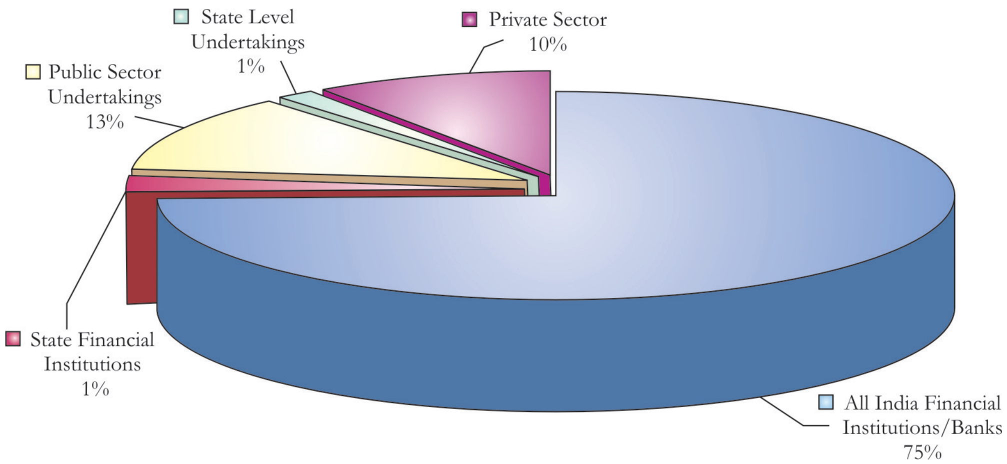


Table 2-9: Sectoral Distribution of Resources Mobilised by Private Placement

(In per cent)

Sector	2004-05	2005-06
Financial & Banking	64	68.12
Power	16	9.64
Water Resources	2	0.13
Telecommunications	2	0.57
Others	16	21.54
Total	**100**	**100.00**

Source: Prime Annual Report

The maturity profile of issues in the private placement market ranged between 12 months to 240 months during 2005-06. The largest number of placements was for 120 months (77 placements) and 36 months (58 placements). A total of 57 offers had a put option, while 62 offers had a call option.

Unlike public issues of bonds, it is not mandatory for corporates issuing bonds in the private placement market to obtain and disclose credit raring from an approved credit rating agency rating is however, required for listing.of the 362 debt private placements deals during 2005-06, 335 issues (93%) went for credit rating and 27 did not rated.

Private placement accounted for 77% of total resources mobilized by the corporate sector from the primary market (Table 2.10). For the year 2005-06 the share of public issues was nil.

Corporate Debt

During 2005-06, the corporates raised a total of Rs. 794,458 million through debt issues, solely arising from private placement since the share of public issues was nil. This year the privately placed debt issues reached the maximum limit of 100%. The share of debt in total collection had been increasing consistently till 2002-03 and from than it witnessed a reversal in the trend and stood at 77% in 2005-06 (Table 2.10).

Table 2-10: Resources Raised by Corporate Sector

(Amount in Rs. mn.)

Year	Public Equity Issues	Debt Issues			Total Resource Mobilisation (2+5)	Share (%) of Private placement in		Share (%) of Debt in Total Resource Mobilisation (5/6*100)
		Public Issues	Private Place-ments*	Total (3+4)		Total Debt (4/5*100)	Total Resource Mobilisation (4/6*100)	
1	2	3	4	5	6	7	8	9
1995-96	88,820	29,400	100,350	129,750	218,570	77.34	45.91	59.36
1996-97	46,710	69,770	183,910	253,680	300,390	72.50	61.22	84.45
1997-98	11,320	19,290	309,830	329,120	340,450	94.14	91.01	96.67
1998-99	5,040	74,070	387,480	461,550	466,580	83.95	83.05	98.92
1999-00	29,750	46,980	547,010	593,990	623,740	92.09	87.70	95.23
2000-01	24,790	41,390	524,335	565,725	590,520	92.68	88.79	95.80
2001-02	10,820	53,410	462,200	515,610	526,430	89.64	87.80	97.94
2002-03	10,390	46,930	484,236	531,166	541,556	91.16	89.42	98.08
2003-04	178,210	43,240	484,279	527,519	705,729	91.80	68.62	74.75
2004-05	214,320	40,950	551,838	592,788	807,108	93.09	68.37	73.45
2005-06	236,760	0.00	794,458	794,458	1,031,218	100.00	77.04	77.04

*Data from 2000-01 onwards include only issues with a tenor and put/call option of 1year or more, while data for earlier years include all privately placed debt issues irrespective of tenor.
Source: Prime Database.

Collective Investment Vehicles

The International Organization of Securities Commission (IOSCO) has, in its Report on Investment Management of the Technical Committee, defined the Collective Investment Schemes, as "an open ended collective investment scheme that issues redeemable units and invests primarily in transferable securities or money market instruments". There are three distinct categories of CIVs, namely, Mutual Funds (MFs), Collective Investment Schemes (CIS) and Venture Capital Funds (VCFs). The developments in the year 2005-06 with respect to the above three different CIVs are discussed in this chapter.

Mutual Funds

Mutual Funds (MFs) are undoubtedly an important product innovation in the financial field, as an instrument of raising capital from the wider public for corporate enterprise growth. Historically, MFs, originally called unit trusts in the United Kingdom, were invented for the mass of relatively small investors. Investors are issued 'units', thus, for an investor, investments in MF imply buying shares (or portions) of the MF and becoming the shareholders of the fund.

In India, the Unit Trust of India (UTI), created in 1964 was the first MF. It enjoyed complete monopoly of MF business up to 1988. The MF business was progressively opened to competition post 1988. This move gathered momentum after the adoption of economic liberalization in 1991 and the creation of SEBI in 1992. As of end March 2006, 38 MFs are registered with SEBI with an asset base of Rs. 2,318,620 million

In recent years, the MF schemes have diversified considerably thus expanding the basket of investment opportunities to suit the different needs of the investors. There are schemes that invest only in equities, in debt instruments or in both, in real estates, gold units etc. The objectives of the MFs have also widened, with the MFs investing in growth stocks, in stocks of a particular sector, the MFs are managed aggressively as well as passively. Thus investors have a variety of options such as income funds, balanced funds, liquid funds, gilt funds, index funds, exchange traded funds , sectoral funds to deploy their savings.

Policy Developments

The policy and regulatory initiatives taken during the period April 2005-June 2006 are as discussed hereunder:

Introduction of Gold Exchange Traded Funds in India.

As per the gazette notification no. S.O. 38(E) dated January 12, 2006 and SEBI circular dated January 24, 2006 Gold Exchange Traded Fund schemes by Mutual Fund were permitted for the first time in India. Gold Exchange Traded Fund schemes are permitted to invest primarily in

a) Gold

b) Gold related instruments - Regulation 2(mc) stipulates that gold related instruments are such instruments having gold as underlying, as are specified by SEBI from time to time.

Gold exchange traded fund scheme' shall mean a mutual fund scheme that invests primarily in gold or gold related instruments;

Gold related instrument' shall mean such instrument having gold as underlying, as may be specified by the Board from time to time.

With effect to this addition, Mutual funds may invest moneys collected under any of its schemes only in -

a) Securities;

b) Money market instruments;

c) Privately placed debentures;

d) Securitised debt instruments, which are either asset backed or mortgage backed securities; or

e) Gold or gold related instruments.

A gold exchange traded fund scheme shall be subject to the following investment restrictions:

a) The initial issue expenses in respect of any such scheme shall not exceed six percent of the funds raised under that scheme;

b) The funds of any such scheme shall be invested only in gold or gold related instruments in accordance with its investment objective, except to the extent necessary to meet the liquidity requirements for honouring repurchases or redemptions, as disclosed in the offer document; and

c) Pending deployment of funds in accordance with clause (b), the mutual fund may invest such funds in short term deposits of scheduled commercial banks."

Guidelines for MFs

SEBI issued the following guidelines in accordance with the provisions of Regulation 77 of the SEBI (Mutual Funds) Regulations, 1996:

Minimum Number of Investors in Schemes/Plans of MFs

In consultation with Association of Mutual Funds in India (AMFI), SEBI issued guidelines stipulating the minimum number of investors in each MF schemes. Each scheme/individual plan(s) is required to have a minimum of 20 investors and no single investor should account for more than 25% of the corpus of such scheme/plan(s). This disclosure has to be made in the offer document to be filed with SEBI. In case of non-fulfillment of the aforementioned guidelines for open ended schemes, a grace period of 3 month or the end of the quarter whichever is earlier, from the close of IPO is given to balance and to ensure compliance. If the MF fails to comply, then the scheme is to be wound off. For Fixed Maturity Plans (FMPs) and Close Ended Schemes no such grace period is given. These guidelines, however, are not applicable to Exchange Traded Funds (ETFs). In case of existing open ended schemes/plans, the same conditions are required to be complied with as soon as possible and not later than December 31, 2004. However, for close ended schemes, FMPs and ETFs already in existence, the guidelines are not applicable considering the nature of the schemes/plans and in the interest of the investors.

Market Design

The MF industry is governed by SEBI (MF) Regulations, 1996, which lays the norms for the MF and its AMC. All MFs in India are constituted as trusts and are allowed to issue open-ended and close-ended schemes under a common legal structure. This section throws light on the market design of the MFs in India.

Structure of MFs

A typical MF in India has the following constituents:

Fund Sponsor: A 'sponsor' is a person who, acting alone or in combination with another corporate body, establishes a MF. In order to register with Sebi as a MF, the sponsor should have a sound financial track record of over five years and general reputation of fairness and integrity in all his business transaction. Following its registration, in accordance with SEBI Regulations, the sponsor forms a trust, appoints a Board of Trustees and an AMC as a fund manager. Further, a custodian is appointed to carry out the custodial services for the schemes of the fund. The sponsor should contribute at least 40% of the net worth of the AMC.

Trustees: The MF can either be managed by the Board of Trustees, which is a body of individuals, or by a Trust Company, which is a corporate body. Most of the funds in India are managed by a Board of Trustees. The trustees are appointed with the approval of SEBI. Two thirds of trustees are independent persons and are not associated with sponsors. The trustees, being the primary guardians of the unit holders' funds and assets, have to be persons of high repute and integrity. The Trustees, however, do not directly manage the portfolio of MF. It is managed by the AMC as per the defined objectives, in accordance with trust deed and SEBI (MF) Regulations.

Asset Management Company: The AMC, appointed by the sponsor or the Trustees and approved by SEBI, acts like the investment manager of the Trust. The AMC should have at least a net worth of Rs. 10 crore. It functions under the supervision of its Board of

Directors, Trustees and the SEBI. In the name of the Trust, AMC floats and manages different investment 'schemes' as per the SEBI Regulations and the Investment Management agreement signed with the Trustees. The regulations require non-interfering relationship between the fund sponsors, trustees, custodians and AMC.

Apart from these, the MF has some other constituents, such as, custodians and depositories, banks, transfer agents and distributors. A custodian is appointed for safe keeping the securities and participating in the clearing system through approved depository.

Types of MFs/Schemes

A wide variety of MFs/Schemes cater to different preferences of the investors based on their financial position, risk tolerance and return expectations. The MF Schemes can be broadly categorized under three headings, viz., Funds by structure e.g. open ended and close ended schemes; Funds by investment objective e.g. growth schemes, income schemes, balanced schemes, money market schemes and lastly other schemes e.g. tax saving schemes, index schemes and sector specific schemes.

An open-ended fund provides the investors with an easy entry and exit option at NAV, which is declared on a daily basis. While, in close-ended funds, the investors have to wait till maturity to redeem their units, however, an entry and exit is provided through mandatory listing of units on a stock exchange. The listing is to be done within six months of the close of the subscription. Assured return schemes, is a scheme that assures a specific return to the unit holders irrespective of performance of the scheme, which are fully guaranteed either by the sponsor or AMC.

Growth/Equity Oriented Schemes provide capital appreciation over medium to long-term by investing a major part of their corpus in equities. Income/Debt Oriented Schemes provide regular and steady income to investors by investing in fixed income securities such as bonds, corporate debentures, government securities and money market instruments. Hence, they are less risky compared to equity schemes. Balanced Funds provide both growth and regular income as they invest both in equities and fixed income securities in the specified proportion as indicated in their offer documents. Money Market or Liquid Funds provide easy liquidity and preserves capital, but generates moderate income. As they invest exclusively in safer short-term instruments such as, treasury bills, certificates of deposit, commercial paper, inter-bank call money, and government securities. Index Funds replicate the portfolio of any particular index such as the Nifty by investing in the same securities with the same weightage as in the index. The exchange traded index funds, as the name suggests, are traded on the stock exchanges. Then, there are funds/schemes that invest in shares of specific sectors or industries such as Pharmaceuticals, Software and Banking.

Regulation of Funds

The MFs are regulated under the SEBI (MF) Regulations, 1996. All the MFs have to be registered with SEBI. The regulations have laid down a detailed procedure for launching of schemes, disclosures in the offer document, advertisements, listing and repurchase of close-ended schemes, offer period, transfer of units, investments, among others.

In addition, RBI also supervises the operations of bank-owned MFs. While SEBI regulates all market related and investor related activities of the bank/FI-owned funds, any issues concerning the ownership of the AMCs by banks falls under the regulatory ambit of the RBI.

Further, as the MFs, AMCs and corporate trustees are registered as companies under the Companies Act 1956, they have to comply with the provisions of the Companies Act. Many close-ended schemes of the MFs are listed on one or more stock exchanges. Such schemes are, therefore, subject to the regulations of the concerned stock exchange(s) through the listing agreement between the fund and the stock exchange.

MFs, being Public Trusts are governed by the Indian Trust Act, 1882, are accountable to the office of the Public Trustee, which in turn reports to the Charity Commissioner, that enforces provisions of the Indian Trusts Act.

Investment Restrictions

Investment policies of each scheme are dictated by the investment objective stated in the offer document and by the restrictions imposed by SEBI. In case of investments in money market instruments, they have to be in accordance with RBI directives. Hence, the MFs can invest only in transferable securities in the money or the capital market or in privately placed debentures or securitized debts. Investment by a MF is subject to following restrictions:

a) A MF is not permitted to invest more than 15% of its NAV in debt instruments issued by a single issuer, which are rated not below investment grade by an authorized credit rating agency. However, the limit may be extended to 20% of the NAV of the scheme with the prior approval of the Board of Trustees and the Board of the AMC. This limit is not applicable for investments in government securities and money market instruments. Within the given limit, investments in at least investment grade mortgaged backed securitized debt can be made.

b) No MF under all its schemes should own more than 10% of any company's paid up capital.

c) A scheme may invest in any other scheme under the same AMC or any other MF without charging any fees. However the aggregate inter scheme investment made by all schemes under the same AMC or in schemes under the management of any other AMC should not exceed 5% of the NAV of the MF. However, this is not applicable for any fund of funds scheme.

d) The initial issue expenses in any scheme should not exceed six per cent of the funds raised under that scheme.

e) No MF is to make any investments in any unlisted or listed securities of an associate or group company of the sponsor in excess of 25% of the net assets or any security issued by way of private placement.

f) MFs should not invest more than 10% of their NAV in the equity shares or equity related instruments of any company. This limit, however, is not applicable for investments in case of index funds or sector or industry specific schemes.

g) Investments in the unlisted equity shares or equity related instruments are capped at not more than 5% of its NAV in case of open ended scheme and 10% in case of close ended scheme.

h) Each buy and sell transactions carried out by MFs should necessarily be delivery based. It should not in any case short sell the securities or carry forward transactions or engage in badla finance. Nevertheless, MFs are permitted to enter into derivatives transactions on a recognized stock exchange for the purpose of hedging and portfolio balancing.

Disclosure of Performance

A MF has to compute net asset value (NAV) for each scheme by dividing the net assets of the scheme by the number of outstanding units as on the valuation date, which reflects the performance of a scheme. The NAV is to be disseminated on daily basis in case of open ended schemes and on weekly basis in case of close ended schemes. Apart from publishing NAVs in newspapers and the web sites of respective MFs, all MFs are required to put their daily NAVs on the web site of AMFI, so that the investors can access NAVs of all the MFs at one place.

The MFs are required to publish their performance in the form of half-yearly results, which should include their returns/yields over a period of time i.e. last six months, 1 year, 3 years, 5 years and at the inception of the schemes. The MFs are required to send annual report or abridged annual report to all the unit holders at the end of the year but not later than six months from the date of closure of the relevant accounts year.

Code of Conduct

The MF regulations include codes of conduct for the MFs and AMCs, their employees and intermediaries. They are as in the following:

a) Trustees and AMCs must maintain high standards of integrity and fairness in all their dealings and in the conduct of their business. They must keep the interest of all unit holders paramount in all matters.

b) The sponsor of the MF, the trustees or the AMC or any of their employees should not render, directly or indirectly any investment advice about any security in the publicly accessible media, whether on real-time or non real-time basis. However, while rendering such advice, a disclosure of his interest including long or short position in the said security should be made.

c) Excessive concentration of business with few broking firms, affiliates and also excessive holding of units in a scheme among a few investors should be avoided by the Trustees and AMCs.

d) Trustees and AMCs should also avoid conflicts of interest in managing the affairs of the schemes and the interest of all the unit holders should govern all their activities. The investments should be made in accordance with the objectives stated in the offer documents. They should not indulge in any unethical means to sell securities or induce any investor to buy their schemes.

e) It is expected that the Trustees and AMCs should render at all times high standards of services, exercise due diligence, ensure proper care and exercise independent professional judgment.

f) The AMC should not make any exaggerated statement, whether oral or written, either about their qualifications or capability to render investment management services or their achievements.

Advertisements Code by MFs

As per the MF regulations, advertisements should be truthful, fair and clear, and not contain any statement/promise/forecast, which is untrue or misleading. The sales literature should also contain information, which is included in the current advertisement. Assuming that the investors are not trained in legal or financial matters, it should be ensured that the advertisement is set forth in a clear, concise and understandable manner. Excessive use of technical/legal jargons or complex language, inclusion or exclusion of excessive details, which is likely to detract the investors, should be avoided. Also, standardized computations such as annual dividend on face value, annual yield on the purchase price and annual compounded rate of return should be used.

Market Outcome

Resource Mobilisation

The MF vehicle is quite popular with investors who are wary of directly investing in the securities market. The popularity of the MFs as an investment avenue is clearly visible from the data presented in Table 3.1. In India, investment in MFs is considered to be as safe as bank deposits. This is due to the fact that the MFs in India have primarily been sponsored by government, banks and FIs. Thus, the schemes of MFs of the commercial banks and the insurance companies, which entered the market in 1987, were well received. The boom continued into the nineties with liberalisation evoking positive response from the investors. The resource mobilisations by MFs remained steady during the period 1992-95 with annual gross mobilisation averaging Rs. 110,000 million per annum during the period. The MFs were, however, hit severely by the bearish sentiments in the secondary market since October 1994. The years 1995-96 and 1996-97 witnessed net outflows of funds from MFs. The MF industry managed to mobilise modest sums during the next two financial years. It was in late 90's and first few years of 2000's that the MF industry witnessed a sharp turnaround with record resource mobilisation amounting to Rs. 199,530 million. Tax sops announced in the Union Budget 1999-00 and emergence of bullish trends in the secondary market fuelled the recovery. The year 2000-01 witnessed a slowdown once again with net resource mobilisation by all MFs taken together aggregating Rs. 71,370 million, which could be attributed to a slump in secondary market and increase in tax on income distributed by debt-oriented MFs. In 2002-03, the resource mobilization by all MFs together aggregated to a further low of Rs. 45,800 million with UTI having a net outflow of Rs. 94,340 million. The fiscal years 2003-04 and 2004-05 witnessed a sharp rise in the net resources mobilized compared to its previous year aggregating Rs. 476,840 million and 468,090 million respectively. The same trend was continued in the fiscal 2005-06 wherein the net resources mobilized were Rs. 527,800 million. The performance of the private sector MFs was also consistent as compared to previous year; it mobilized Rs. 429,770 million.

During 2005-06, the number of registered MF with the SEBI stood at 38. As against 97 schemes in the year 2004-05, 190 new schemes were launched in 2005-06, of which 67

Table 3-1: Resource Mobilisation by Mutual Funds

(Rs. mn.)

Year	Public Sector MFs			Private	Grand Total
	Bank sponsored	FI sponsored	UTI	Sector MFs	
1990-91	23,520	6,040	45,530	-	75,090
1991-92	21,400	4,270	86,850	-	112,520
1992-93	12,040	7,600	110,570	-	130,210
1993-94	1,480	2,390	92,970	15,600	112,440
1994-95	7,650	5,760	86,110	13,220	112,740
1995-96	1,130	2,350	-63,140	1,330	-58,330
1996-97	60	1,370	-30,430	8,640	-20,360
1997-98	2,370	2,030	28,750	7,490	40,640
1998-99	2,310	6,910	1700	25,190	36,110
1999-00	1,560	3,570	45,480	148,920	199,530
2000-01	--------------- 15,200----------		3,220	92,920	111,350
2001-02	--------------- 14,740----------		-72,840	129,470	71,370
2002-03	---------------18,950----------		-94,340	121,220	45,830
2003-04	---------------37,610----------		10,500*	428,730	476,840
2004-05	---------------16,670-----------		25,970	425,450	468,090
2005-06	---------------63,790-----------		34,240	429,770	527,800

* Data for 2003-04 relate to UTI Mutual Fund for the period February 01, 2003 to March 31, 2004.
Source: RBI.

were open-ended and 123 close-ended schemes. This took the total number of schemes as at end-March 2006 to 592 against 451 as at end March 2005. Aggregate sales of all the 451 schemes amounted to Rs. 10,981,580 million. The redemptions during the year were at Rs. 10,453,820 (Table 3.2).

The bank sponsored MFs made gross mobilization of Rs. 1,372,260 million accounting for 12.50%of the total resource mobilization during 2005-06. In net terms, the bank sponsored MFs witnessed an out flow of Rs. 76,910 million. The private sector MFs accounted for the bulk of mobilization by raising almost 83.30% of gross resources mobilized by MF industry during 2005-06. These private sector MFs witnessed a net inflow of Rs. 429,730 million in the same period as compared to Rs. 75,510 million in the previous year (2004-05).

The share of open-ended schemes in total funds raised by MFs registered a marginal rise to 96.26% in 2005-06 as compared to 97.89% in 2004-05. No new assured return schemes were launched in 2005-06. The share of close ended schemes, on the other hand, had an increase from 2.11% during 2004-05 to 3.74% during 2005-06. The open ended and close ended schemes together registered a net inflow of Rs. 21,540 million and Rs. 527,760 million in 2004-05 and 2005-06 respectively (Table 3.3A).

With the decline in interest rates during past few years, the liquid/money market schemes have become very popular among investors due to the attractive returns delivered by them. They have accounted for almost three-fourths of the total resources mobilized. The sale as well as repurchase has been very high in case of these schemes, resulting in a net inflow of Rs. 42,050 million during the year. However, the Income schemes, Gilt schemes and the ELSS schemes have witnessed outflows to the extent of Rs. 139,760 million, Rs. -15,600 million and Rs. 35,920 million, respectively during 2005-06. The income schemes raised about 15.37% of resources mobilising Rs. 1,687,920 million during 2005-06 (Table 3.3 B).

Table 3.2: Accretion of Funds with Mutual Funds

(Rs. mn.)

	Category	2004-05			2005-06			Assets under Management at the end	
		Sale	Purchase	Net	Sale	Purchase	Net	March-05	March-06
A	**Bank Sponsored**	**904,460**	**924,600**	**-20,140**	**1,372,260**	**1,295,350**	**76,910**	**291,030**	**451,190**
	i. Joint Ventures - Predominantly Indian	309,950	299,700	10,250	481,670	439,730	41,940	65,950	131,860
	ii. Others	594,510	624,900	-30,390	890,590	855,620	34,970	225,080	319,330
B	**Institutions**	**128,000**	**161,830**	**-33,830**	**462,200**	**441,080**	**21,120**	**30,100**	**52,290**
C	**Private Sector (i+ii+iii+iv)**	**7,364,160**	**7,288,650**	**75,510**	**9,147,120**	**8,717,390**	**429,730**	**1,174,410**	**1,815,140**
	i. Indian	2,424,280	2,370,600	53,680	2,567,610	2,380,650	186,960	307,500	506,020
	ii. Joint Ventures - Predominately Indian	1,568,790	1,561,980	6,810	3,465,180	3,294,290	170,890	308,390	741,440
	iii. Joint Ventures - Predominately Foreign	3,371,090	3,356,070	15,020	3,114,330	3,042,450	71,880	558,520	567,680
	iv Foreign	--	--	--	--	--	--	--	--
Grand Total (A+B+C)		**8,396,620**	**8,375,080**	**21,540**	**10,981,580**	**10,453,820**	**527,760**	**1,495,540**	**2,318,620**

Source: AMFI Updates.

Table 3-3A: Scheme-wise Resource Mobilisation by Mutual Funds

(Rs. mn.)

Scheme	2004-05		2005-06	
	Sale	Purchase	Sale	Purchase
Open-ended	8,219,580	8,259,760	10,571,260	10,313,460
Close-ended	177,040	115,320	410,320	140,360
Assured Return	--	--	--	--
Total	**8,396,620**	**8,375,080**	**10,981,580**	**10,453,820**

Source: AMFI Updates

Table 3-3B: Scheme-wise Resource Mobilisation by Mutual Funds

(Rs. mn.)

Scheme	2004-05		Net Inflow/	2005-06		Net Inflow/
	Sale	Purchase	(Outflow)	Sale	Purchase	(Outflow)
Income	1,557,190	1,699,650	-142,460	1,687,920	1,548,160	139,760
Growth	370,790	298,320	72,470	820,860	504,500	316,360
Balanced	37,550	34,100	3,450	40,060	30,790	9,270
Liquid/ Money Market	6,385,940	6,282,470	103,470	8,368,590	8,326,540	42,050
Gilt	43,610	57,060	-13,450	24,800	40,400	-15,600
ELSS	1,540	3,480	-1,940	39,350	3,430	35,920
Total	**8,396,620**	**8,375,080**	**21,540**	**10,981,580**	**10,453,820**	**527,760**

Source: AMFI Updates

Assets under Management

As on March 31, 2006, the MFs have managed assets of Rs. 2,318,620 million. As shown in Table 3.2, the share of private sector MFs in total assets managed has remained almost the same as of previous year, being 78.5 as at end March 2005 and 78.3 as at end March 2006 (Chart 3.1). During the year the assets under management of the private sector MFs increased by Rs. 640,730 million amounting to an aggregate of Rs. 1,815,140 million.

The open ended schemes and the close ended schemes as at end-March 2006 accounted for 83.55% and 16.45% of total assets under management of MFs, respectively (Table 3.4).

Table 3-4: Assets under Management as at end March, 2006

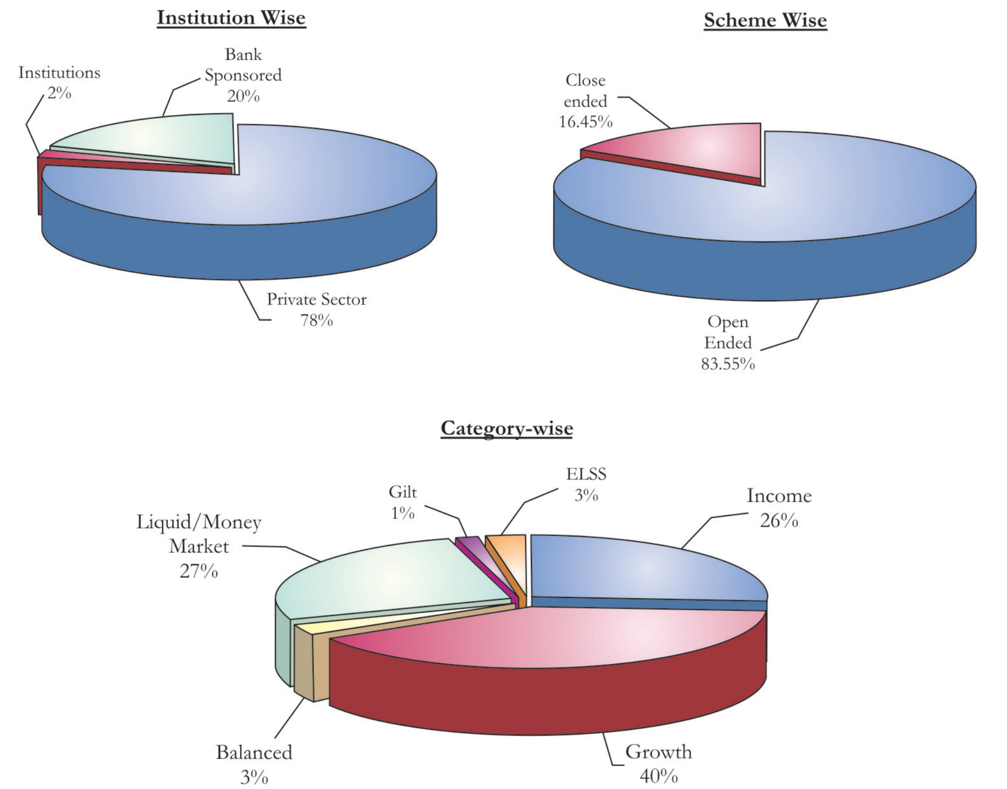
(Rs. mn.)

Scheme	Open Ended	Close Ended	Total	% to total
Income	308,790	293,990	602,780	26.00
Growth	864,070	64,600	928,670	40.05
Balanced	67,010	7,920	74,930	3.23
Liquid/Money Market	615,000	--	615,000	26.52
Gilt	31,350	--	31,350	1.35
ELSS	50,910	14,980	65,890	2.84
Total	**1,937,130**	**381,490**	**2,318,620**	**100.00**

Source: AMFI Updates.

The growth schemes accounted for 40.05% of total assets under management as at end-March 2006, followed by liquid/money market schemes with 26.52%. The income schemes accounted for 26.00%. of assets under management of MFs as at end-March 2006 (Chart 3.1.).

Chart 3-1: Assets under Management at the end of March 2006



Index Funds

Index funds are those funds which track the performance of an index. This is usually carried out by either investing in the shares comprising the index or by buying a sample of shares making up the index or a derivative based on the likely performance of the index. The value of the fund is linked to the chosen index so that if the index raises so will the value of the fund. Conversely, if the index falls so will the value of the fund.

In the Indian context, the index funds attempt to copy the performance of the two main indices in the market viz., S&P CNX Nifty or Sensex. This is done by investing in all the stocks that comprise the index in proportions equal to the weightage given to those stocks in the index. Unlike a typical MF, index funds do not actively trade stocks throughout the year. They may at times hold their stocks for the full year even if there are changes in the composition of index; this reduces transaction costs. Index funds are considered, particularly, appropriate for conservative long term investors looking at moderate risk, moderate return arising out of a well-diversified portfolio. since index funds are passively managed, the bias of the fund managers in stock selection is reduced, yet providing returns at par with the index. As on September 2006 there were 14 Index funds in India

Exchange Traded Funds

An Exchange Traded Fund (ETFs) is a type of Investment Company whose investment objective is to achieve similar returns as in case of a particular market index. An ETF is similar to an index fund, but the ETFs can invest in either all of the securities or a representative sample of securities included in the index. Importantly, the ETFs offer a one-stop exposure to a diversified basket of securities that can be traded in real time like an individual stock. ETFs first came into existence in USA in 1993. Some of the popular ETFs are: SPDRs (Spiders) based on the S&P 500 Index, QQQs (Cubes) based on the Nasdaq-100 Index, iSHARES based on MSCI Indices, TRAHK (Tracks) based on the Hang Seng Index and DIAMONDs based on Dow Jones Industrial Average (DJIA).

Like index funds, ETFs are also passively managed funds wherein subscription/ redemption of units implies exchange with underlying securities. These being exchange traded, units can be bought and sold directly on the exchange, hence, cost of distribution is much lower and the reach is wider. These savings are passed on to the investors in the form of lower costs. The structure of ETFs is such that it protects long-term investors from inflows and outflows of short-term investor. ETFs are highly flexible and can be used as a tool for gaining instant exposure to the equity markets.

The first ETF in India, based on S&P CNX Nifty, was the Nifty Benchmark Exchange Traded Scheme (Nifty BeES). This was launched by Benchmark Mutual Fund in December 2001. It is bought and sold like any other stock on NSE. Over the past three years, few more ETFs have been introduced, they are: Junior Nifty BeES based on CNX Nifty Junior, S&P CNX Nifty UTI Depository Receipts Schemes (SUNDER) based on S&P CNX Nifty, Bank BeES (Banking Index Benchmark Exchange Traded Scheme) tracking the CNX Bank Index. Further the Benchmark Mutual Fund has launched a money market ETF in India which is incidentally the only money market ETF in the world. It is known as the Liquid BeES (Liquid Benchmark Exchange Traded Scheme). Prudential ICICI Mutual Fund also launched an ETF based on the BSE Sensex, SPICE (Sensex Prudential ICICI Exchange Traded Fund), trading for which has started on January 13, 2003. As on September 2006 there are 6 Exchange trade funds in India

A comparative view of ETFs vis-à-vis other funds are presented in the table below:

Parameter	Open-Ended fund	Close-Ended fund	Exchange Traded Fund
Fund Size	Flexible	Fixed	Flexible
NAV	Daily	Daily	Real time
Liquidity provider	Fund itself	Stock Market	Stock Market/Fund itself
Sale Price	At NAV plus load if any	Significant Premium/ Discount to NAV	Very close to actual NAV of scheme
Availability	Fund itself	Through Exchange where listed	Through Exchange where listed/fund itself
Portfolio Disclosures	Monthly	Monthly	Daily/Real time
Uses	Equitising Cash	–	Equitising cash, hedging, Arbitrage
Intra-day trading	Not Possible	Expensive	Possible at low cost

Collective Investment Schemes

A Collective Investment Scheme (CIS) is any scheme or arrangement made or offered by any company, which pools the contributions, or payments made by the investors, and deploy the same. Despite the similarity between the CIS and MF regarding the pooling of savings and issuing of securities, they differ in there investment objective. While MF invests exclusively in securities, CIS confine their investment to plantations and real estate. Any entity proposing to operate as a Collective Investment Management Company (CIMC) has to apply for registration with SEBI.

Guidelines under CIS Regulations

The SEBI (CIS) Regulations specifically state that, without obtaining a certificate of registration from SEBI, no entity can sponsor a CIS. The other regulations are as follows:

i. CIS should be floated as a public company registered under the provisions of the Companies Act, 1956 and the memorandum of association should specify management of CIS as one of its objectives.

ii. The company at the time of registration as CIMC should have a minimum net worth of Rs. 5 crore (provided that at the time of making the application, the applicant should have a minimum net worth of Rs. 3 crore which should be increased to Rs. 5 crore within three years from the date of grant of registration).

iii. The offer document should disclose adequate information to enable investors to take informed decisions. The offer document should also indicate the maximum and minimum amount expected to be raised. No scheme should be kept open for subscription for a period more than 90 days.

iv. Each scheme has to obtain a rating from a recognized credit rating agency and the projects to be undertaken should be appraised by an empanelled appraising committee.

v. CIMC should obtain adequate insurance policy for protection of the scheme's property.

vi. Advertisements for each and every scheme have to conform to the SEBI's advertisement code.

vii. The units of every scheme should be listed immediately after the allotment is over, which is not later than six weeks from the date of closure of the scheme on the stock exchanges.

viii. The CIMC on behalf of the scheme should before the expiry of one month from the close of each quarter publish its unaudited financial results in one daily newspaper having nation wide circulation and in the regional newspaper of the region where the head office of the CIMC is situated.

As on March 31, 2006, there was no CIS entity registered with SEBI. SEBI had information regarding 664 entities; out of which 75 entities wound up their schemes and repaid money to the investors; 19 entities have court cases pending against them; remaining 570 entities, SEBI has taken actions against them for failure to wind up their schemes and make repayments to investors. In addition to this, SEBI has requested the police authorities to file FIR under IPC against 70 CIS entities which had mobilized Rs. 50 million or more under their collective investment schemes and had failed to wind up their schemes to repay investors.

Venture Capital Funds

Venture Capital Fund (VCF) is a fund established in the form of a trust or a company including a body corporate having a dedicated pool of capital, raised in the specified manner and invested in Venture Capital Undertakings (VCUs). VCU is a domestic company whose shares is not listed on a stock exchange and is engaged in a business for providing services, production, or manufacture of article. A company or body corporate to carry on activities as a VCF has to obtain a certificate from SEBI and comply with the regulations prescribed in the SEBI (Venture Capital Regulations) 1996.

Regulations for VCFs

The salient features of the SEBI (Venture Capital Regulations), 1996 are as follows:

i. The minimum investment in a VCF by an investor should not be less than Rs. 0.5 million (5 lakh); the minimum corpus of the fund before it starts activities should be at least Rs. 50 million (5 crore)

ii. A VCF seeking to avail benefit under the relevant provisions of the Income Tax Act will be required to disinvest its holdings within a period of one year from the listing of the VCU.

iii. The VCF is eligible to participate in the IPO through book building route as Qualified Institutional Buyer.

iv. Automatic exemption is granted from open offer requirements in case of transfer of shares from VCFs in Foreign Venture Capital Investors (FVCIs) to promoters of a venture capital undertaking.

Investment Restrictions

i. The VCF have to disclose the investment strategy at the time of application for registration and should not have invested more than 25% corpus of the fund in any one VCU. A VCF, also, cannot invest in associated companies. At least 75% of the investible funds should be invested in unlisted equity shares or equity linked instruments.

ii. Not more than 25% of the investible funds may be invested by way of subscription to IPO of a VCU whose shares are proposed to be listed subject to lock-in period of one year and debt or debt instrument of a VCU in which the VCF has already made an investment by way of equity.

As on March 31, 2006 the total count of VCFs and FVCIs stood at 80 and 39 respectively. All VCFs are now required to provide information pertaining to their venture capital activity for every quarter starting from the quarter ending December 2000.

Secondary Market - Trading*

Introduction

After the securities are issued in the primary market, they are traded in the secondary market by the investors. The stock exchanges along with a host of other intermediaries provide the necessary platform for trading in secondary market and also for clearing and settlement. The securities are traded, cleared and settled within the regulatory framework prescribed by the Exchanges and the SEBI.

With the increased application of information technology, the trading platforms of all the stock exchanges are accessible from anywhere in the country through their trading terminals. The trading platform of NSE is also accessible through the internet. In a geographically widespread country like India, this has significantly expanded the reach of the exchanges to every geographical area of the country.

Policy Developments

Over the last decade the Government and the market regulators have taken several policy measures to improve the operations of the stock exchanges and market intermediaries. The measures are aimed at improving the market infrastructure and up gradation of risk containment, so as to protect the interest of the investors. The policy developments during April 2005 and June 2006 pertaining to trading of securities are enumerated below.

Initiatives from Government

I. Union Budget for 2006-07

The Union Budget for 2006-2007 proposed the following measures that has a bearing on the functioning of the secondary market:

1. limit on FII investment in Government securities to be increased from $ 1.75 billion to $ 2 billion
2. Limit on FII investment in corporate debt from $ 0.5 billion to $ 1.5 billion.
3. Ceiling on aggregate investment by mutual funds in overseas instruments to be raised from $ 1 billion to $ 2 billion with removal of requirement of 10

* This Chapter discusses the trading of equity shares while the trading of debt and derivative instruments is discussed in Chapters 6 and 7 respectively.

4. Per cent reciprocal share holding
5. Limited number of qualified Indian mutual funds to be allowed to invest, cumulatively up to $ 1 billion, in overseas exchange traded funds.
6. An investor protection fund to be setup under the aegis of SEBI
7. RBI's anonymous electronic order matching trading module (NDS-OM) on its Negotiated Dealing System to be extended to qualified mutual funds, provident funds and pension funds.
8. Steps to be taken to create a single, unified exchange-traded market for corporate bonds.

Initiatives from SEBI

I. DIP Guidlines

Provision for specific allocation for MFs within the QIB category: It has been decided to provide 5% of the 50% or 60% of the net offer to public available for allocation to QIBs for MFs. Effectively, out of the portion available for allocation to QIBs, 5% will be available for allocation to MFs. All eligible bids by MFs will be considered for allocation in the aforementioned 5% as well as in the balance available for QIBs. In the event of inadequate response from the MFs, the shares may be made available to QIBs other than MFs.

Proportionate allotment to QIBs: It has been decided to extend the existing provisions of proportionate allotment as applicable for Retail individual investors (RIIs) and Non Institutional Investors (NIIs) to the QIB category. It has also been decided that where BRLMs have reasons not to accept a QIB bid, the same should be done at the time of receipt of the bids and the reasons therefore should be disclosed to the bidders. Necessary disclosures in this regard shall also be made in the offer document.

Margin requirement for QIBs : The DIP guidelines do not mandate any specific margin for any of the categories eligible for applying in public issues, whether RIIs, NIIs or QIBs. However, it has been observed that in practice, in all the book built issues, there has invariably been 100% margin for RIIs and NIIs, but no margin for QIBs. It has now been decided to bring in margin of 10% in QIB category.

II. Investments in ADRs/GDRs/Foreign securities by MFs

Mutual Funds schemes where disclosure pertaining to investment in ADRs/GDRs/foreign securities has not been made in the offer document, in such cases prior to investment in ADRs/GDRs /foreign securities for the first time, the AMC shall ensure that a written communication about the proposed investment is sent to each unitholder and an advertisement is given in one English daily newspaper having nationwide circulation as well as in a newspaper published in the language of the region where the Head Office of the MF is situated. The communication to unitholders shall also disclose the risk factors associated with such investments. However this provision shall not be applicable to existing MF schemes where relevant disclosure regarding investing in ADRs/GDRs/foreign securities has already been made.

III. Rationalization of disclosure requirements for listed companies :

A listed company is required to make disclosures under the continuous disclosure requirements of listing agreement and as such, information pertaining to such a company is already available in public domain. However, presently, all companies, irrespective of whether they are listed or are approaching the markets for the first time with an initial public offering, are required to make the same disclosures in offer documents / prospectuses. In view of this, it has now been decided to rationalize the disclosure requirements for rights issues and public issues by listed companies and to make the benefit of such rationalization available to those listed companies which are regular in filing periodic returns with Stock Exchanges and have a comprehensive investor grievance mechanism in place to redress investor's complaints satisfactorily.

Abridged letter of offer : Presently, in public issues, applicants receive abridged prospectus (and not the entire prospectus) along with the application form. However, in case of rights issues, an issuer company is required to dispatch the letter of offer to all the shareholders, along with the application form. In order to bring uniformity in the practice of making available abridged offer documents, it has now been decided to permit an issuer company making a rights issue to dispatch an abridged letter of offer which shall contain disclosures as required to be given in the case of an abridged prospectus. The issuer company shall provide the detailed letter of offer to any shareholder upon request.

Disclosure of issue price : Presently, a listed company making a rights issue or a public issue is required to disclose the issue price or the price band in the draft offer document filed with SEBI, except in the case of a public issue through the Book Building route. It has now been decided to henceforth allow a listed company to fix and disclose the issue price in case of a rights issue any time prior to fixing of the record date, in consultation with the Designated Stock Exchange and in case of a public issue through fixed price route, at any time prior to filing of the prospectus with the Registrar of Companies (ROC). The prospectus filed with ROC shall have one issue price.

Further issue of shares : Presently, a company is prohibited to make further issue of capital after filing a draft offer document with SEBI till the listing of the shares referred to in the offer document. It has now been decided to permit a company to issue further shares, provided full disclosures in regard to the total capital to be raised from such further issues is given in the draft offer document.

Lock-in Provisions : It is clarified that lock-in period of one year in terms of clause 4.14.1 of SEBI (DIP) Guidelines, 2000 shall be reckoned from the date of allotment of shares issued in a public issue.

IV. The Prevention of Money Laundering Act, 2002 (PMLA).

As per the provisions of the Act, every banking company, financial institution (which includes chit fund company, a co-operative bank, a housing finance institution and a non-banking financial company) and intermediary (which includes a stock-broker, sub-broker, share transfer agent, banker to an issue, trustee to a trust deed, registrar to an issue, merchant banker, underwriter, portfolio manager, investment adviser and any other intermediary associated with securities market and registered under section 12 of the Securities and Exchange Board of India Act, 1992) shall have to maintain a record of all the transactions; the nature and value of which has been prescribed in the Rules notified under the PMLA. Such transactions include :

a) All cash transactions of the value of more than Rs 10 lakhs or its equivalent in foreign currency.

b) All series of cash transactions integrally connected to each other which have been valued below Rs 10 lakhs or its equivalent in foreign currency where such series of transactions take place within one calendar month.

c) All suspicious transactions whether or not made in cash.

Government of India, Ministry of Finance, Department of Revenue has issued notifications dated July 1, 2005 and December 13, 2005 in the Gazette of India, notifying the Rules under the Prevention of Money Laundering Act (PMLA), 2002. In terms of the Rules, the provisions of PMLA, 2002 came into effect form July 1, 2005. Section 12 of the PMLA, 2002 casts certain obligations on the intermediaries in regard to preservation and reporting of certain transactions. Intermediaries are therefore, advised to go through the provisions of PMLA, 2002 and the Rules notified there under and take all steps considered necessary to ensure compliance with the requirements of section 12 of the Act *ibid*.

All intermediaries are advised to ensure that a proper policy framework on anti-money laundering measures is put into place within one month from January 18, 2006. The intermediaries are also advised to designate an officer as 'Principal Officer' and intimate their details to the Financial Intelligence Unit, India on an immediate basis.

Maintenance of records of transactions : All the intermediaries shall put in place a system of maintaining proper record of transactions prescribed under Rule 3, as mentioned below :-

a) All cash transactions of the value of more than rupees ten lakh or its equivalent in foreign currency;

b) All series of cash transactions integrally connected to each other which have been valued below rupees ten lakh or its equivalent in foreign currency where such series of transactions have taken place within a month and the aggregate value of such transactions exceeds rupees ten lakh;

c) All cash transactions where forged or counterfeit currency notes or bank notes have been used as genuine and where any forgery of a valuable security has taken place;

d) All suspicious transactions whether or not made in cash and by way of as mentioned in the Rules.

Information to be maintained : Intermediaries are required to maintain and preserve the following information in respect of transactions referred to in Rule 3:

a) The nature of the transactions;

b) The amount of the transaction and the currency in which it was denominated;

c) The date on which the transaction was conducted; and

d) The parties to the transaction

Maintenance and Preservation of records : Intermediaries should take appropriate steps to evolve an internal mechanism for proper maintenance and preservation of such records and information in a manner that allows easy and quick retrieval of data as and when requested by the competent authorities. Further, the records mentioned in Rule 3 have to be maintained and preserved for a period of ten years from the date of cessation of the transactions between the client and intermediary.

Intermediaries should formulate and implement the client identification program containing the requirements as laid down in Rule 9 and such other additional requirements that it considers appropriate. The records of the identity of clients have to be maintained and preserved for a period of ten years from the date of cessation of the transactions between the client and intermediary.

Reporting to Financial Intelligence Unit-India : In terms of the PMLA rules, intermediaries are required to report information relating to cash and suspicious transactions to the Director, Financial Intelligence Unit-India (FIU-IND) at the following address: Director, FIU-IND, Financial Intelligence Unit-India, 6th Floor, Hotel Samrat, Chanakyapuri, New Delhi-110021.

Intermediaries should carefully go through all the reporting requirements and formats enclosed with this circular. These requirements and formats are divided into two parts- Manual Formats and Electronic Formats. Details of these formats are given in the documents (Cash Transaction Report- version 1.0 and Suspicious Transactions Report version 1.0) which are also enclosed with this circular. These documents contain detailed guidelines on the compilation and manner/procedure of submission of the manual/electronic reports to FIU-IND. The related hardware and technical requirement for preparing reports in manual/electronic format, the related data files and data structures thereof are also detailed in these documents. Intermediaries, which are not in a position to immediately file electronic reports, may file manual reports to FIU-IND as per the formats prescribed. While detailed instructions for filing all types of reports are given in the instructions part of the related formats, intermediaries should adhere to the following:

a) The cash transaction report (CTR) (wherever applicable) for each month should be submitted to FIU-IND by 15th of the succeeding month.

b) The Suspicious Transaction Report (STR) should be submitted within 7 days of arriving at a conclusion that any transaction, whether cash or non-cash, or a series of transactions integrally connected are of suspicious nature. The Principal Officer should record his reasons for treating any transaction or a series of transactions as suspicious. It should be ensured that there is no undue delay in arriving at such a conclusion.

c) The Principal Officer will be responsible for timely submission of CTR and STR to FIU-IND;

d) Utmost confidentiality should be maintained in filing of CTR and STR to FIU-IND. The reports may be transmitted by speed/registered post/fax at the notified address.

Intermediaries should not put any restrictions on operations in the accounts where an STR has been made. Further, it should be ensured that there is no tipping off to the client at any.

Reporting of 'Principal Officer' details to FIU -India : It has been brought to the notice of SEBI by FIU-IND that a large number of entities have not submitted details of their 'Principal Officer' to FIU-IND as required by the SEBI circular no. ISD/CIR/RR/AML/1/06 dated January 18, 2006. All the Intermediaries, which have yet not reported these details to FIU-IND are directed to do so forthwith.

V. Issuing Electronic Contract Notes (ECNs).

Issuing ECNs when specifically consented : The digitally signed ECNs may be sent only to those clients who have opted to receive the contract notes in an electronic form, either in the Member - Client agreement / Tripartite agreement or by a separate letter. The mode of confirmation shall be as per the agreement entered into with the clients.

Where to send ECNs : The usual mode of delivery of ECNs to the clients shall be through e-mail. For this purpose, the client shall provide an appropriate e-mail account to the member which shall be made available at all times for such receipts of ECNs.

Requirement of digital signature : All ECNs sent through the e-mail shall be digitally signed, encrypted, non-tamperable and shall comply with the provisions of the IT Act, 2000. In case the ECN is sent through e-mail as an attachment, the attached file shall also be secured with the digital signature, encrypted and non-tamperable.

Requirements for acknowledgement, proof of delivery, log report etc. : The acknowledgement of the e-mail shall be retained by the member in a soft and non-tamperable form.

Proof of delivery : The proof of delivery i.e., log report generated by the system at the time of sending the contract notes shall be maintained by the member for the specified period under the extant regulations of SEBI/stock exchanges and shall be made available during inspection, audit, etc. The member shall clearly communicate to the client in the agreement executed with the client for this purpose that non-receipt of bounced mail notification by the member shall amount to delivery of the contract note at the e-mail ID of the client.

Log Report for rejected or bounced mails : The log report shall also provide the details of the contract notes that are not delivered to the client/e-mails rejected or bounced back. Also, the member shall take all possible steps (including settings of mail servers, etc) to ensure receipt of notification of bounced mails by the member at all times within the stipulated time period under the extant regulations of SEBI/stock exchanges.

When to issue or send in Physical mode :

Issue in Physical mode : In the case of those clients who do not opt to receive the contract notes in the electronic form, the member shall continue to send contract notes in the physical mode to such clients.

Send in Physical mode : Wherever the ECNs have not been delivered to the client or has been rejected (bouncing of mails) by the e-mail ID of the client, the member shall send a physical contract note to the client within the stipulated time under the extant regulations of SEBI/ stock exchanges and maintain the proof of delivery of such physical contract notes.

General requirements :

ECNs through website : In addition to the e-mail communication of the ECNs in the manner stated above, in order to further strengthen the electronic communication channel, the member shall simultaneously publish the ECN on his designated web-site in a secured way and enable relevant access to the clients.

Access to the website : In order to enable clients to access the ECNs posted in the designated website in a secured way, the member shall allot a unique user name and password for the purpose, with an option to the client to access the same and save the contract note electronically or take a print out of the same.

Preservation/Archive of electronic documents : The member shall retain/archive such electronic documents as per the extant rules/regulations/circulars/guidelines issued by SEBI/Stock Exchanges from time to time.

Financing of Acquisition of Equity in Overseas Companies

The guidelines pertaining to financing of acquisition of equity in overseas companies issued by RBI have been reviewed and RBI has decided to allow banks to extend financial assistance to Indian companies for acquisition of equity in overseas joint ventures/wholly owned subsidiaries or in other overseas companies, new or existing, as strategic investment, in terms of a board approved policy duly incorporated in the loan policy of the bank. Such policy should include overall limit on such financing, terms and conditions of eligibility of borrowers, security, margin etc. While the Board may frame its own guidelines and safeguards for such lending, such acquisition(s) should be beneficial to the company and the country

Market Design*

At the end of March 2006, there were 23 stock exchanges registered with SEBI having a total of 9,335 registered brokers and 23,479 registered sub-broker trading on them (Annexure 4.1).

Stock Exchanges

The stock exchanges need to be recognized under the Securities Contracts (Regulation) Act, 1956. There are 23 recognized stock exchanges in India and most of them now are demutualised and corporatised or in the process of being done so.

NSE since inception has adopted a demutualised structure and its model of demutualization compares well with the international models of demutualised stock exchanges as seen from Table 4.1

Membership

The trading platform of a stock exchange is accessible only to trading members. They play a significant role in the secondary market by bringing together the buyers and sellers. The brokers give buy/sell orders either on their own account or on behalf of clients. As these buy and sell order matches, the trades are executed. The exchange can admit a broker as its member only on the basis of the terms specified in the Securities Contracts (Regulation) Act, 1956, the SEBI Act 1992, the rules, circulars, notifications, guidelines, and the byelaws, rules and regulations of the concerned exchange. No stock broker or sub-broker is allowed to buy, sell or deal in securities, unless he or she holds a certificate of registration from the SEBI.

The stock exchanges, however, are free to stipulate stricter requirements than those stipulated by the SEBI. The minimum standards stipulated by NSE are in excess of those laid

* While an attempt has been made to present market design for the entire Indian securities market, the trading mechanism and such other exchange-specific elements have been explained based on the model adopted by NSE. The market developments have been explained, mostly for the two largest stock exchanges, viz. NSE and BSE. Wherever data permits, an all-India picture has been presented.

Table 4.1: Comparison of the NSE Model and the International Models of Demutualised Stock Exchanges

Comparators	International Model	NSE Model
Legal Structure	Company	Company
For Profit / Not for Profit	For Profit Company	For Profit Company
Ownership Structure	Owned by Shareholders which includes brokers	Owned by Shareholders which are financial institutions which also have broking firms as subsidiaries.
Listing	Several stock exchanges are listed on themselves after Initial Public Offer.	Not a listed company. No Initial Public Offer made.
Ceilings on shareholding	Mostly 5% of voting rights for a single shareholder	No ceiling
Segregation of ownership, trading rights and management	These are segregated. To become a member of the demutualised stock exchange, it is not necessary to own a share in the company. Thus, members may or may not be shareholders and members who own shares may sell off their trading rights and all shareholders are not necessarily members.	These are segregated. The trading rights and ownership are segregated. The broking firms are not shareholders.
Board Structure	The Governing Board comprises of directors who are elected by shareholders. Some of the directors are brokers but majority do not have stock broking background.	The Board comprises of representatives of shareholders, academics, chartered accountants, legal experts etc. Of these, 3 directors are nominated by SEBI and 3 directors are public representatives approved by SEBI.
Fiscal benefits	As mutual entities, stock exchanges enjoyed fiscal benefits prior to demutualisation, but when converted into for profit companies these are taxed.	NSE was set up as a demutualised for profit company and is taxed. So the question of fiscal benefit prior to demutualisation does not arise.
Transfer of assets	Assets were transferred from the mutual entity to the for-profit demutualised company and shares were given to the members in lieu of the ownership in the old entity. There was no cash consideration paid. Since an Initial Public Offer (IPO) was also made in many cases, the valuation of the shares were done by the market and no separate valuation exercise was required as for example in the case of LSE where a bonus issue was made.	The question of transfer of assets did not arise because NSE was set up by the institutions as a demutualised company itself.
Enactment of legislation to give effect to demutualisation	In several countries a separate legislation was necessary as in the case of Australia, Hong Kong, Toronto and Singapore. In several others no legislation was necessary as in the case of UK.	Not applicable as NSE was set up as a demutualised company.

Source: Report of the SEBI Group on Corporatisation and Demutualisation of Stock Exchanges.

down by the SEBI. The NSE admits members based on factors, such as, corporate structure, capital adequacy, track record, education, and experience (Table 4.2). This reflects a conscious decision of NSE to ensure quality broking services.

Table 4.2: Eligibility Criteria for Trading Membership on CM Segment of NSE

(Amount in Rs. lakh)

Particulars	CM and F&O Segment	CM, WDM and F&O Segment
Constitution	Individuals/Firms/Corporates	Corporates
Paid-up capital (in case of corporates)	30	30
Net Worth	100	200
Interest Free Security Deposit (IFSD)	125	275
Collateral Security Deposit (CSD)	25	25
Annual Subscription	1	2
Education	Individual trading member/ two partners/two directors should be graduates. Dealers should also have passed SEBI approved certification test for Derivatives and Capital Market (Basic or Dealers) Module of NCFM.	At least two directors should be graduates. Dealers should also have passed SEBI approved certification test for Derivatives and Capital Market (Basic or Dealers) Module of NCFM.
Experience	----------------------Two year's experience in securities market----------------------	
Track Record	The Applicant/Partners/Directors should not be defaulters on any stock exchange. They must not be debarred by SEBI for being associated with capital market as intermediaries They must be engaged solely in the business of securities and must not be engaged in any fund-based activity.	

Note: Clearing Membership requires higher networth, IFSD and CSD.

The authorities have been encouraging corporatisation of the broking industry. As a result, a number of brokers-proprietor firms and partnership firms have converted themselves into corporates. As at end-March 2006, there were brokers 9,335 (including multiple registrations) registered with SEBI as compared to 9,128 brokers as at end-March 2005. As of end March 2006, 3,961 brokers, accounting for nearly 42.43% of total have become corporate entities. Amongst those registered with NSE around 90.93% of them were corporatised, followed by BSE and OTCEI with 78.69% and 76.46% corporate brokers respectively.

As at end-March 2006, there were 23,479 sub-brokers registered with SEBI, as compared with 13,684 sub-brokers as at end of previous year. During 2005-06, 207 new brokers were registered with SEBI, whereas 347 were membership cases of reconciliation/cancellation/ surrender. NSE and BSE together constituted 93.9% of the total sub-brokers.

Listing of Securities

Listing means formal admission of a security to the trading platform of a stock exchange. Listing of securities on the domestic stock exchanges is governed by the provisions in the Companies Act, 1956, the Securities Contracts (Regulation) Act, 1956 (SC(R)A), the Securities Contracts (Regulation) Rules (SC(R)R), 1957, the circulars/guidelines issued by Central Government and SEBI. In addition, the rules, bye-laws and regulations of the concerned stock exchange and by the listing agreement entered into by the issuer and the stock exchange. Some of the key provisions are enumerated below:

1. The Companies Act, 1956 requires a company intending to issue securities to the public should seek permission from one or more recognised stock exchanges for its listing. If the permission is not granted by all the stock exchanges before the expiry of 10 weeks from the closure of the issue, then the allotment of securities would be void. Also, a company may prefer to appeal against refusal of a stock exchange to list its securities to the Securities Appellate Tribunal (SAT). The prospectus should state the names of the stock exchanges, where the securities are proposed to be listed.
2. The byelaws of the exchanges stipulates norms for the listing of securities. All listed companies are under obligation to comply with the conditions of listing agreement with the stock exchange where their securities are listed. If they fail to comply with them, then they are punishable with a fine up to Rs. 1,000.
3. The SC(R)R prescribe requirements with respect to the listing of securities on a recognised stock exchange and empowers SEBI to waive or relax the strict enforcement of any or all of them.
4. The listing agreement states that the issuer should agree to adhere to the agreement of listing, except for a written permission from the SEBI. As a precondition for the security to remain listed, an issuer should comply with the conditions as may be prescribed by the Exchange. Further, the securities are listed on the Exchange at its discretion, as the Exchange has the right to suspend or remove from the list the said securities at any time and for any reason, which it considers appropriate.
5. A SEBI circular asserts that the basic norms of listing on the stock exchanges should be uniform across the exchanges. However, the stock exchanges can prescribe additional norms over and above the minimum, which should be part of their byelaws. SEBI has been issuing guidelines/circulars prescribing certain norms to be included in the listing agreement and to be complied by the companies. The listing requirements for companies in the CM segment of NSE are presented in Table 4.3.
6. The stock exchanges levy listing fees on the companies, whose securities are listed with them. The listing fee has two components-initial fee and annual fee. While, initial fee is a fixed amount, the annual fee varies depending upon the size of the company. NSE charges Rs.7,500 as initial fees. For companies with a paid-up share and/or debenture capital of less than or equal to Rs. 1 crore annual listing fees is Rs. 4,200. For companies with a paid-up share and/or debenture capital of more than Rs. 50 crore, the annual listing fees is Rs. 70,000 plus Rs. 1,400 for every additional Rs. 5 crore or part thereof.

A number of requirements, under the SC(R)R, the byelaws, the listing agreement have to be continuously complied with by the issuers to ensure continuous listing of its securities. The listing agreement also stipulates the disclosures that have to be made by the companies. In addition, the corporate governance practices enumerated in the agreement have to be followed. The Exchange is required to monitor the compliance with requirements. In case a company fails to comply with the requirements, then trading of its security would be suspended for a specified period, or withdrawal/delisting, in addition to penalty as prescribed in the SC(R)A.

Table 4.3: Listing Criteria for Companies on CM Segment of NSE

Criteria	Initial Public Offerings (IPOs)	Companies listed on other exchanges
Paid-up Equity Capital (PUEC)/ Market Capitalisation (MC)	PUEC ≥ Rs. 10 cr. and MC ≥ Rs. 25 cr.	PUEC ≥ Rs. 10 cr. and MC ≥ Rs. 25 cr. OR PUEC ≥ Rs. 25 cr. OR MC ≥ Rs. 50 cr.
Company/Promoter's Track Record	3 years of existence of applicant/promoting company.	3 years of existence of applicant/promoting company.
Dividend Record or Net worth	--	Dividend paid for at least 2 out of the last 3 years OR Net worth Rs. 50 cr.
Project Appraisal/Listing	Project appraisal by specified agencies	Listed on any other stock exchange for at least last three years OR Project appraisal by specified agencies
Other Requirements	(a) No disciplinary action by other stock exchanges/regulatory authority in past 3 years. (b) Satisfactory redressal mechanism for investor grievances, distribution of shareholding and litigation record of the promoting company, if any.	(a) Same as for IPOs. (b) No negative net worth, No winding-up petition, and No reference to BIFR.

Note:

1. The criteria for IPOs shall also be applicable to companies which have come out with IPOs, but are not listed on NSE, provided they make an application for listing within 6 months of the date of closure of public issue.
2. Dividend track record/net worth/project appraisal/listing are not applicable to Government Companies, PSUs, FIs, Nationalised Banks, Statutory Corporations, Banking Companies etc.who are otherwise governed by a regulatory framework.

Explanations:

1. Paid up Equity Capital means post issue paid up equity capital.
2. In case of IPOs, market capitalisation is the product of the issue price and the post-issue number of equity shares. In case of listed companies it is the product of post issue number of equity shares and average of the weekly high and low of the closing prices during last 12 months is used to calculate market capitalisation.
3. Net worth means paid-up equity capital + reserves excluding revaluation reserve - miscellaneous expenses not written off - negative balance in profit and loss account to the extent not set off.

Trading Mechanism

NSE was the first stock exchange in the country set up as a national exchange having nation-wide access with fully automated screen based trading system. Owing to this, today NSE has become the largest exchange in India with approximately 66% of the trading volumes on it. It is one of the very few exchanges in the world to also have adopted anonymous order matching system. The member punches in the NEAT system, the details of his order such as the quantities and prices of securities at which he desires to transact. The transaction is executed as soon as it finds a matching sale or buy order from a counter party. All the orders are electronically matched on a price/time priority basis. This has resulted in a considerable reduction in time spent, cost and risk of error, as well as frauds, resulting in improved operational efficiency. It allows for faster incorporation of price sensitive information into prevailing prices, as the market participants can see the full market on real time basis. This increases informational efficiency and makes the market more transparent. Further, the system 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. A single consolidated order book for each stock displays, on a real time basis, buy and sell orders originating from all over the country. The book stores only limit orders, which are orders to buy or sell shares at a stated quantity and stated price, are executed only if the price quantity conditions match. Thus, the NEAT system provides an Open Electronic Consolidated Limit Order Book (OECLOB), which ensures full anonymity by accepting orders, big or small, from members without revealing their identity. Thus, provides equal access to all the investors. A perfect audit trail, which helps to resolve disputes by logging in the trade execution process in entirety, is also provided.

The trading platform of the CM segment of NSE is accessed not only from the computer terminals, but also from the personal computers of the investors through the Internet.

SEBI has allowed the use of internet as an order routing system for communicating investors' orders to the exchanges through the registered brokers. These brokers should obtain the permission from their respective stock exchanges. In February 2000, NSE became the first exchange in the country to provide web-based access to investors to trade directly on the Exchange followed by BSE in March 2001. The orders originating from the PCs of investors are routed through the internet to the trading terminals of the designated brokers with whom they have relations and further to the exchange. After these orders are matched, the transaction is executed and the investors get the confirmation directly on their PCs.

As of March 2006, 142 trading members on the Capital Market Segment provided internet based trading facility to investors. The trading members in turn had registered 1,443,291 clients for web based access as on March 31, 2006. Around 11.68% of the total trading volume was routed and executed through internet.

Technology

With the developments in communication and network technologies, there has been a paradigm shifts in the operations of the securities market across the globe. Technology has enabled organisations to build new sources of competitive advantage, bring about innovations in products and services, and provide new business opportunities. Stock exchanges all over the world have realized the potential of IT and have moved over to electronic trading systems, which have wider reach and provide a better mechanism for trade and post trade execution.

Given the importance of technology in shaping the securities industry, NSE has been emphasizing on innovations and sustained investments in technology. NSE is the first exchange in the world to use satellite communication technology for trading and also has the largest VSAT-based trading network in the world and largest VSAT network for any purpose in the Asia Pacific region. NSE has also put in place NIBIS (NSE's internet Based Information System) for on-line real-time dissemination of trading information through its website.

As part of its business continuity plan, NSE has established a disaster back-up site at Chennai along with its entire infrastructure, including the satellite earth station. This site at Chennai is a mirror replica of the complete production environment at Mumbai. The link between the two is through a high-speed optical fiber and the transaction data is backed up on near real time basis from the main site to the disaster back-up site to keep both the sites synchronized with each other all the time.

Trading Rules

Insider Trading

Insider trading is considered an offence and is hence prohibited. The SEBI (Prohibition of Insider Trading) Regulations, 1992 prohibits an insider from dealing (on his own behalf or on behalf of others) in listed securities on the basis of 'unpublished price sensitive information', communicating, counseling or procuring such information from any other person to deal in securities of any company on the basis of such information. Price sensitive information for a security is any information, which if published, is likely to affect its price. It includes information regarding the financial results of the company, intended declaration of dividends, issue of securities or buy back of securities, amalgamation, mergers, takeovers, and any major policy changes. SEBI, on the basis of any complaint or otherwise, is empowered to investigates/ inspects these allegation of insider trading. If a person is found *prima facie* guilty of insider trading, then SEBI may prosecute persons in an appropriate court or pass such orders as it may deem fit.

In order to strengthen insider trading regulations, SEBI has mandated a code of conduct for listed companies, its employees, analysts, market intermediaries and professional firms. The insider trading regulations require initial and continuous disclosure of shareholding by directors, officers and major shareholders (holding more than 5% shares/voting rights). The companies are also mandated to adopt a code of disclosure with regards to price sensitive information, market rumours, reporting of shareholding/ownership, etc.

Unfair Trade Practices

The SEBI (Prohibition of Fraudulent and Unfair Trade Practices in relation to the Securities Market) Regulations, 1995 empowers SEBI to investigate into cases of market manipulation, fraudulent and unfair trade practices. The regulations define frauds as acts committed by a party of the contract or by his agent, with intent to deceive another party or his agent or to induce him to enter into the contract. The regulations specifically prohibit market manipulation, misleading statements to induce sale or purchase of securities, and unfair trade practices relating to securities. Under these regulations, SEBI can investigate into violations committed by any person, including an investor, issuer or an intermediary, *suo moto* or upon information received by it. Based on the report of the investigating officer, SEBI can initiate action for suspension or cancellation of registration of an intermediary.

Takeovers

The restructuring of companies through takeover is governed by the SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 1997. The Regulations were formulated so that the process of acquisitions and takeovers is carried out in a well-defined and orderly manner following the principles of fairness and transparency. As per the regulations, the mandatory public offer is triggered on:

a) Crossing the threshold limit of 15%,

b) Crossing the creeping acquisition limit of 15% or more but less than 75% of shares or voting rights of a target company,

c) Attempts by persons having 75% or more to acquire more shares.

The regulations give enough scope for existing shareholders to consolidate and also cover the scenario of indirect acquisition of control. The applications for takeovers are scrutinised by the Takeover Panel constituted by the SEBI.

Buy Back

Buy back is done by the company with the purpose to improve liquidity in its shares and enhance the shareholders' wealth. Under the SEBI (Buy Back of Securities) Regulations, 1998, a company is permitted to buy back its shares from:

a) Existing shareholders on a proportionate basis through the offer document;

b) Open market through stock exchanges using book building process; and

c) Shareholders holding odd lot shares.

The company has to disclose the pre and post-buy back holdings of the promoters. To ensure completion of the buy back process speedily, the regulations have stipulated time limit for each step. For example, in the cases of purchases through stock exchanges, an offer for buy back should not remain open for more than 30 days. The verification of shares received in buy back has to be completed within 15 days of the closure of the offer. The payments for accepted securities has to be made within 7 days of the completion of verification and bought back shares have to be extinguished and physically destroyed within 7 days of the date of the payment. Further, the company making an offer for buy back will have to open an escrow account on the same lines as provided in takeover regulations.

Circuit Breakers

Volatility in stock prices is a cause of concern for both the policy makers and the investors. To curb excessive volatility, SEBI has prescribed a system of circuit breakers. The circuit breakers bring about a nation-wide coordinated halt in trading on all the equity and equity derivatives markets. An index based market-wide circuit breaker system applies at three stages of the index movement either way at 10%, 15% and 20%. The breakers are triggered by movement of either S&P CNX Nifty or Sensex, whichever is breached earlier (discussed in details in chapter 5).

Further, the NSE views entries of non-genuine orders with utmost seriousness as this has market-wide repercussion. It may suo-moto cancel the orders in the absence of any immediate confirmation from the members that these orders are genuine or for any other reason as it may deem fit. As an additional measure of safety, individual scrip-wise price bands has been fixed as below:

- Daily price bands of 2% (either way) on a set of specified securities,
- Daily price bands of 5% (either way) on a set of specified securities,
- Price bands of 20% (either way) on all remaining securities (including debentures, warrants, preference shares etc which are traded on CM segment of NSE),
- No price bands are applicable on scrips on which derivative products are available or on scrips included in indices on which derivatives products are available.

For auction market the price bands of 20% are applicable. In order to prevent members from entering orders at non-genuine prices in these securities, the Exchange has fixed operating range of 20% for such securities.

Demat Trading

A depository holds securities in dematerialized form. It maintains ownership records of securities in a book entry form, and also effects transfer of ownership through book entry. Though, the investors have a right to hold securities in either physical or demat form, SEBI has made it compulsory that trading in securities should be only in dematerialised form. This was initially introduced for institutional investors and was later extended to all investors. The companies, which fail to establish connectivity with both the depositories on the scheduled date as announced by SEBI, then their securities are traded on the trade for trade" settlement window of the exchanges.

At the end of March 2006, the number of companies connected to NSDL and CDSL were 6,022 and 5,479 respectively. The number of dematerialised securities have increased from 147.7 billion at the end of March 2005 to 201.9 billion at the end of March 2006. During the same period the value of dematerialsied securities has increased from Rs. 15,687 billion to Rs. 27,147 billion. Since the introduction of the depository system, dematerialisation has progressed at a fast pace and has gained acceptance amongst the market participants. All actively traded scrips are held, traded and settled in demat form. The details of progress in dematerialisation in two depositories, viz. NSDL and CDSL, are presented in Table 4.4a.

Charges for Services

As per SEBI Regulations, every stockbroker, on the basis of his total turnover, is required to pay annual turnover charges, which are to be collected by the stock exchanges. In order to share the benefits of efficiency, NSE has been reducing the transaction charges over a period of time. At present a trading member is required to pay the exchange transaction charges @0.004% (Rs. 4 per Rs.1 lakh) of the turnover.

A securities transaction tax has also been introduced. For all delivery based transactions a STT of 0.20% (to be shared equally by both buyers and sellers) and for all non-delivery based transactions 0.02% shall be levied.

Table 4.4A: Progress of Dematerialisation: NSDL & CDSL

Parameters of Progress	NSDL		CDSL	
	March-05	March-06	March-05	March-06
Companies - Agreement signed	5,537	6,022	5,068	5,479
Companies - Available for Demat	5,536	6,022	5,068	5,479
Market Cap. of Companies available (Rs.bn.)	16,383	30,051	16,712	29,527
Number of Depository Participants	216	223	271	315
Number of DP Locations	2,819	3,017	1,530	2,577
No. of Investor Accounts	6,300,723	75,60,299	1,005,772	1,861,288
Demat Quantity (Mn.)	128,663	174,722	19,080	27,220
Demat Value (Rs. bn.)	14,477	24,789	1,210	2,358

Source: NSDL & CDSL.

Stamp duties are payable as per the rates prescribed by the relevant states. In Maharashtra, 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, for non-delivery based trades, it is levied @ 20 paise for every Rs 10,000 or part there of (0.002%).

The depositories provide depository services to investors through depository participants (DPs). They do not charge the investors directly, but charge their DPs who are free to have their own free structure for their clients. However, the existing structure of dematerialization charges has been rationalized to provide benefits to the investors. W. e. f February 1, 2005, certain charges paid by investors were removed which include charges towards opening of a Beneficiary Owner (BO) account, credit of securities into BO account and custody charges for BO account opened on or after February 1, 2005. W. e. f April 1, 2005, the custody charges are not levied on any investor. The depositories, however, have been reducing their charges from DPs over a period of time. The charges levied on DPs by NSDL and CDSL are presented in Table 4.4b.

Table 4-4B: Service Charges levied by the Depositories (March, 2006)

Depositories Services	NSDL	CDSL
Depositories Services	NSDL	CDSL
Dematerialisation	Nil	Nil
Rematerialisation	Rs. 10 per certificate	Rs. 10 per certificate
Custody	Nil	Nil
Settlement	Rs. 6 per debit instruction	Rs. 5 per debit instruction
	Nil for credit instruction	Nil for credit instruction
Pledge Creation	Rs. 25 per instruction	Rs. 12 to pledgor
Pledge Closure	Nil	Rs. 12 to pledgor
Pledge Invocation	Nil	Nil
Securities Borrowing	Rs. 25 per instruction	Not available

Source: NSDL & CDSL.

Institutional Trades

Trades by Mutual Funds and Foreign Institutional Investors are termed as Institutional trades; Transactions by MFs in the secondary market are governed by SEBI (Mutual Funds) Regulations, 1996. A MF under all its schemes is not allowed to own more than 10% of any company's paid-up capital. They are allowed to do only 'delivery-based' transactions. A MF cannot invest more than 10% of the NAV of a particular scheme in the equity shares or equity related instruments of a single company.

The investments by FIIs are governed by the rules and regulations of the RBI and the SEBI. As per the RBI guidelines, each FII can invest up to 10% of the paid-up capital of a company, however, the total FII investment should not exceed 24%. This can, however, be increased up to the sectoral cap/statutory ceiling, as applicable, provided the Indian company's board of directors and also its general body approve it. As per the SEBI guidelines, all FII transactions are to be routed through a registered member of a recognized stock exchange in India. FIIs have to necessarily give and take delivery of securities sold and bought.

Index Services

A stock index consists of a set of stocks that are representative of either the whole market, or a specified sector. It helps to measure the change in overall behaviour of the markets or sector over a period of time. NSE and CRISIL, have jointly promoted the India Index Services & Products Limited (IISL). The IISL provides stock index services by developing and maintaining an array of indices for stock prices. IISL is the only specialized organization of this type in the country. IISL maintains a number of equity indices comprising broad-based benchmark indices, sectoral indices and customised indices. The most popular index is the S&P CNX Nifty, followed by the CNX Nifty Junior, S&P CNX Defty, S&P CNX 500, CNX Midcap 200, S&P CNX Industry indices (for 72 industries), CNX IT Index and CNX 100. These indices are monitored and updated dynamically and are reviewed regularly. These are maintained professionally to ensure that it continues to be a consistent benchmark of the equity markets, which involves inclusion and exclusion of stocks in the index, day-to-day tracking and giving effect to corporate actions on individual stocks.

Nifty is a well diversified 50 stock index accounting for 23 sectors of the economy. It accounted for 56.52% of total market capitalisation of CM segment of NSE as at end-March 2006. The total traded value of all Nifty stocks is approximately 60% of the traded value of all the stocks on the NSE (average taken for the last six months). CNX Nifty Junior accounts for 9.77% of the market capitalization in NSE.

Nifty was introduced considering the fact that it would not only be used for reflecting the stock market behavior accurately, but also for modern applications such as index funds and index derivatives. It has become the most popular and widely used stock market indicator in the country.

Index futures and options have been launched based on Nifty index, CNX IT and on Bank Nifty Index. Futures contracts based on Nifty have also been launched at the derivative exchange at Singapore. It is the only Indian index-based derivative product traded on a foreign exchange.

Market Outcome

Turnover – Growth and Distribution

Trading volumes in the equity segments of the stock exchanges have witnessed phenomenal growth over the last few years. It has seen a considerable increase in late 1990's, however a slump was witnessed during 2001-02. The traits of recovery in the market are visibly seen for the last three years. The volumes had risen from Rs. 9,689,093 million in 2002-03 to Rs. 16,668,963 million in 2004-05. The trading volumes in the year 2005-06 were Rs. 23,901,030 million. In percentage terms there has been a growth of 43.39% in 2005-06 over the previous year's volume (Table 4.5).

The monthly trading value of the CM segment on NSE increased from Rs. 827,183 million in April 2005 to Rs 2,093,951 million in March 2006 (Table 4.6).The trading value of CM segment of NSE has shown a sturdy increase in every month. The daily turnover on NSE averaged around Rs. 62,532 million in this year.

Table 4-5: Turnover on Stock Exchanges in India*

	Stock Exchanges	Turnover (Rs. mn.)		Share in turnover (%)	
		2004-05	2005-06	2004-05	2005-06
1	NSE	11,400,720	15,695,580	68.39	65.67
2	Mumbai	5,187,170	8,160,740	31.12	34.14
3	Calcutta	27,150	28,000	0.16	0.12
4	Uttar Pradesh	53,430	14,860	0.32	0.06
5	Ahmedabad	80	--	0.00	0.00
6	Delhi	--	--	--	--
7	Pune	3	--	0.00	--
8	Ludhiana	--	--	--	--
9	Bangalore	--	--	--	--
10	ICSE	--	--	--	--
11	Hyderabad	140	890	0.00	0.00
12	SKSE	0	--	0.00	--
13	Madras	270	50	0.00	0.00
14	Madhya Pradesh	--	--	--	--
15	Vadodara	--	--	--	--
16	OTCEI	0	0	0.00	0.00
17	Gauhati	--	--	--	--
18	Cochin	--	--	--	--
19	Magadh	--	910	--	0.00
20	Bhubaneshwar	--	--	--	--
21	Coimbatore	--	--	--	--
22	Jaipur	--	--	--	--
23	Mangalore	0	--	0.00	0.00
	Total	**16,668,963**	**23,901,030**	**100.00**	**100.00**

* Excludes turnover in WDM and derivatives segments of Exchanges.
Source: SEBI Bulletin 2005-06

Table 4-6: Stock Market Indicators - Monthly Trends on NSE and BSE

(Rs. mn.)

Month	Turnover		Average Daily Turnover		Market Capitalisation (end of period)	
	NSE	BSE	NSE	BSE	NSE	BSE
Apr-05	827,183	378,090	41,359	18,900	15,179,079	16,357,660
May-05	868,020	433,590	39,455	19,710	16,549,947	17,832,210
Jun-05	1,113,970	584,790	48,433	25,430	17,275,024	18,503,770
Jul-05	1,230,080	618,990	61,504	30,950	18,487,402	19,871,700
Aug-05	1,457,313	759,330	66,241	34,510	19,574,909	21,239,000
Sep-05	1,453,932	812,910	69,235	38,710	20,982,633	22,543,760
Oct-05	1,208,099	591,020	60,405	29,550	19,276,445	20,656,110
Nov-05	1,095,785	526,940	54,789	26,350	21,668,229	23,230,640
Dec-05	1,499,083	773,560	68,140	35,160	23,223,921	24,893,850
Jan-06	1,494,421	793,160	74,721	39,660	24,343,946	26,161,940
Feb-06	1,353,742	700,700	71,250	36,880	25,120,830	26,955,420
Mar-06	2,093,951	1,187,650	95,180	53,980	28,132,007	30,221,900
2005-2006	**15,695,579**	**8,160,730**	**62,532**	**32,510**	**28,132,007**	**30,221,900**

Source: NSE & Monthly SEBI Bulletins

Few of the stock exchanges have shown slight growth trends in their trading volumes in the year 2005-06, most exchanges did not report any turnover during the whole fiscal 2005-06. NSE consolidated its position further as the market leader by contributing about 65.7% of the total turnover. Since its inception in 1994, NSE has emerged as the favoured exchange among trading members. The consistent increase in popularity of NSE is clearly evident from Annexure 4.2, which presents business growth of CM segment of NSE. Not only in the national arena, but also in the international markets, NSE has been successful in creating a niche for itself. According to reports of FIBV, in the calendar year 2004, in terms of trading intensity NSE ranked 3rd next only to NYSE and NASDAQ (this is third consecutive year where NSE ranks 3rd).

The sectoral distribution of turnover has undergone significant change over last few years. Table 4.7 presents the share of top '50' companies at NSE, classified according to different sectors, in turnover and market capitalisation. The share of manufacturing companies in trading volume of top '50' companies, which was around 9.85% in 2000-01, witnessed a sharp decline to 2.03% 2002-03. But the last three years have seen sharp rise in the share, 37.66% in 2003-04, 41.81% in 2004-05 and 43.01 in 2005-06. The share of information technology (IT) companies in trading volume has risen from 19.56% in 2004-05 to only 21.49% in 2005-06.

The share of top '5' securities in turnover has been on a declining trend since the past few years. It witnessed a decline from 25.88% in 2004-05 to 22.15% in 2005-06 (Table 4.8). Trading in top '100' securities also has witnessed a decline from 84.26% to 73.12% over the same period. Member-wise distribution of turnover indicates increasing diffusion of trades

Table 4-7: Distribution of Turnover and Market Capitalisation of Top '50' Companies listed at NSE

Companies	Turnover																	
	Amount (Rs. mn.)									% to Total								
	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Manufacturing	1,326,775	882,241	1,397,421	1,247,790	284,260	111,930	3,289,182	3,450,950	3,976,090	37.43	23.13	18.78	9.85	6.05	2.03	37.66	41.81	43.01
Financial Services	540,709	265,005	343,082	175,590	49,170	142,040	1,164,357	1,240,080	1,677,850	15.25	6.95	4.61	1.39	1.05	2.57	13.33	15.02	18.15
F.M.C.G	1,551,480	942,404	380,109	324,380	132,580	44,630	194,259	174,380	422,780	43.77	24.71	5.11	2.56	2.82	0.81	2.22	2.11	4.57
I.T.	25,793	1,381,476	3,693,152	9,571,590	3,128,510	4,127,810	2,711,187	1,614,760	1,986,260	0.73	36.22	49.63	75.56	66.58	74.71	31.04	19.56	21.49
Pharmaceuticals	19,762	90,295	482,304	210,850	225,380	95,600	229,623	228,810	224,200	0.56	2.37	6.48	1.66	4.80	1.73	2.63	2.77	2.43
Others	80,484	252,850	1,144,814	1,138,030	878,840	1,002,930	1,146,357	1,545,400	957,150	2.27	6.63	15.39	8.98	18.70	18.15	13.12	18.72	10.35
Total	**3,545,003**	**3,814,271**	**7,440,881**	**12,668,230**	**4,698,740**	**5,524,940**	**8,734,966**	**8,254,380**	**9,244,330**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Companies	Market Capitalisation																	
	Amount (Rs. mn.)									% to Total								
	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Manufacturing	1,773,710	1,065,715	1,516,922	967,180	561,090	333,830	2,621,234	2,562,230	5,436,240	54.95	34.39	20.53	20.79	12.41	8.03	31.13	23.35	29.30
Financial Services	340,613	183,338	362,092	364,600	424,850	452,830	1,045,514	1,385,180	1,867,460	10.55	5.92	4.90	7.84	9.39	10.89	12.41	12.62	10.07
F.M.C.G	591,987	907,729	795,220	804,970	565,070	378,260	598,188	623,510	1,331,570	18.34	29.29	10.76	17.30	12.49	9.09	7.10	5.68	7.18
I.T.	84,343	457,416	3,064,181	1,060,950	801,450	760,170	811,075	2,473,980	4,447,680	2.61	14.76	41.48	22.80	17.72	18.28	9.63	22.54	23.97
Pharmaceuticals	81,758	242,208	193,237	210,350	323,140	275,740	425,007	413,650	751,000	2.53	7.82	2.62	4.52	7.14	6.63	5.05	3.77	4.05
Others	355,454	242,718	1,456,091	1,245,020	1,847,200	1,958,270	2,920,559	3,515,830	4,717,670	11.01	7.83	19.71	26.76	40.84	47.08	34.68	32.04	25.43
Total	**3,227,864**	**3,099,124**	**7,387,742**	**4,653,070**	**4,522,800**	**4,159,100**	**8,421,576**	**10,974,380**	**18,551,620**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

F.M.C.G. Fast Moving Consumer Goods
I.T. Information Technology

Table 4-8: Percentage Share of Top 'N' Securities/Members in Turnover of NSE

Month	No. of Securities / Members				
	5	10	25	50	100
Securities					
1994-95 (Nov.-Mar.)	48.77	55.92	68.98	81.14	91.07
1995-96	82.98	86.60	90.89	93.54	95.87
1996-97	84.55	91.96	95.70	97.03	98.19
1997-98	72.98	85.17	92.41	95.76	97.90
1998-99	52.56	67.11	84.71	92.03	95.98
1999-00	39.56	59.22	82.31	88.69	93.66
2000-01	52.15	72.90	88.93	94.57	97.46
2001-02	44.43	62.92	82.24	91.56	95.91
2002-03	40.58	55.41	77.8	89.16	95.38
2003-04	31.04	44.87	64.32	79.44	91.03
2004-05	25.88	41.65	57.98	72.4	84.26
2005-06	22.15	31.35	46.39	59.22	73.12
Members					
1994-95 (Nov.-Mar.)	18.19	26.60	44.37	61.71	81.12
1995-96	10.65	16.56	28.61	41.93	58.59
1996-97	5.94	10.08	19.67	30.57	45.95
1997-98	6.29	10.59	18.81	29.21	44.24
1998-99	7.73	11.96	20.77	31.66	47.02
1999-00	7.86	12.99	22.78	34.41	49.96
2000-01	7.78	12.76	23.00	33.86	48.79
2001-02	7.14	12.29	23.63	36.32	53.40
2002-03	10.26	16.41	29.07	42.49	59.15
2003-04	11.58	17.36	30.34	44.05	61.37
2004-05	13.52	20.2	34.97	49.01	65.09
2005-06	14.62	22.57	38.17	52.57	68.45

Source: NSE.

among a larger number of trading members over the years. During 2005-06, top '5' members accounted for only 14.62% of turnover, while top '100' members accounted for 68.45% of total turnover.

This year turnover in India seems to be less concentrated in comparison to that in other comparable markets (international) as may be seen from Table 4.9. Ten most active index securities accounted for 30.6% of turnover in India and top ten index securities in terms of equity base accounted for 33.9% of market capitalisation at the end of December 2005.

At the end of March 2006, NSE has permitted 142 members on its CM segment the web based access to its trading system. These members in turn have registered 1,443,291 clients for web based access. About 499 lakh trades for Rs. 1,834,285 million constituting 11.68% of the total trading volume were routed and executed through the internet. NEATiXS a product of the NSE.IT helps brokerage firms to conduct internet trading, which can be accessed easily using standard browsers. It provides real time on-line market information including stock quotes and order screens, allowing investors to place orders from their personal computers. The success of internet trading in India, however, will depend on expansion of internet bandwidth, which is necessary for faster execution of trades.

Table 4-9: Market Concentration in Emerging Asian Markets: End December 2005

(In per cent)

Market	Index Stock's Share of		Share of 10 Largest Index Stocks in Market Capitalisation	Share of 10 Most Active Index Stocks in Turnover
	Market Capitalisation	Turnover		
China	74.6	58.3	38.8	21.0
Thailand	84.5	81.0	49.2	38.5
Taiwan	82.0	66.8	34.2	27.2
Korea	86.7	53.8	36.0	18.5
Malaysia	80.1	61.1	36.3	30.4
India	77.9	63.2	33.9	30.6

Source: S&P Emerging Stock Markets Factbook 2005

Market Capitalisation

The market capitalisation for securities available for trading on the equity segment of NSE and BSE witnessed enormous growth over the previous years (Table 4.6). The market capitalisation of NSE and BSE as at end March 2006 amounted to Rs. 28,132,010 million and Rs. 30,221,090 million respectively.

A sharp change in the shares of different sectors in market capitalisation is observed over the years (Table 4.7). Sectors like manufacturing, which used to dominate in terms of market capitalization with more than 35% in the year 1998-99, have shown declines in 2001-02 and 2002-03. However, a turnaround in the market capitalization was witnessed in 2003-04 and has continued to some extent to 2005-06 where it registered 29.30%. The IT sector companies showed a drastic improvement from 9.63% in 2003-04 to 23.97% in 2005-06.

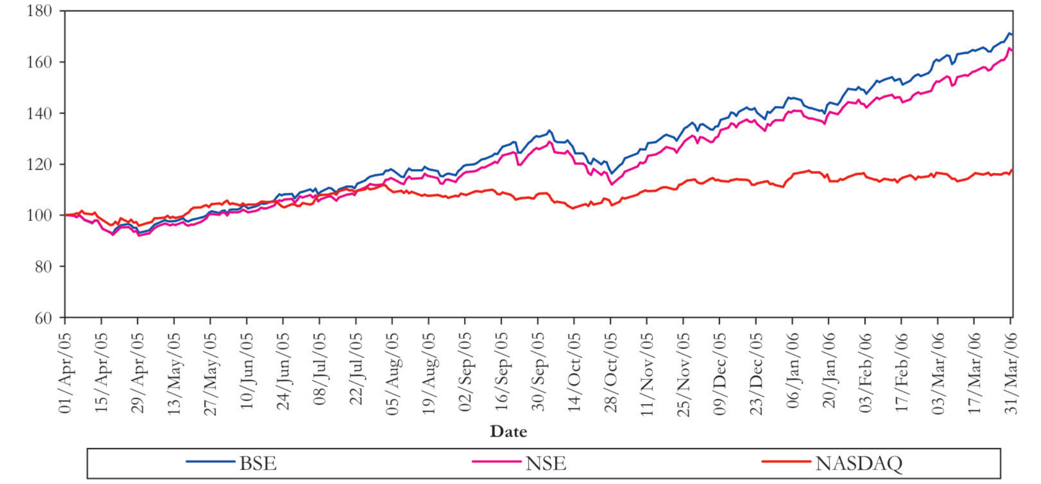
Indices

The different markets in the year 2005-06 have shown a steep rise in the performance as compared to the markets in the previous year. The Nifty index, registered a new high of 3402.55 in March 2006. The point to point return of the index was 67.15% in 2005-06 (Table 4.10). Similarly BSE also gave huge returns to the tune of 73.73% in the said period.

Table 4.10: Movement of Select Indices on Indian/Foreign Markets

Index	31.03.2004	31.03.2005	31.03.2006	Change during 2004-05 (%)	Change during 2005-06 (%)
S&P CNX Nifty	1771.90	2035.65	3402.55	14.89	67.15
BSE Sensex	5590.60	6492.82	11280.00	16.14	73.73
Hang Seng	12681.67	13516.88	15805.04	6.59	16.93
Dow Jones	10381.70	10503.76	11109.32	1.18	5.77
Nasdaq	2000.63	1999.23	2339.79	-0.07	17.03
Nikkei	11715.39	11668.95	17059.66	-0.40	46.20
FTSE	4417.50	4894.40	5964.60	10.80	21.87

Source: NSE, BSE & Bloomberg.



Volatility

The stock markets witnessed maximum volatility in October 2005 basically due to intra-day downslide in the benchmark index wherein an eight sigma deviation was observed in the VAR (Table 4.11). During the last quarter of the 2005-06, January witnessed high volatility to the tune of 0.93% and 1.01% in the Nifty and the Sensex respectively. Rest of the months during 2005-06 showed volatility of either 1.00% or less than 1.00%. Chart 4.2 presents the volatility of S&P CNX Nifty, Sensex and NASDAQ.

Table 4-11: Stock Market Index, Volatility and P/E Ratio: April 2005 to March 2006

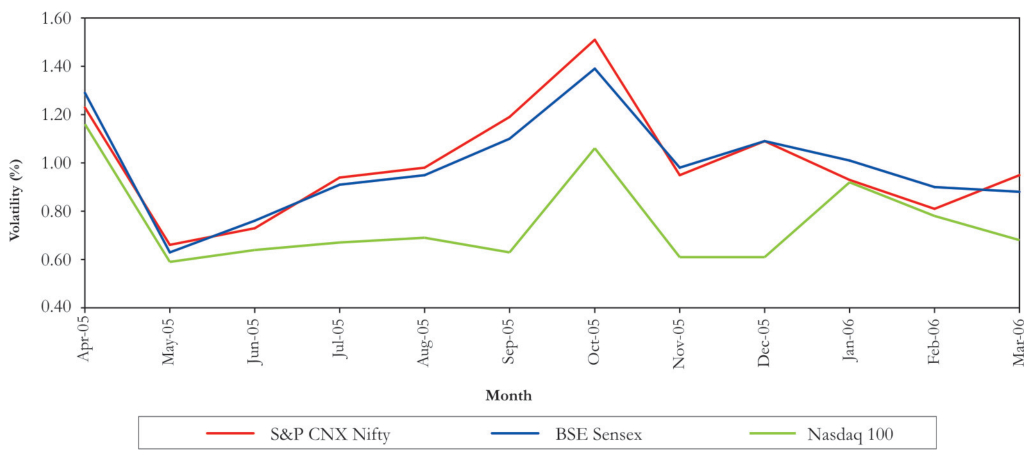
Month/Year	S&P CNX Nifty			Sensex		
	Index	Volatility (%)**	P/E Ratio*	Index	Volatility (%)**	P/E Ratio*
Apr-05	1,903	1.23	13.27	6,154	1.29	14.4
May-05	2,088	0.66	13.94	6,715	0.63	15.28
Jun-05	2,221	0.73	14.31	7,194	0.76	16.03
Jul-05	2,312	0.94	14.10	7,635	0.91	15.74
Aug-05	2,385	0.98	14.78	7,805	0.95	16.25
Sep-05	2,601	1.19	16.15	8,634	1.10	17.8
Oct-05	2,371	1.51	14.23	7,892	1.39	15.45
Nov-05	2,652	0.95	15.95	8,789	0.98	17.23
Dec-05	2,837	1.09	17.16	9,398	1.09	18.61
Jan-06	3,001	0.93	17.90	9,920	1.01	18.49
Feb-06	3,075	0.81	18.17	10,370	0.9	19.06
Mar-06	3,403	0.93	20.26	11,280	0.88	20.92

* As on the last trading day of the month.

** Volatility is calculated as standard deviation of the daily returns for the respective period

Source: SEBI & NSE.

Chart 4-2: Stock Market Volatility, 2005-06



Returns in Indian Market

The performance of Nifty and various other indices over different periods of last one month to 12 months is presented in Table 4.12. It reveals that the indices have performed with varying degrees over varying periods.

The comparative performance of five major sectoral indices, viz. S&P CNX Petrochemicals Index, S&P CNX Finance Index, CNX FMCG Index, S&P CNX Pharma Index, and CNX IT Index, with that of Nifty Index for the year 2005-06 is presented in Chart 4.3. It is observed that during the entire period, CNX Finance Index, CNX FMCG Index out-performed the Nifty. The CNXIT Index was the worst performer during the whole year, second being S&P CNX petrochemical index. S&P CNX Pharmaceutical Index mirrored the movement of Nifty during the most part of the year. The monthly closing prices of these sectoral indices are presented in Table 4.12.

Exchange Traded Funds

The first ETF in India, the "Nifty BeEs (Nifty Benchmark Exchange Traded Scheme) based on S&P CNX Nifty was launched in December 2001 by Benchmark Mutual Fund. It is bought and sold like any other stock on NSE and has all characteristics of an index fund. As on March end 2006, there were five ETFs listed on NSE. They are namely Nifty BeES, Junior Nifty BeES, Bank BeES, Liquid BeES and SUNDER (S&P CNX Nifty UTI Notional Depository Receipts Scheme). Prudential ICICI launched an ETF based on BSE Sensex, namely SPICE (Sensex Prudential ICICI Exchange Traded Fund). During the month of March 2006 the total trading volume of the 5 ETFs listed on NSE was Rs. 255.88 million. Details about ETFs are available in Chapter 3.

Table 4.12: Performance of Sectoral Indices

Month/ Year	Monthly Closing Prices						Average Daily Volatility (%)					
	S&P CNX Nifty	CNX FMCG	CNX IT	CNX Finance	S&P CNX Petro-chemicals	S&P CNX Pharma-ceuticals	S&P CNX Nifty	CNX FMCG	CNX IT	CNX Finance	S&P CNX Petro-chemicals	S&P CNX Pharma-ceuticals
Apr-05	1902.50	2938.88	2539.75	963.88	2342.51	2817.87	1.23	1.20	1.95	1.70	2.05	0.86
May-05	2087.55	3193.06	2899.55	1082.14	2461.21	3109.71	0.67	0.88	0.96	-1.03	0.98	0.71
Jun-05	2220.60	3433.89	3072.10	1454.09	2567.40	3200.31	0.73	1.12	1.13	1.96	1.36	0.71
Jul-05	2312.30	3525.39	2985.95	1727.63	2824.50	3345.09	0.94	0.77	1.45	1.80	1.56	1.11
Aug-05	2384.65	3681.64	3177.15	1825.45	2893.71	3516.85	0.98	0.92	1.30	1.74	1.40	1.10
Sep-05	2601.40	4119.51	3296.50	1682.94	3255.31	3576.23	1.19	1.39	1.39	3.23	2.22	1.10
Oct-05	2370.95	3702.87	3211.95	1523.29	2918.17	3167.80	1.51	1.71	1.70	2.26	1.93	1.16
Nov-05	2652.25	4120.79	3533.95	1705.82	3132.90	3519.73	0.95	1.46	1.14	1.31	1.08	0.79
Dec-05	2836.55	4421.43	3906.90	1833.32	3190.43	3678.64	1.09	1.13	1.12	1.83	1.14	0.92
Jan-06	3001.10	4669.83	4010.30	1937.66	3347.07	3855.35	0.93	0.95	1.32	1.29	1.57	0.73
Feb-06	3074.70	5262.66	3972.90	1966.01	3182.08	4140.99	0.81	1.57	0.88	1.23	-1.35	1.18
Mar-06	3402.55	5897.48	4352.90	2092.85	3356.11	4476.07	0.95	1.29	1.44	1.56	1.18	0.82

Source: IISL.

Chart 4-3: Movement of Nifty and Sectoral Indices, 2005-06

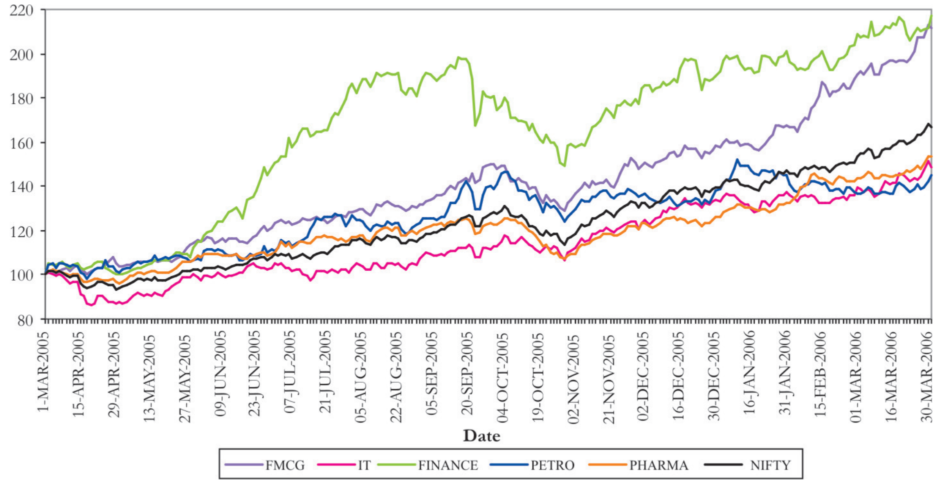


Table 4-13: Performance of Select Indices as at end March 2006

(In per cent)

	1 month	3 months	6 months	1 year
S&P CNX Nifty	10.66	19.95	42.69	67.15
S&P CNX 500	9.45	18.35	36.87	64.16
S&P CNX Defty	10.25	21.23	40.82	64.1
CNX Nifty Junior	7.47	15.71	26.9	49.99
CNX Midcap 200	8.9	18.77	30.69	63.56
CNX IT Index	9.56	11.42	37.01	8.91
CNX Bank Index	2.35	3.84	13.88	31.01

Source: IISL.

Liquidity

Many listed securities on stock exchanges are not traded actively. The percentage of companies traded on BSE was quite low at 34.85% as compared with 99.03 % on NSE in March 2006 (Table 4.14). Only 86.26% of companies traded on BSE were traded for more than 100 days during 2005-06, while that on NSE, it has been 91.74% (Table 4.15). Trading took place for less than 100 days in case of 13.74% of companies traded at BSE during the year, and for less than 10 days in case of 4.85% of companies traded.

Institutional Transactions

During 2005-06, the strong risk adjusted returns of the Indian market have led FIIs to make more allocations to India. The FIIs registered a net investment of Rs. 394,660 million. The FII net investment was highest during the month of December 2005, when they made

Table 4-14: Trading Frequency on NSE & BSE

Month/Year	NSE			BSE		
	Companies Available for Trading*	Companies Traded	% of Traded to Available for Trading	Listed Securities	Traded Securities	% of Traded to Listed Securities
Apr-05	836	829	99.16	7,204	2,446	33.95
May-05	842	830	98.57	7,040	2,531	35.95
Jun-05	855	843	98.60	7,097	2,568	36.18
Jul-05	868	856	98.62	7,129	2,577	36.15
Aug-05	875	864	98.74	7,166	2,669	37.25
Sep-05	883	872	98.75	7,134	2,552	35.77
Oct-05	881	887	100.68	7,137	2,421	33.92
Nov-05	886	872	98.42	7,199	2,546	35.37
Dec-05	896	888	99.11	7,236	2,545	35.17
Jan-06	903	893	98.89	7,239	2,563	35.41
Feb-06	911	900	98.79	7,340	2,518	34.31
Mar-06	929	920	99.03	7,311	2,548	34.85

Source: SEBI and NSE.

* At the end of the month. Includes listed/permitted to trade companies but excludes suspended companies.

Table 4.15: Frequency Distribution of Companies Traded at NSE and BSE

No. of Days Traded	No. of Companies Traded at NSE		No. of Companies Traded at BSE	
	2004-05	% to Total	2004-05	% to Total
Above 100 days	877	91.74	2,630	86.26
91-100 days	3	0.31	22	0.72
81-90 days	5	0.52	19	0.62
71-80 days	8	0.84	21	0.69
61-70 days	5	0.52	27	0.89
51-60 days	6	0.63	30	0.98
41-50 days	4	0.42	25	0.82
31-40 days	5	0.52	32	1.05
21-30 days	10	1.05	43	1.41
11-20 days	19	1.99	52	1.71
1-10 days	14	1.46	148	4.85
Total	**956**	**100.00**	**3,049**	**100.00**

Source: SEBI & NSE.

net purchases for a peak of Rs. 83,610 million (Table 4.16). The cumulative net FII investment touched US$ 47.70 billion by end-March 2006. As on end March 2006, the total number of FIIs registered with SEBI amounted to 882 against 685 in March 2005.

During 2005-06, the MFs have invested more funds in the debt instruments than equity instruments (Table 4.17). In the equity market, MFs were net buyers to the tune of Rs. 143,030 million during 2005-06. In the months of June 2005 and from December 2005 to February 2006 the MFs were in a selling spree in the equity, whereas in the Debt instruments August 2005, December 2005 and January 2006 witnessed the MFs in selling mode.

Table 4-16: Trends in FII Investment

Period	Purchases (Rs. mn.)	Sales (Rs. mn.)	Net Investment (Rs. mn.)	Cumulative Net Investment (Rs. mn.)	Net Investment (US$ mn.)	Cumulative Net Investment (US$ mn.)
1994-95	**76,311**	**28,348**	**47,963**	**47,963**	**1,528**	**3,167**
1995-96	**96,935**	**27,516**	**69,420**	**117,384**	**2,036**	**5,202**
1996-97	**155,539**	**69,794**	**85,745**	**203,129**	**2,432**	**7,634**
1997-98	**186,947**	**127,372**	**59,574**	**262,703**	**1,650**	**9,284**
1998-99	**161,150**	**176,994**	**-15,845**	**246,857**	**-386**	**8,898**
1999-00	**568,555**	**467,335**	**101,219**	**348,077**	**2,339**	**11,237**
2000-01	**740,506**	**641,164**	**99,342**	**447,419**	**2,159**	**13,396**
2001-02	**499,199**	**411,650**	**87,552**	**534,972**	**1,846**	**15,242**
2002-03	**470,601**	**443,710**	**26,889**	**561,861**	**562**	**15,804**
2003-04	**1,448,575**	**990,940**	**457,645**	**1,019,506**	**9,949**	**25,754**
2004-05	**2,169,530**	**1,710,730**	**458,800**	**1,478,306**	**10,173**	**35,927**
2005-06	**3,449,780**	**3,055,120**	**394,660**	**19,702,322**	**9,334**	**477,063**
Apr-05	162,100	176,860	-14,760	1,463,546	-338	35,589
May-05	156,190	170,050	-13,860	1,449,686	-318	35,271
Jun-05	259,600	207,020	52,580	1,502,266	1,210	36,481
Jul-05	257,170	179,560	77,610	1,579,876	1,784	38,265
Aug-05	283,590	237,370	46,220	1,626,096	1,062	39,327
Sep-05	266,510	221,940	44,570	1,670,666	1,023	40,350
Oct-05	271,660	317,940	-46,280	1,624,386	-1,054	39,296
Nov-05	235,000	216,260	18,740	1,643,126	420	39,716
Dec-05	335,480	251,870	83,610	1,726,736	1,831	41,547
Jan-06	334,150	326,580	7,570	1,734,306	603	42,150
Feb-06	356,710	282,350	74,360	1,808,666	1,660	43,810
Mar-06	531,620	467,320	64,300	1,872,966	1,451	45,261

Source: SEBI.

Table 4-17: Trends in Transactions by Mutual Funds

(Rs. mn.)

Month/Year	Equity			Debt			Total Net Purchases/Sales
	Gross Purchase	Gross Sales	Net Purchases/Sales	Gross Purchase	Gross Sales	Net Purchases/Sales	
Apr-05	43,480	28,830	14,650	95,680	45,330	50,350	65,000
May-05	70,010	36,610	33,400	106,880	59,820	47,060	80,460
Jun-05	45,680	63,850	-18,170	106,870	70,890	35,980	17,810
Jul-05	59,250	54,200	5,050	89,670	51,540	38,130	43,180
Aug-05	92,820	69,890	22,930	143,180	82,850	60,330	83,260
Sep-05	102,630	70,290	32,340	136,990	89,330	47,660	80,000
Oct-05	92,730	62,530	30,200	79,770	57,840	21,930	52,130
Nov-05	65,770	59,960	5,810	69,240	42,910	26,330	32,140
Dec-05	83,680	97,450	-13,770	71,670	79,370	-7,700	-21,470
Jan-06	98,570	110,300	-11,730	66,180	57,130	9,050	-2,680
Feb-06	91,580	94,030	-2,450	46,280	37,030	9,250	6,800
Mar-06	157,700	112,870	44,830	83,100	56,600	26,500	71,330
2005-06	**1,003,900**	**860,810**	**143,090**	**1,095,510**	**730,640**	**364,870**	**507,960**

Source: SEBI.

Takeovers

In 2005-06, there were 102 takeovers under open category involving Rs. 40,800 million as against Rs. 46,320 million during the preceding year (Table 4.18). However, there were 245 takeovers under exempted category involving Rs 171,320 million as against Rs. 69,580 million in the previous year.

Table 4-18: Substantial Acquisition of Shares and Takeovers

(Value in Rs.mn.)

Year	Open Offers								Automatic Exemption	
	Objectives						Total			
	Change in Control of Management		Consolidation of Holdings		Substantial Acquisition				Number	Value of Shares Acquired
	Number	Value	Number	Value	Number	Value	Number	Value		
1994-95	0	0	1	1,140	1	42	2	1,182	--	--
1995-96	4	301	4	255	0	0	8	556	--	--
1996-97	11	118	7	783	1	23	19	924	--	--
1997-98	18	1,429	10	3,398	13	956	41	5,784	93	35,022
1998-99	29	997	24	4,163	12	3,271	65	8,430	201	18,881
1999-00	42	2,588	9	711	23	1,300	74	4,599	252	46,774
2000-01	70	11,404	5	1,890	2	425	77	13,719	248	48,732
2001-02	54	17,562	26	18,152	1	390	81	36,104	276	25,390
2002-03	46	38,144	40	25,733	2	14	88	63,891	238	24,284
2003-04	38	3,952	16	1,966	11	10,030	65	15,948	171	14,357
2004-05	35	35,030	12	1,650	14	9,640	61	46,320	212	69,580
2005-06	78	32,520	9	1,190	15	7,090	102	40,800	245	171,320
Total	**425**	**144,046**	**163**	**61,031**	**95**	**33,181**	**683**	**238,258**	**1,936**	**454,340**

Source: SEBI.

Annexure 4-1: Exchange -wise Brokers and Sub-brokers in India

Exchanges	Participants at the end March			
	Registered Brokers		Registered Sub-Brokers	
	2005	2006	2005	2006
Ahmedabad	317	317	119	119
Bangalore	250	256	156	156
Bhubaneshwar	221	219	17	17
Calcutta	962	962	88	88
Cochin	446	434	42	42
Coimbatore	135	135	22	22
Delhi	376	375	343	343
Gauhati	119	110	4	4
Hyderabad	288	304	199	199
ICSEIL	654	788	3	3
Jaipur	522	507	34	34
Ludhiana	293	293	38	38
Madhya Pradesh	174	174	5	5
Madras	178	182	115	115
Magadh	198	198	3	3
Mangalore	66	66	1	1
Mumbai	726	840	6,917	10,691
NSEIL	976	1,014	5,338	11,359
OTCEI	801	769	19	19
Pune	186	192	161	161
SKSE	425	426	0	0
Uttar Pradesh	504	463	19	19
Vadodara	311	311	41	41
Total	**9,128**	**9,335**	**13,684**	**23,479**

Source: SEBI Annual Report

Annexure 4-2: Business Growth of CM Segment of NSE

Month/ Year	No. of Trading Days	No. of Companies Traded	No. of Trades (mn.)	Traded Quantity (mn.)	Turnover (Rs. mn.)	Average Daily Turnover (Rs. mn.)	Turnover Ratio (%)	Demat Securities Traded (mn.)	Demat Turnover (Rs. mn.)	Demat Turnover as a % of Total Turnover	Market Capital-isation (Rs. mn.) *
Nov 94-Mar 95	**102**	**--**	**0.3**	**139**	**18,050**	**177**	**--**	**--**	**--**	**0**	**3,633,500**
1995-96	**246**	**--**	**7**	**3,991**	**672,870**	**2,735**	**--**	**--**	**--**	**0**	**4,014,590**
1996-97	**250**	**--**	**26**	**13,556**	**2,954,030**	**11,816**	**--**	**--**	**--**	**0**	**4,193,670**
1997-98	**244**	**--**	**38**	**13,569**	**3,701,930**	**15,172**	**--**	**--**	**--**	**0**	**4,815,030**
1998-1999	**251**	**--**	**55**	**16,533**	**4,144,740**	**16,513**	**--**	**854**	**238,180**	**5.75**	**4,911,751**
1999-2000	**254**	**--**	**98**	**24,270**	**8,390,515**	**33,034**	**--**	**15,377**	**7,117,057**	**84.82**	**10,204,257**
2000-01	**251**	**1201**	**168**	**32,954**	**13,395,102**	**53,367**	**--**	**30,722**	**12,643,372**	**94.39**	**6,578,470**
2001-02	**247**	**1,019**	**175**	**27,841**	**5,131,674**	**20,776**	**--**	**27,772**	**5,128,661**	**99.94**	**6,368,610**
Apr-02	22	843	20	2,880	533,200	24,236	8.21	2,878	533,159	99.99	6,495,510
May-02	22	821	22	3,530	549,791	24,990	8.70	3,530	549,791	100.00	6,316,092
Jun-02	20	825	19	3,852	442,411	22,121	6.70	3,852	442,411	100.00	6,599,910
Jul-02	23	820	21	3,682	513,984	22,347	8.44	3,682	513,984	100.00	6,086,430
Aug-02	21	806	19	2,600	461,131	21,959	7.29	2,600	461,131	100.00	6,326,180
Sep-02	20	806	18	2,558	464,986	23,249	7.75	2,558	464,986	100.00	5,996,032
Oct-02	21	770	20	2,646	519,022	24,715	8.55	2,646	519,022	100.00	6,067,880
Nov-02	19	767	17	2,363	513,515	27,027	7.96	2,363	513,515	100.00	6,453,880
Dec-02	21	762	22	3,302	619,733	29,511	9.21	3,302	619,733	100.00	6,728,620
Jan-03	23	763	24	3,634	647,622	28,157	11.32	3,634	647,622	100.00	5,722,766
Feb-03	19	760	19	2,868	482,892	25,415	8.30	2,868	482,892	100.00	5,819,850
Mar-03	20	762	18	2,492	431,599	21,580	8.04	2,492	431,599	100.00	5,371,332
2002-03	**251**	**899**	**240**	**36,407**	**6,179,886**	**24,621**	**--**	**36,405**	**6,179,845**	**100.00**	**5,371,332**
Apr-03	20	749	21	3,145	489,713	24,486	9.23	3,145	489,713	100.00	5,306,304
May-03	21	743	25	4,400	546,902	26,043	8.94	4,400	546,902	100.00	6,120,303
Jun-03	21	744	27	5,190	615,857	29,327	9.08	5,190	615,857	100.00	6,785,500
Jul-03	23	755	32	6,491	788,776	34,295	10.97	6,491	788,776	100.00	7,191,449
Aug-03	20	752	32	8,455	853,466	42,673	10.20	8,455	853,466	100.00	8,366,505
Sep-03	22	761	35	7,185	1,033,456	46,975	11.97	7,185	1,033,456	100.00	8,634,805
Oct-03	23	728	36	7,177	1,155,953	50,259	12.47	7,177	1,155,953	100.00	9,267,479
Nov-03	20	738	31	5,672	928,858	46,443	9.48	5,672	928,858	100.00	9,795,410
Dec-03	22	754	38	7,175	1,103,726	50,169	9.46	7,175	1,103,726	100.00	11,670,287
Jan-04	21	761	40	7,334	1,342,687	63,937	12.03	7,334	1,342,687	100.00	11,161,500
Feb-04	19	763	31	4,648	1,087,181	57,220	9.79	4,648	1,087,181	100.00	11,109,543
Mar-04	22	769	32	4,459	1,048,765	47,671	9.36	4,459	1,048,765	100.00	11,209,760
2003-04	**254**	**804**	**379**	**71,330**	**10,995,339**	**43,289**	**--**	**71,330**	**10,995,339**	**100.00**	**11,209,760**
Apr-04	20	771	32	5,369	1,009,512	50,476	8.61	5,369	1,009,512	100.00	11,718,279
May-04	21	776	36	5,465	989,199	47,105	10.41	5,465	989,199	100.00	9,504,938
Jun-04	22	787	34	4,199	848,985	38,590	8.67	4,199	848,985	100.00	9,796,999
Jul-04	22	793	38	6,306	938,361	42,653	8.80	6,306	938,361	100.00	10,660,873
Aug-04	22	799	36	5,754	868,557	39,480	7.60	5,754	868,557	100.00	11,430,748
Sep-04	22	809	37	6,267	885,081	40,231	7.21	6,267	885,081	100.00	12,275,502
Oct-04	20	814	30	4,727	756,976	37,849	6.04	4,727	756,976	100.00	12,538,253
Nov-04	20	816	33	6,255	820,353	41,018	5.67	6,255	820,353	100.00	14,462,924
Dec-04	23	821	47	9,933	1,155,931	50,258	7.32	9,933	1,155,931	100.00	15,791,608
Jan-05	19	820	41	8,158	997,319	52,490	6.40	8,158	997,319	100.00	15,574,438

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Annexure 4-2: Business Growth of CM Segment of NSE

Month/ Year	No. of Trading Days	No. of Companies Traded	No. of Trades (mn.)	Traded Quantity (mn.)	Turnover (Rs. mn.)	Average Daily Turnover (Rs. mn.)	Turnover Ratio (%)	Demat Securities Traded (mn.)	Demat Turnover (Rs. mn.)	Demat Turnover as a % of Total Turnover	Market Capital-isation (Rs. mn.) *
Feb-05	20	825	42	8,967	999,895	49,995	6.19	8,967	999,895	100.00	16,145,971
Mar-05	22	831	46	8,370	1,130,551	51,389	7.13	8,370	1,130,551	100.00	15,855,853
2004-05	**253**	**856**	**451**	**79,769**	**11,400,720**	**45,062**	**--**	**79,769**	**11,400,720**	**100.00**	**15,855,853**
Apr-05	20	829	37	5,127	827,183	41,359	5.45	5,127	827,183	100.00	15,179,079
May-05	22	830	41	5,652	868,020	39,455	5.24	5,652	868,020	100.00	16,549,947
Jun-05	23	843	48	7,048	1,113,970	48,433	6.45	7,048	1,113,970	100.00	17,275,024
Jul-05	20	856	50	8,413	1,230,080	61,504	6.65	8,413	1,230,080	100.00	18,487,400
Aug-05	22	864	57	10,072	1,457,313	66,242	7.44	10,072	1,457,313	100.00	19,574,909
Sep-05	21	872	58	9,200	1,453,932	69,235	6.93	9,200	1,453,932	100.00	20,982,633
Oct-05	20	887	46	5,767	1,208,099	60,405	6.27	5,767	1,208,099	100.00	19,276,445
Nov-05	20	872	43	5,387	1,095,785	54,789	5.06	5,387	1,095,785	100.00	21,668,229
Dec-05	22	888	55	6,370	1,499,083	68,140	6.45	6,370	1,499,083	100.00	23,223,921
Jan-06	20	893	55	6,672	1,494,421	74,721	6.14	6,672	1,494,421	100.00	24,343,946
Feb-06	19	900	52	6,163	1,353,742	71,250	5.39	6,163	1,353,742	100.00	25,120,830
Mar-06	22	920	66	8,579	2,093,951	95,180	7.44	8,579	2,093,951	100.00	28,132,007
2005-06	**251**	**928**	**609**	**84,449**	**15,695,579**	**62,532**	**--**	**84,449**	**15,695,579**	**100.00**	**28,132,007**

* At the end of the period.
Source: NSE

Secondary Market - Clearing and Settlement

Policy Developments

The major policy developments during the period April 2005 to June 2006 is presented below :-

I. Margining in Cash Market

Currently in the cash market, VaR margin rate is calculated at the end of the trading day and then applied to the open positions of the subsequent trading day. However, in the derivative market, the risk parameter files for computation of the margins are updated intra-day.

With a view to ensure market safety and protect the interest of investors and also to further align the risk management framework across the cash and derivative markets, it has been decided that the risk arrays should be updated intra-day in the cash market as has been done in the derivative market. The applicable VaR margin rates shall be updated at least 5 times in a day, which may be carried out by taking the closing price of the previous day at the start of trading and the prices at 11:00 a.m., 12:30 p.m., 2:00 p.m. and at the end of the trading session.

II. Revised Activity Schedule for T+2 Rolling Settlement.

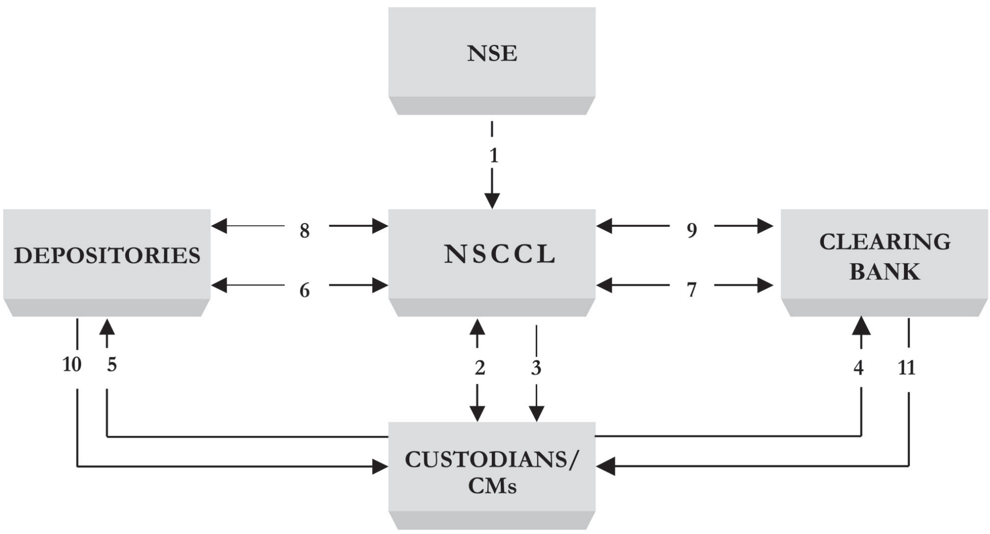
In order to provide more time for the custodians to confirm the trades following the decision to discontinue hand delivery bargains/D*v*P trades, it had been decided to revise the activity schedule for T+2 rolling settlement. The revised schedule is given below and been effective from September 19, 2005.

Sl. No.	Day	Time	Description of Activity
1	T		Trade Day
2	T+1	By 1.00 p.m	Completion of Custodial confirmation of trades to CC/CH.
		By 2.30 p.m	Completion of process and download obligation files to brokers/custodians by the CC/CH
3	T+2	By 11.00 a.m	Pay-in of Securities and Funds
		By 1.30 p.m	Pay-out of Securities and Funds

Clearing and Settlement Processes

The transactions in secondary market pass through three distinct phases, viz., trading, clearing and settlement. While the stock exchanges provide the platform for trading, the clearing corporation determines the funds and securities obligations of the trading members and ensures that the trade is settled through exchange of obligations. The clearing banks and the depositories provide the necessary interface between the custodians/clearing members for settlement of funds and securities obligations of trading members. The clearing process involves determination of what counter-parties owe, and which counter-parties are due to receive on the settlement date, thereafter the obligations are discharged by settlement. The clearing and settlement process for transaction in securities on NSE is presented in Chart 5.1.

Chart 5-1: Clearing and Settlement Process at NSE



1. Trade details from Exchange to NSCCL (real-time and end of day trade file).
2. NSCCL notifies the consummated trade details to clearing members/custodians who affirm back. Based on the affirmation, NSCCL 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 (NSCCL advises depository to debit pool account of custodians/CMs and credit its account and depository does it)
7. Pay-in of funds(NSCCL advises Clearing Banks to debit account of custodians/CMs and credit its account and clearing bank does it)
8. Pay-out of securities (NSCCL advises depository to credit pool account of custodians/CMs and debit its account and depository does it)
9. Pay-out of funds (NSCCL advises Clearing Banks to credit account of custodians/CMs and debit its account and clearing bank does it)
10. Depository informs custodians/CMs through DPs.
11. Clearing Banks inform custodians/CMs.

Several entities, like the clearing corporation, clearing members, custodians, clearing banks, depositories are involved in the process of clearing. The role of each of these entities is explained below:

- *Clearing Corporation:* The clearing corporation is responsible for post-trade activities such as the risk management and the clearing and settlement of trades executed on a stock exchange.
- *Clearing Members:* Clearing Members are responsible for settling their obligations as determined by the NSCCL. They do so by making available funds and/or securities in the designated accounts with clearing bank/depositories on the date of settlement.
- *Custodians:* Custodians are clearing members but not trading members. They settle trades on behalf of trading members, when a particular trade is assigned to them for settlement. The custodian is required to confirm whether he is going to settle that trade or not. If he confirms to settle that trade, then clearing corporation assigns that particular obligation to him. As on date, there are 10 custodians empanelled with NSCCL. They are , Citibank N.A., Deutsche Bank A.G., HDFC Bank Limited, HSBC Limited, ICICI Limited, IL&FS Limited, Standard Chartered Bank, State Bank of India SHCIL and Kotak Mahendra Bank Ltd.
- *Clearing Banks:* Clearing banks are a key link between the clearing members and Clearing Corporation to effect settlement of funds. Every clearing member is required to open a dedicated clearing account with one of the designated clearing banks. Based on the clearing member's obligation as determined through clearing, the clearing member makes funds available in the clearing account for the pay-in and receives funds in case of a pay-out. There are 12 clearing banks of NSE, viz., Bank of India Ltd., Canara Bank Ltd., HSBC Ltd., ICICI Bank Ltd. HDFC Bank Ltd., IDBI Bank Ltd., Indusind Bank Ltd., Kotak Mahendra Bank, Standard Chartered Bank, State Bank of India, Union Bank of India and UTI Bank Ltd.
- *Depositories:* Depository holds securities in dematerialized form for the investors in their beneficiary accounts. Each clearing member is required to maintain a clearing pool account with the depositories. He is required to make available the required securities in the designated account on settlement day. The depository runs an electronic file to transfer the securities from accounts of the custodians/clearing member to that of NSCCL and visa-versa as per the schedule of allocation of securities.
- *Professional Clearing Member:* NSCCL admits special category of members known as professional clearing members (PCMs). PCMs may clear and settle trades executed for their clients (individuals, institutions etc.). In such cases, the functions and responsibilities of the PCM are similar to that of the custodians. PCMs also undertake clearing and settlement responsibilities of the trading members. The PCM in this case has no trading rights, but has clearing rights i.e. he clears the trades of his associate trading members and institutional clients.

Settlement Cycle

NSCCL clears and settles trades as per the well-defined settlement cycles (Table 5.1). All the securities are being traded and settled under T+2 rolling settlement. The NSCCL notifies the relevant trade details to clearing members/custodians on the trade day (T), which are affirmed on T+1 to NSCCL. Based on it, NSCCL nets the positions of counterparties to determine their obligations. A clearing member has to pay-in/pay-out funds and/or securities. The obligations are netted for a member across all securities to determine his fund obligations and he has to either pay or receive funds. Members' pay-in/pay-out obligations are determined latest by T+1 and are forwarded to them on the same day, so that they can settle their obligations on T+2. The securities/funds are paid-in/paid-out on T+2 day to the members' clients' and the settlement is complete in 2 days from the end of the trading day.

Table 5-1: Settlement Cycle in CM Segment

Activity	T+2 Rolling Settlement (From April 1, 2003)
Trading	T
Custodial Confirmation	T+1
Delivery generation	T+1
Securities/Funds Pay-in	T+2
Securities/Funds Pay-out	T+2
Valuation Debit	T+2.
Auction	T+3
Bad Delivery Reporting	T+4
Auction Pay-in/Pay-out	T+5
Close Out	T+5
Rectified Bad Delivery Pay-in/Pay-out	T+6
Re-bad Delivery Reporting	T+8
Close Out of Re-bad Delivery	T+9

T+1 means one working day after the trade day. Other T+ terms have similar meanings.
Source: NSE

Risk Management

A sound risk management system is integral to an efficient clearing and settlement system. The clearing corporation ensures that trading members' obligations are commensurate with their net worth. It has put in place a comprehensive risk management system, which is constantly being monitored and upgraded to prevent market failures. It monitors the track record and performance of members in terms of their net worth, positions and exposure with the market, collects margins. If the prescribed limits on positions and exposures are breached, then automatically the members are disabled. To safeguard the interest of the investors, NSE administers an effective market surveillance system to detect excessive volatility and prevents price manipulation by setting up price bands. Further, the exchange maintains strict surveillance over market activities in illiquid and volatile securities.

Risk Containment Measures

The risk containment measures have been repeatedly reviewed and revised to be up to date with the market realities. This section however discusses the measures prevailing as in June 2006.

Capital Adequacy Requirements

The capital adequacy requirements stipulated by the NSE are substantially in excess of the minimum statutory requirements as also to those stipulated by other stock exchanges. A person/ entity seeking membership in the CM segment is required to have a net worth of Rs. 10 million and keep an interest free security deposit of Rs. 12.5 million and collateral security deposit of Rs. 2.5 million with the Exchange/NSCCL. The deposits kept with the Exchange as part of the membership requirement are taken as base capital to determine the member's intra-day trading limit and/or gross exposure limit. Additional base capital is required to be deposited by the member for taking additional exposure. The capital adequacy norms to be followed by members are presented in Table 5.2.

Table 5-2: Capital Adequacy Norms for Membership on NSE

Requirement	Members of			Professional Clearing Members of	
	CM and F&O Segment	CM and WDM Segment	CM, WDM and F&O Segment	CM Segment	CM and F&O Segment
Net Worth	Rs. 100 lakh	Rs. 200 lakh	Rs. 200 lakh	Rs. 300 lakh	Rs. 300 lakh
Interest Free Security Deposit (IFSD)	Rs. 125 lakh	Rs. 250 lakh	Rs. 275 lakh	Rs. 25 lakh	Rs. 34 lakh
Collateral Security Deposit (CSD)	Rs. 25 lakh	Rs. 25 lakh	Rs. 25 lakh	Rs. 25 lakh	Rs. 50 lakh

Note: Note: A professional clearing member (PCM) is required to bring in IFSD of Rs.6 lakh and CSD of Rs.17.5 lakh (Rs. 9 lakh and Rs.25 lakh respectively for corporate members) per trading member in the CM segment.

Source: NSE.

On-Line Monitoring

NSCCL has put in place an on-line monitoring and surveillance system, whereby exposure of the members is monitored on a real time basis. A system of alerts has been built in so that both the member and the NSCCL are alerted as per pre-set levels (reaching 70%, 85%, 90%, 95% and 100%) as and when the members approach these limits. The system enables NSSCL to further check the micro-details of members' positions, if required and take pro-active action.

The on-line surveillance mechanism also generates alerts/reports on any price/ volume movement of securities not in line with past trends/patterns. Open positions of securities are also analyzed. For this purpose the exchange maintains various databases to generate alerts. These alerts are scrutinized and if necessary taken up for follow up action. Besides this, rumors in the print media are tracked and where they are found to be price sensitive, companies are approached to verify the same. This is then informed to the members and the public.

Inspection and Investigation

There is a regulatory requirement that a minimum of 20% of the active trading members should be inspected every year to verify their level of compliance with various rules, byelaws and regulations of the Exchange. Usually, inspection of more members than the regulatory requirement is undertaken every year. The inspection randomly verifies if the investor interests are being compromised in the conduct of business by the members. On the basis of various alerts further analysis is carried out. If it suggests any possible irregularity such as deviations from the past trends/patterns, concentration of trading at NSE at the member level, then a more detailed investigation is undertaken. If the detailed investigation establishes any irregular activity, then a disciplinary action is initiated against the member. If the investigation suggests suspicions of possible irregular activity across the stock exchanges and/or possible involvement of clients, the same is informed to SEBI.

Margin Requirements

NSCCL imposes stringent margin requirements as part of its risk containment measures. The categorisation of stocks for imposition of margins is as given below:

- The Stocks which have traded at least 80% of the days for the previous six months shall constitute the Group I and Group II.
- Out of the scrips identified above, the scrips having mean impact cost of less than or equal to 1% shall be categorized under Group I and the scrips where the impact cost is more than 1, shall be categorized under Group II.
- The remaining stocks shall be classified into Group III.
- The impact cost shall be calculated on the 15th of each month on a rolling basis considering the order book snapshots of the previous six months. On the basis of the impact cost so calculated, the scrips shall move from one group to another group from the 1st of the next month.
- For securities that have been listed for less than six months, the trading frequency and the impact cost shall be computed using the entire trading history of the security.

Categorisation of newly listed securities

For the first month and till the time of monthly review a newly listed security shall be categorized in that Group where the market capitalization of the newly listed security exceeds or equals the market capitalization of 80% of the securities in that particular group. Subsequently, after one month, whenever the next monthly review is carried out, the actual trading frequency and impact cost of the security shall be computed, to determine the liquidity categorization of the security.

In case any corporate action results in a change in ISIN, then the securities bearing the new ISIN shall be treated as newly listed security for group categorization. The daily margin is the sum of Mark to Market Margin (MTM margin) and Value at Risk-based Margin (VaR-based margin). VaR margin is applicable for all securities in rolling settlement

Value at Risk Margin

All securities are classified into three groups for the purpose of VaR margin.

- For the securities listed in Group I, scrip wise daily volatility calculated using the exponentially weighted moving average methodology shall be applied to daily returns in the same manner as in the derivatives market. The scrip wise daily VaR would be 3.5 times the volatility so calculated subject to a minimum of 7.5%.
- For the securities listed in Group II, the VaR margin shall be higher of scrip VaR (3.5 sigma) or three times the index VaR, and it shall be scaled up by root 3.
- For the securities listed in Group III, the VaR margin would be equal to five times the index VaR and scaled up by root 3.
- In case of securities in Trade for Trade segment (TFT segment) VaR as applicable to Group 3 (illiquid securities) shall be applicable

  VaR margin rate for a security constitutes the following:

  1. Value at Risk (VaR) based margin, which is arrived at, based on the methods stated above. The index VaR, for the purpose, would be the higher of the daily Index VaR based on NIFTY or BSE SENSEX. The index VaR would be subject to a minimum of 5%.
  2. Security specific Margin: NSCCL may stipulate security specific margins for the securities from time to time.

The VaR margin rate computed as mentioned above will be charged on the net outstanding position (buy value-sell value) of the respective clients on the respective securities across all open settlements. There would be no netting off of positions across different settlements. The net position at a client level for a member are arrived at and thereafter, it is grossed across all the clients including proprietary position to arrive at the gross open position.

For example, in case of a member, if client A has a buy position of 1000 in a security and client B has a sell position of 1000 in the same security, the net position of the member in the security would be taken as 2000. The buy position of client A and sell position of client B in the same security would not be netted. It would be summed up to arrive at the member's open position for the Purpose of margin calculation.

The Var margin shall be collected on an upfront basis by adjusting against the total liquid assets of the member at the time of trade. The VaR margin so collected shall be released on completion of pay-in of the settlement.

The details of all margins (VAR, extreme loss margin and mark to market) as at end of each day will be downloaded to members in their respective Extranet directory.

Extreme Loss Margin

The Extreme Loss Margin for any security shall be higher of:

1. 5%, or
2. 1.5 times the standard deviation of daily logarithmic returns of the security price in the last six months. This computation shall be done at the end of each month by taking the price data on a rolling basis for the past six months and the resulting value shall be applicable for the next month.

- The Extreme Loss Margin shall be collected/ adjusted against the total liquid assets of the member on a real time basis.
- The Extreme Loss Margin shall be collected on the gross open position of the member. The gross open position for this purpose would mean the gross of all net positions across all the clients of a member including its proprietary position.
- There would be no netting off of positions across different settlements. The Extreme Loss Margin collected shall be released on completion of pay-in of the settlement.
- The details of all margins (VAR, extreme loss margin and mark to market) as at end of each day will be downloaded to members in their respective Extranet directory.

Mark-to-Market Margin

Mark to market loss shall be calculated by marking each transaction in security to the closing price of the security at the end of trading. In case the security has not been traded on a particular day, the latest available closing price at the NSE shall be considered as the closing price. In case the net outstanding position in any security is nil, the difference between the buy and sell values shall be considered as notional loss for the purpose of calculating the mark to market margin payable.

The mark to market margin (MTM) shall be collected from the member before the start of the trading of the next day.

The MTM margin shall also be collected/adjusted from/against the cash/cash equivalent component of the liquid net worth deposited with the Exchange.

The MTM margin shall be collected on the gross open position of the member. The gross open position for this purpose would mean the gross of all net positions across all the clients of a member including its proprietary position. For this purpose, the position of a client would be netted across its various securities and the positions of all the clients of a broker would be grossed.

There would be no netting off of the positions and setoff against MTM profits across two rolling settlements i.e. T day and T-1 day. However, for computation of MTM profits/losses for the day, netting or setoff against MTM profits would be permitted.

In case of Trade for Trade Segment (TFT segment) each trade shall be marked to market based on the closing price of that security.

The MTM margin so collected shall be released on completion of pay-in of the settlement

Index-based Market-wide Circuit Breakers

An index based market-wide circuit breaker system applies at three stages of the index movement either way at 10%, 15% and 20%. These circuit breakers bring about a coordinated trading halt in trading on all equity and equity derivatives markets across the country. The breakers are triggered by movements in either Nifty or Sensex, whichever is breached earlier.

- In case of a 10% movement in either of these indices, there would be a one-hour market halt if the movement takes place before 1:00 p.m. In case the movement takes place at or after 1:00 p.m. but before 2:30 p.m. there would be trading halt for ½ hour. In case movement takes place at or after 2:30 p.m. there will be no trading halt at the 10% level and market would continue trading.

- In case of a 15% movement of either index, there should be a two-hour halt if the movement takes place before 1 p.m. If the 15% trigger is reached on or after 1:00 p.m. but before 2:00 p.m., there should be a one-hour halt. If the 15% trigger is reached on or after 2:00 p.m. the trading should halt for remainder of the day.
- In case of a 20% movement of the index, trading should be halted for the remainder of the day.

Settlement Process

The settlement process begins as soon as members' obligations are determined through the clearing process. The settlement process is carried out by the Clearing Corporation with the help of clearing banks and depositories. The Clearing Corporation provides a major link between the clearing banks and the depositories. This link ensures actual movement of funds as well as securities on the prescribed pay-in and pay-out day.

This requires members to bring in their funds/securities to the clearing corporation. The CMs make the securities available in designated accounts with the two depositories (CM pool account in the case of NSDL and designated settlement accounts in the case of CSDL). The depositories move the securities available in the pool accounts to the pool account of the clearing corporation. Likewise CMs with funds obligations make funds available in the designated accounts with clearing banks. The clearing corporation sends electronic instructions to the clearing banks to debit designated CMs' accounts to the extent of payment obligations. The banks process these instructions, debit accounts of CMs and credit accounts of the clearing corporation. This constitutes pay-in of funds and of securities.

After processing for shortages of funds/securities and arranging for movement of funds from surplus banks to deficit banks through RBI clearing, the clearing corporation sends electronic instructions to the depositories/clearing banks to release pay-out of securities/funds. The depositories and clearing banks debit accounts of the Clearing Corporation and credit accounts of CMs. This constitutes pay-out of funds and securities.

Settlement is deemed to be complete upon declaration and release of pay-out of funds and securities. The settlement cycle for the CM segment are presented in Table 5.1.

Dematerialised Settlement

NSE along with leading financial institutions established the National Securities Depository Ltd. (NSDL), the first depository in the country, with the objective to reduce the menace of fake/forged and stolen securities and thereby enhance the efficiency of the settlement systems. This has ushered in an era of dematerialized trading and settlement. SEBI, too, has been progressively promoting dematerialisation by mandating settlement only through dematerialized form for more and more securities. The share of demats delivery in total delivery at NSE touched almost 99.99% in terms of value during 2005-06.

Settlement Guarantee

The Settlement Guarantee Fund provides a cushion for any residual risk and operates like a self-insurance mechanism wherein members themselves contribute to the fund. In the event of a trading member failing to meet his settlement obligation, then the fund is utilized to the extent required for successful completion of the settlement. This has eliminated counter-party risk of trading on the Exchange.

As in case of NSCCL, other stock exchanges also have been allowed by the SEBI to use trade guarantee funds (TGFs) maintained by them for meeting the shortages arising out of non-fulfillment/partial fulfillment of funds obligations by members in a settlement before declaring the concerned member a defaulter, subject to the condition that: (a) in cases where the shortage was in excess of the BMC, the trading facility of the member was withdrawn and the securities pay out due to the member was withheld, (b) in cases where the shortage exceeded 20% of the BMC and was less than the BMC on six occasions within a period of three months, the trading facility of the member was withdrawn and the securities pay-out to the member was withheld. On recovery of the complete shortages, the member would be permitted to trade with a reduced exposure.

Settlement Statistics

The details of settlement of trades on CM segment of NSE are provided in Annexure 5.1. There has been a substantial reduction in short and bad deliveries. Short deliveries averaged around 0.39% of total delivery in 2005-06. The ratio of bad deliveries to net deliveries progressively declined to almost negligible in 2005-06.

During 2005-06, taking all stock exchanges together, 35.57% of securities accounting for 28.49% turnover were settled by delivery and the balance were squared up/netted out (Table 5.3). In the preceding year, 30.92% of shares accounting for 25.05% of turnover were settled by delivery. This indicates preference for non-delivery-based trades.

Table 5.3: Delivery Pattern in Stock Exchanges

(In per cent)

Exchange	2004-05		2005-06	
	Quantity	Value	Quantity	Value
NSEIL	25.67	24.22	27.66	25.99
Mumbai	39.62	27.00	45.25	33.24
Calcutta	40.91	46.48	56.23	60.32
Delhi	0.00	0.00	0.00	0.00
Ahmedabad	1.25	3.13	0.00	0.00
Uttar Pradesh	1.46	0.52	0.28	2.83
Bangalore	0.00	0.00	0.00	0.00
Ludhiana	0.00	0.00	0.00	0.00
Pune	0.00	0.00	0.00	0.00
OTCEI	0.00	0.00	100.00	100.00
Hyderabad	82.22	65.00	96.00	95.82
ICSEIL	0.00	0.00	0.00	0.00
Chennai	--	--	100.00	97.80
Vadodara	0.00	0.00	0.00	0.00
Bhubaneshwar	0.00	0.00	0.00	0.00
Coimbatore	0.00	0.00	0.00	0.00
Madhya Pradesh	0.00	0.00	0.00	0.00
Magadh	0.00	0.00	0.00	0.00
Jaipur	0.00	0.00	0.00	0.00
Mangalore	0.00	0.00	0.00	0.00
Gauhati	0.00	0.00	0.00	0.00
SKSE	0.00	0.00	0.00	0.00
Cochin	0.00	0.00	0.00	0.00
Total	**30.92**	**25.05**	**35.57**	**28.49**

* Delivery ratio represents percentage of delivery to turnover of a Stock Exchange
Source: SEBI.
Quantity = qnty shares delivered as a % of no. of shares traded
Value = value of shares delivered as a % of turnover

Table 5.1: Settlement Statistics in CM Segment of NSE

Month/ Year	No. of Trades (mn.)	Traded Quantity (mn.)	Quantity of Shares Deliverable (mn.)	% of Shares Delivered to Total Shares Traded	Turnover (Rs. mn.)	Value of Shares Deliverable (Rs. mn.)	% of Delivery to Value of Shares Traded	Securities Pay-in (Rs. mn.)	Short Delivery (Auctioned quantity) (mn.)	% of Short Delivery to Delivery	Unrectified Bad Delivery (Auctioned quantity (mn.)	% of Unrectified Bad Delivery to Delivery	Funds Pay-in (Rs. mn.)
Apr-05	36	5,195	1,315	25.31	830,379	216,237	26.04	215,385	6	0.48	0.00	0.00	76,911
May-05	41	5,628	1,527	27.14	884,437	245,605	27.77	244,493	8	0.49	0.00	0.00	79,205
Jun-05	46	6,679	1,829	27.38	1,061,326	300,648	28.33	299,637	8	0.42	0.00	0.00	105,857
Jul-05	47	7,798	2,101	26.95	1,147,291	313,081	27.29	311,979	9	0.43	0.00	0.00	101,738
Aug-05	58	10,013	2,831	28.27	1,525,605	428,940	28.12	427,448	12	0.43	0.00	0.00	134,044
Sep-05	54	8,535	2,300	26.94	1,320,876	356,177	26.97	354,630	11	0.49	0.00	0.00	103,726
Oct-05	50	6,473	1,822	28.14	1,353,763	338,570	25.01	337,409	7	0.40	0.00	0.00	131,706
Nov-05	42	5,201	1,416	27.24	1,047,482	276,525	26.40	275,745	5	0.32	0.00	0.00	91,549
Dec-05	55	6,211	1,723	27.75	1,428,141	362,951	25.41	361,941	5	0.29	0.00	0.00	114,822
Jan-06	55	6,601	1,861	28.19	1,482,577	400,983	27.05	399,644	7	0.36	0.00	0.00	136,334
Feb-06	52	6,032	1,770	29.34	1,337,526	373,521	27.93	372,459	6	0.31	0.00	0.00	105,809
Mar-06	62	7,477	2,229	29.81	1,748,987	480,289	27.46	478,989	6	0.29	0.00	0.00	132,557
2005-06	**600**	**81,844**	**22,724**	**27.77**	**15,168,390**	**4,093,525**	**26.99**	**4,079,759**	**89**	**0.39**	**0.00**	**0.00**	**1,314,256**

Debt Market

Introduction

The debt market in India comprises mainly of two segments viz., the Government securities market consisting of Central and State Governments securities, Zero Coupon Bonds (ZCBs), Floating Rate Bonds (FRBs), T-Bills and the corporate securities market* consisting of FI bonds, PSU bonds, and Debentures/Corporate bonds. Government securities form the major part of the market in terms of outstanding issues, market capitalization and trading value. It sets benchmark for the rest of the market. The market for debt derivatives have not yet developed appreciably though a market for OTC derivatives in interest rate products exists.

During 2005-06, the government and corporate sector collectively mobilized Rs. 2,611,928 million from primary debt market, a rise of 27.49% as compared to the preceding year (Table 6-1). About 69.58% of these were raised by the government (Central and State Governments), while the balance amount was mobilized by the corporate sector through public and private placement issues. The turnover in secondary debt market during 2005-06 aggregated Rs. 26,053,916 million, 13% lower than that in the previous year. The share of NSE in total turnover in debt securities remained at about 18.25% during 2005-06.

Table 6.1: Debt Market: Selected Indicators

(In Rs. mn.)

Issuer/Securities	Amount raised form Primary Market		Turnover in Secondary Market	
	2004-05	2005-06	2004-05	2005-06
Government	1,456,020	1,817,470	29,552,626	25,804,000*
Corporate/Non Government	592,788	794,458	384,187	249,916
Total	**2,048,808**	**2,611,928**	**29,936,813**	**26,053,916**

Source: Primedatabase, RBI and NSE.
* includes NDS-OM turnover

* This chapter discusses the market design and outcome in the government securities market, both primary and secondary segment. Data availability for secondary market for corporate debt securities is limited. Wherever possible, the developments in the secondary market for corporate debt are also covered in this chapter. The developments in primary corporate debt market are presented in Chapter 2 of this publication.

Policy Developments

Various initiatives taken by the RBI and SEBI during April 2005 to June 2006 are enumerated in this section.

I. Secondary Market Transactions in Government Securities - Intra-day short-selling:

Guidelines issued by the Reserve Bank of India for the proposal of introducing Intra-day short selling in government securities.

- Banks and Primary Dealers (PDs) may undertake outright sale of Central Government dated security that they do not own, subject to the same being covered by outright purchase from the secondary market within the same trading day.
- Intra-day short selling is being permitted subject to the following conditions:
  - a) Intra-day short sale transaction and also the covering of short position should be executed only on the Negotiated Dealing System - Order Matching (NDS-OM) platform.
  - b) Under no circumstances should the short position be left uncovered at the end of the day. Inability to cover a short position during the trading day itself shall be treated as an instance of 'SGL bouncing' and will be liable to the disciplinary action prescribed in respect of SGL bouncing, besides attracting such further regulatory action as necessary.
  - c) At no point of time should a bank/PD accumulate a short position in excess of 0.25 per cent of the outstanding stock of a security. The information regarding the outstanding stock of each Government of India dated security is being made available on the RBI website (URL: www.rbi.org.in) with effect from March 1, 2006 to facilitate monitoring in this regard.
  - d) Gilt Accounts Holders (GAHs), under CSGL facility are not permitted to undertake intra-day short selling. Those entities providing CSGL facility are required to ensure that no short-sale is undertaken by the GAHs.
- Before actually undertaking transactions in terms of this circular, banks/PDs are required to have in place a written policy on 'intra-day' short sale which should be approved by their respective Boards of Directors. The policy should lay down the internal guidelines which should include, inter alia, risk limits on short position, an aggregate nominal short sale limit (in terms of Face Value) across all eligible securities, the internal control systems to ensure adherence to regulatory and internal guidelines, reporting of short selling activity to the top management and the RBI, procedure to deal with violations, etc. (A copy of the said policy should be sent for prior information to the Internal Debt Management Department (IDMD) of the RBI.) A bank/PD must have in place a system to detect violations if any, immediately, certainly within the same trading day. A bank/PD which cannot ensure such prompt detection should not undertake short sale.
- The concurrent auditors should specifically verify compliance with these instructions and report violations, if any, on the date of trade itself, within a

reasonably short time, to the appropriate internal authority. As part of their monthly reporting, concurrent auditors may verify whether the independent back office has taken cognizance of all such lapses and reported the same within the required time frame. Any violation of regulatory guidelines noticed in this regard should immediately be reported to the Public Debt Office (PDO), Mumbai and IDMD, Reserve Bank of India.

- Banks / PDs are also required to report, as per the format in the Annex, to IDMD, RBI on a monthly basis, the daily security-wise maximum intra-day short sale position. This report will be sent on the first working day of the succeeding month.
- These guidelines will be reviewed periodically to consider modifications and continuance, as appropriate.

II. When Issued Transactions in Central Government Securities

As part of restructuring the debt issuance framework in light of Fiscal Responsibility and Budget Management (FRBM) Act, 2003, the Internal Technical Group on Central Government Securities had recommended introduction of 'When Issued' markets in Central Government Securities.

'When Issued', a short form of "when, as and if issued ", indicates a conditional transaction in a security authorized for issuance but not as yet actually issued. All "when issued" transactions are on an "if" basis, to be settled if and when the actual security is issued.

'When Issued' market has two basic advantages :-

- It facilitates the distribution process for Government securities by stretching the actual distribution period for each issue and allowing the market more time to absorb large issues without disruption.
- 'When Issued' market also facilitates price discovery process by reducing uncertainties surrounding auctions.

Such 'When Issued' transactions shall be undertaken ***only on*** NDS-OM platform.

III. FII investments in Debt Securities

As mentioned in Circular NO. IMD/FII/20/2006 the Government of India has raised the cumulative debt investment limits from US$1.75 billion to US$2 billion and US$1.5 billion for FII/Sub Account investments in Government securities and Corporate Debt, respectively. These limits are separate and not fungible.

The following shall be applicable :

Revised limit	100% debt	70:30	Total permissible
Govt securities/ t-bills	1.75	0.25	2.00
Corporate debt	1.35	0.15	1.50
Total			**3.50**

IV. Monetary & Credit Policy and Mid-term Review of Monetary and Credit Policy, 2005-06

The Monetary and Credit Policy for 2005-2006 proposed the following :

- Reverse repo rate raised by 25 bps to 5.25% and RBI also raised he fixed rate repo rate by 25bps to 6.25% with effect from Oct 26
- Bank rate kept unchanged at 6.00%
- Cash reserve ratio (CRR) unchanged at 5.00%
- Introduce intra-day short selling in government securities
- To extend NDS-OM module to all insurance entities which re mandated to invest in government securities.

V. Annual Policy Statement for 2006-07

RBI Governor announces Annual Policy Statement for the year 2006-07. The Annual policy envisaged the following :

- Focus on credit quality and financial market conditions for maintaining macroeconomic, in particular, financial stability.
- Monetary and interest rate environment enabling growth momentum consistent with price stability.
- Bank Rate, Reverse Repo Rate, Repo Rate and Cash Reserve Ratio kept unchanged.
- GDP growth projection for 2006-07 at 7.5-8.0 per cent.
- Inflation to be contained within 5.0-5.5 per cent during 2006-07.
- M3 projected to expand by around 15.0 per cent for 2006-07. In normal circumstances, the policy preference would be for maintaining a lower order of money supply growth in 2006-07.
- Deposits projected to grow by around Rs.3,30,000 crore for 2006-07.
- Adjusted non-food credit projected to increase by around 20 per cent, implying a calibrated deceleration from a growth of around 30 per cent ruling currently.
- Appropriate liquidity to be maintained to meet legitimate credit requirements, consistent with price and financial stability.
- Ceiling interest rate on non-resident (external) rupee deposits raised to US dollar LIBOR/SWAP plus 100 basis points.
- Ceiling interest rate on export credit in foreign currency raised to LIBOR plus 100 basis points.
- Provisioning for standard advances raised to 1.0 per cent for personal loans, capital market exposures, residential housing beyond Rs.20 lakh and commercial real estate loans.
- Risk weight on exposures to commercial real estate raised to 150 per cent.
- Exposure to venture capital funds treated as part of capital market exposure and assigned with higher risk weight of 150 per cent.

– 'When issued' market in Government securities announced.
– Primary Dealers to be permitted to diversify their activities.

Barring the emergence of any adverse and unexpected developments in various sectors of the economy and keeping in view the current assessment of the economy including the outlook for inflation, the overall stance of monetary policy at this juncture will be:

o To ensure a monetary and interest rate environment that enables continuation of the growth momentum consistent with price stability while being in readiness to act in a timely and prompt manner on any signs of evolving circumstances impinging on inflation expectations.

o To focus on credit quality and financial market conditions to support export and investment demand in the economy for maintaining macroeconomic, in particular, financial stability.

o To respond swiftly to evolving global developments.

VI. Mid-term review of RBI's Annual Policy for 2006-07

RBI governor presented the mid-term review of Annual Policy for the year 2006-07 today (31 October 2006). The highlights of the review are as given below:

– Repo rate is revised upwards by 25 basis points to 7.25 per cent from 7.0 per cent earlier.
– Reverse Repo Rate, Bank Rate and Cash Reserve Ratio (CRR) are kept unchanged at 6.0 per cent, 6.0 per cent and 5.0 per cent, respectively.
– GDP growth projection for fiscal 2007 is changed to around 8.0 per cent from 7.5-8.0 per cent projected in the the Annual Policy Statement and the First Quarter Review.
– There is no change in the policy of containing inflation in the range of 5-5.5 per cent during 2006-07. The current (as on 13 October 2006) inflation rate, measured in terms of WPI, is 5.26 per cent.

The RBI now expects the growth in monetary and credit aggregates to be higher than the initial indicative projections. It had forecast M3 to grow by 15 per cent in the the Annual Policy Statement and the First Quarter Review. The current (as on 13 October 2006) growth in M3 is much higher at 19 per cent. Similarly, it had projected non-food credit and bank deposits to grow by 20 per cent and 15.6 per cent, respectively, during 2006-07. And the current growth in the same (as on 13 October 2006) is 30.5 per cent and 20.7 per cent, respectively.

Market Design

Market Participants

Given the large size of the trades, the debt market has remained predominantly a wholesale market. In this market, the investors can also be the issuers of the securities. For example, a bank issues CDs and also invest in different banks CDs and also in other securities such as PSU bonds or Government securities. Though some efforts have been undertaken to encourage the retail participation, it still remains rather subdued. The RBI regulates the government securities market, while the corporate debt instruments traded on exchanges are regulated by the SEBI. The important market participants in the debt market are:

Regulators

The RBI operates both as the monetary authority and the debt manager to the government. In its role as a monetary authority, the RBI participates in the market through open-market operations as well as through Liquidity Adjustment facility (LAF) to regulate the money supply. It also regulates the bank rate and repo rate, and uses these rates as indirect tools for its monetary policy. The RBI as the debt manager issues the securities at the cheapest possible rate. Hence, in the debt market, the RBI plays a dual role of influencing the interest rates through its monetary policy and also issues government debt securities. Further, the RBI also supervises banks and development financial institutions.

The SEBI regulates the debt instruments listed on the stock exchanges. It issues guidelines for its issuance and also for their listing on stock exchanges. The secondary market trading is conducted as per the rules set by the SEBI.

Primary Dealers

Primary dealers (PDs) are important intermediaries in the government securities markets. There were 17 PDs operating in the market at the end of March 2006. They act as underwriters in the primary market, and as market makers in the secondary market. PDs underwrite a portion of the issue of government security that is floated for a pre-determined amount. Normally, PDs collectively offer to underwrite up to 100% of the notified amount in respect of all issues. The underwriting commitment of each PD is broadly decided on the basis of its size in terms of its net owned funds, its holding strength, the committed amount of bids and the volume of turnover in securities.

Several facilities have been extended to PDs given their special role in the government debt market. RBI provides liquidity support to the PDs through LAF against collateral of government securities and through repo operations/refinance. PDs are also given favoured access to the RBI's open market operations. They are permitted to borrow and lend in the money market. In addition, they can raise resources through CPs and also have access to finance from commercial banks as any other corporate borrower.

Brokers

Brokers play an important role in secondary debt market by bringing together counterparties and negotiating terms of the trade. It is through them that the trades are entered on the stock exchanges. The brokers are regulated by the stock exchanges and also by the SEBI.

Investors

Banks are the largest investors in the debt markets, particularly in the government securities market. They are also the main participants in the call money market/term market and also repo market for their short term funding requirement. Banks also issue CDs and bonds in the debt markets. Further, they arrange CP issues of corporates.

MFs have emerged as important players in the debt market, owing to the growing number of debt funds that have mobilised significant amounts from the investors. Most mutual funds also have specialised debt funds such as gilt funds and liquid funds. They participate in the debt markets pre-dominantly as investors, and trade on their portfolios quite regularly.

Foreign Institutional Investors (FIIs) also are permitted to invest in treasury and corporate bonds, within certain limits.

Provident and pension funds are large investors in the debt markets. The prudential regulations governing the deployment of the funds mobilised by them mandate investments pre-dominantly in treasury and PSU bonds. They are, however, not very active traders in their portfolio. This is so because they are not permitted to sell their holdings, unless they have a funding requirement that cannot be met through regular accruals and contributions.

Charitable institutions, trusts and societies are also large investors in the debt markets. They are, however, governed by their rules and bye-laws with respect to the kind of bonds they can buy and the manner in which they can trade on their debt portfolios.

Since January 2002, retail investors have been permitted to submit non-competitive bids at primary auction through any bank or PD. They submit bids for amounts of Rs. 10,000 and multiples thereof, subject to the condition that a single bid does not exceed Rs. 1 crore. The non-competitive bids up to a maximum of 5% of the notified amount are accepted at the weighted average cut off price/yield.

The matrix of issuers, investors, instruments in the debt market and their maturities are presented in Table 6-2.

Issuers of Securities

The dominant issuers in debt market consist of Governments, public sector units and corporates. However, there are other issuers who have not been the tapping the market frequently such as the local governments and mutual funds. Recently, international financial institutions have also displayed interest in the domestic market.

– The government securities form the oldest and the most dominant part of the debt market. It comprises of the securities issued by the central Government and state Governments. In the recent past, local bodies such as municipalities have also tapped the market. The Central Government mobilises funds mainly through issue of dated securities and T-bills, while State Governments rely solely on state development loans.

– Bonds are issued by Government sponsored institutions like, Development Financial Institutions (DFIs), banks and public sector units. These bonds are generally treated at surrogates of sovereign paper, sometimes due to explicit guarantee and often due to the comfort of public ownership. Some of the PSU bonds are tax-free, while most bonds are not tax-free.

– The corporate bond markets comprise of commercial paper and bonds. These bonds typically are structured to suit the requirements of investors and the issuing corporate. They include a variety of tailor-made features with respect to interest payments and redemptions. Corporate bond market has seen a lot of innovations, including securitized products, corporate bond strips, and a variety of floating rate instruments

Table 6-2: Participants and Products in Debt Market

Issuer	Instruments	Maturity	Investors
Central Government	Dated Securities	2 - 30 years	RBI, Banks, Insurance Companies, Provident Funds, Mutual Funds, PDs
Central Government	T-Bills	91/364 days	RBI, Banks, Insurance companies, Provident Funds, Mutual Funds, Individuals, PDs
State Government	Dated Securities	5-13 years	Banks, Insurance Companies, Provident Funds
PSUs	Bonds, Structured Obligations	5-10 years	Banks, Insurance Companies, Provident Funds, Mutual Funds, Individuals, Corporates
Corporates	Debentures	1 - 12 years	Banks, Mutual Funds, Corporates, Individuals
Corporates, PDs	Commercial Papers	15 days to 1 year	Banks, Mutual Funds, Financial Institutions, Corporates, Individuals, FIIs
Scheduled Commercial Banks, Select Financial Institutions (under umbrella limit fixed by RBI)	Certificates of Deposits	15 days to 1 year, whereas for FIs it is 1 year to 10 years	Banks, Companies, Individuals, FIIs, Corporations, Trusts, Funds, Associations, FIs, NRIs
Scheduled Commercial Banks	Bank Bonds	1-10 years	Corporations, Individuals, Companies, Trusts, Funds, Associations, FIs, Non-Resident Indians
PSU	Municipal Bonds	0-7 years	Banks, Corporations, Individuals, Companies, Trusts, Funds, Associations, FIs, Non-Resident Indians

with floors and caps. In the recent years, there has been an increase in issuance of corporate bonds with embedded put and call options. The major part of the corporate debt is privately placed with tenors of 1-12 years.

– In addition to above, there is another segment, which comprises of short-term paper issued by banks, mostly in the form of certificates of deposit (CDs) and commercial papers (CPs). While CDs are issued by banks and financial institutions, CPs are issued by corportaes.

Primary Issuance Process

Government Securities

The issue of government securities is governed by the terms and conditions specified in the general and the specific notification of the Government. The specific notifications are issued for each security issuance specifying its unique feature. The terms and conditions specified in the general notification are listed below.

– Any person including firm, company, corporate body, institution, state government, provident fund, trust, NRI, OCB predominantly owned by NRIs and FII registered with SEBI and approved by RBI can submit offers for purchase of government securities.

– The payments can be done through a variety of means such as cash or cheque drawn on RBI or Banker's pay order or by authority to debit their current account with RBI or by Electronic Fund Transfer. Government securities are issued for a minimum amount of Rs. 10,000 (face value) and in multiples of Rs. 10,000 thereafter. These are issued to the investors by credit either in demat form in their SGL account or to a Constituents' SGL or to their Bond Ledger or in the form of stock certificate. These are repaid at Public Debt Offices of RBI or any other institution at which they are registered at the time of repayment.

Government issues securities through the auction, tap sale, pre-announced coupon rate etc. A brief about them are as given below:

Issue of securities through auction: The securities are issued through auction held either on price or on yield basis. If the issue is on price basis, the coupon is pre-determined, then the bidders should quote price per Rs.100 of the face value of the security. If the issue is on yield basis, then 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.

The auctions are held either on 'Uniform price' method or on 'Multiple price' method. In 'Uniform price' method, competitive bids are tendered with rates up to and including the maximum rate of yield as determined by RBI. As per the bids received, RBI determines the maximum rate of yield. Bids quoted higher than the maximum rate of yield are rejected. For '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 specific institutions, categoried by the RBI as '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 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. The nominal amount of securities that would be allocated to retail investors on non-competitive basis is restricted to a maximum percentage of the aggregate nominal amount of the issue.

Issue of securities with pre-announced coupon rates: The coupon on securities is announced before the date of floatation and the securities are issued at par. In case the total subscription exceeds the aggregate amount offered for sale, RBI may make partial allotment to all the applicants.

Issue of securities through tap sale: No aggregate amount is indicated in the notification in respect of the securities sold on tap. Sale of such securities may be extended to more than one day and the sale may be closed at any time on any day.

Issue of securities in conversion of maturing treasury bills/dated securities: The holders of treasury bills of certain specified maturities and holders of specified dated securities are provided an option to convert their holding at specified prices into new securities offered for sale. The new securities could be issued on an auction/pre-announced coupon basis.

RBI may participate in auctions as a "non-competitor" or subscribe to the government securities in other issues. Allotment of securities to RBI are made at the cut off price/ yield emerging in the auction or at any other price/yield decided by the government. In order to maintain a stable interest rate environment, RBI accepts private placement of government securities. Such privately placed securities and securities that devolve on RBI are subsequently offloaded through RBI's open market operations.

The following types of securities are issued by the Government:

Securities with fixed coupon rates: These securities carry a specific coupon rate remaining fixed during the term of the security and payable periodically. These may be issued at a discount, at par or at a premium to the face value, but are redeemed at par.

Floating Rate Bonds: These securities carry a coupon rate, which consists of a variable base and a spread. The most common base rate used is the weighted average of yield of 364 day-treasury bills. The spread is decided at the auction.

Zero Coupon Bonds: These are issued at a discount and redeemed at par. On the basis of the bids tendered, the RBI determines the cut-off price at which tenders would be accepted at the auction.

Securities with Embedded Options: These securities, where a "call option"/"put option" is specified, are repaid at the option before the specified redemption date.

Treasury Bills

Treasury bills (T-bills) are short-term debt instruments issued by the Central government. They have either 91-days or 364-days maturity. T-bills are sold through an auction process announced by the RBI at a discount to its face value. RBI issues an indicative calendar of T-bill auctions.

State Government Securities

The states have the choice of raising 5% to 35% of their allocation through auctions. Most of the States raise resources through tap issuances.

Secondary Market

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. WDM segment of NSE provides trading and reporting facilities for government securities.

Negotiated Dealing System

Negotiated Dealing System (NDS) is an electronic platform for facilitating dealing in Government Securities and Money Market Instruments. It facilitates online reporting of transactions in the instruments available on the NDS. Government Securities (including T-bills), call money, notice/term money, repos in eligible securities, etc. are available for negotiated dealing through NDS. If the NDS member concludes deals outside the NDS system, then they are required to report the deal on NDS system within 15 minutes of concluding the deal. NDS interfaces with CCIL for settlement of government securities transactions for both outright and repo trades.

Negotiated Dealing System - Order Matching (NDS-OM)

NDS-OM is an electronic, screen based, anonymous, order driven trading system, introduced by RBI as part of the existing NDS system to facilitate electronic dealing in government securities. It is accessible to members through RBI's INFINET Network. The system facilitates better price discovery, liquidity, increased operational efficiency and transparency. NDS-OM facilitates straight- through-Processing, with all the trades on the system automatically sent to CCIL for settlement. NDS-OM is open to all existing NDS members who are regulated by RBI. Trading in this platform has been gradually extended to entities like insurance companies, mutual funds and, provident funds. The NDS-OM system supports trading in all Central Government Dated Securities and State Government Securities in T+1 settlement type. It is proposed to be upgraded later to facilitate trading in discounted instruments like Treasury Bills. Further RBI has permitted the execution of intra-day short sale transaction and the covering of short position only on this trading platform.

The main features of the trading system are:

The trading system is purely order driven with all orders from market participants being matched based on strict price/time priority, providing fairness to all market users. This ensures a level playing field for all participants. The trader gets the best bid in the system. The advantages of an order-driven system are: participants provide their own prices and therefore a better flow of information, bid -ask spreads are usually smaller and prices more stable.

a) Anonymity

The system is an anonymous order matching system wherein identity of parties is not revealed at the time of order entry. CCIL is the central counterparty to each trade done on the system. This ensures fairness and minimal information leakage pre-trade.

b) Transparency

The trading system provides timely information, both pre-trade (for example, bid, offer and depth) and post-trade (for example, last trade price and volume), and disseminates it widely on real-time basis to all interested entities both within the

NDS domain as also Non-NDS entities through the RBI website. This enables better price discovery and provides increased opportunities to market participants to respond to new information.

c) **Straight Through Processing**

The trading system allows straight-through processing (STP), i.e. the seamless integration of the different parts of the trading process, starting from displaying pre-trade information and ending with settlement and risk management. Since trades done on the platform flow directly for settlement, members would benefit in terms of reduced operation cost and risk because of STP. Trades done on the system will be treated as confirmed and not be subject to the confirmation processes as existing in the present NDS environment.

d) **Trading protocols**

The trading system allows traders to set their preferences in terms of orders. The system allows traders to enter either price based orders (market orders, limits orders) or time based orders (good till day orders and immediate or cancel orders). Traders can also set the quantity to be disclosed to the market in case of large trades which ensures better pricing for them.

e) **Scalable**

The system facilitates trading by members on behalf of their constituents. The system is also scalable in terms of addition of new instruments and also additional of new user groups like corporate and retail investors.

f) **Audit Trails**

The system provides a precise audit trail of transactions, especially in light of the extant guidelines of sale of government securities and DVP-III mode of settlement. This facilitates electronic supervision and surveillance of the market.

Wholesale Debt Market of NSE

NSE's Wholesale Debt Market (WDM) segment offers a fully automated screen based trading platform through the NEAT (National Exchange for Automated Trading) system. The WDM segment as the name suggest permits only high value transactions in debt securities. Hence, it is meant primarily for banks, institutional and corporate participants and intermediaries. All types of SLR (Government securities, T-bills etc) and non-SLR (CPs, CDs etc) securities are available for trading in the WDM segment of the NSE.

The trades on the WDM segment can be executed through the 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 in WDM segment are settled directly between the participants, who take an exposure to the settlement risk attached to any unknown counter-party. In the NEAT-WDM system, all participants can set up their counter-party exposure limits against all probable counter-parties. This enables the trading member/participant to reduce/minimise the counter-party risk associated with the counter-party to trade. 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 the exchange, and reported to the Exchange through the broker. Thus, deals negotiated or structured outside the exchange are disclosed to the market through NEAT-WDM system. In negotiated market, as buyers and sellers know each other and have agreed to trade, no counter-party exposure limit needs to be invoked.

The trades on the WDM segment could be either outright trades or repo transactions with settlement cycle of T+2 and repo periods (1 to 14 days). For every trade, it is necessary to specify the number of settlement days and the trade type (repo or non-repo), and in the event of a repo trade, the repo term and the repo rate.

The Exchange facilitates trading members to report off-market deals in securities in cases where the repo period is more than the permissible days in the trading system (14 days). These trades are required to be reported to the Exchange within 24 hours of the issuance of contract note.

All government securities are 'deemed' listed as and when they are issued. The other debt securities are traded either under the 'permitted to trade' or 'listed' category. All eligible securities, whether publicly issued or privately placed, can be made available for trading in the WDM segment. Amongst other requirements, privately placed debt paper of banks, institutions and corporates requires an investment grade credit rating to be eligible for listing. The listing requirements for securities on the WDM segment are presented in Table 6-3.

Charges

NSE has specified the maximum rates of brokerage that can be levied by trading members for trades on WDM. The rate depends on the type of security and value of transactions. The rate for central government securities ranges from 5 paise to 25 paise for every Rs. 100 of transactions depending on the order value. Similarly, it ranges from 5 paise to 50 paise for state government securities and institutional bonds also depending on the order value. In case of PSU Bonds and FRBs and CP and Debentures the brokerage rate varies between 10 paise and 50 paise for every Rs. 100 of transaction depending on the order value. It is 1% of the order value for debentures, securitized debt and commercial paper.

A trading member is required to pay transaction charges @ 5 paise per Rs. 1 lakh gross trade value up to Rs. 25,000 crore and @ 2 paise per Rs. 1 lakh gross traded value above Rs. 25,000 crore subject to minimum of Rs. 10,000 per annum.

Corporate Debt Market

Corporate debt instruments are traded either as bilateral agreements between two counterparties or on a stock exchange through brokers. In the latter category, these are

Table 6-3: Listing Criteria for Securities on WDM Segment

	Issuer	Listing Criteria	
		Public Issue	Private Placement
a.	Central/State Government	Deemed listed	
b.	Public Sector Undertakings/ Statutory Corporations		
	- Minimum 51% holding by Govt.	As applicable to corporates	
	- Less than 51% holding by Govt.	As applicable to corporates	
c.	Financial Institutions (SLR and Non-SLR Bonds)	- Eligible	- Investment Grade Credit Rating
d.	Scheduled Commercial Banks - Net worth of Rs. 50 crore or above	- Eligible	- Net worth of Rs. 50 crore or above - Investment Grade Credit Rating
e.	Infrastructure Companies	- Eligible	- Investment Grade Credit Rating
f.	Corporates - Minimum paid-up capital of Rs.10 crore, OR Market capitalisation of Rs. 25 crore (Net worth in case of unlisted companies)	- Eligible	- Investment Grade Credit Rating
g.	Mutual Funds SEBI registered Mutual Fund/ Scheme having an investment objective to invest predominantly in debt instruments.	- Eligible	- Eligible

Source: NSE.

traded on BSE and on the CM and WDM segments of NSE. The difference between trading of government securities and corporate debt securities is that the latter are traded on the electronic limit order book. This is in view of SEBI mandate, which prohibits negotiated deals in respect of corporate listed debt securities. The SEBI regulation also prescribes that all such trades should be executed on the basis of price and order matching mechanism of stock exchanges as in case of equities. The trades on BSE are settled through the clearing house. The trades on CM segment of NSE are settled through National Securities Clearing Corporation. Trades on WDM segment of NSE are settled on a trade-by-trade basis on the settlement day.

Dematerialization of Debt Instruments

Dematerialized trading was earlier restricted only to the equity shares and units of MFs. With the passage of Finance Act 2000, stamp duty payable on transfer of debt instruments was waived, in case of the transfer taking place in the demat mode. In order to promote dematerialization, RBI specified that repos on PSU bonds would be permitted only in demat form. From June 30, 2001, FIs, PDs and SDs have been permitted to make fresh investments and hold CP only in dematerialised form. The outstanding investments in scrip had to be converted into demat by October 2001. Since June 30, 2002, banks and

FIs are required to issue CDs only in demat form. With these developments, NSDL and CDSL have admitted debt instruments such as debentures, bonds, CPs, CDs etc., irrespective of whether these debt instruments are listed, unlisted or privately placed.

Holding and trading in dematerialised form provides a number of benefits to the investors. As securities in demat form can be held and transferred in any denomination, it is possible for the participant to sell securities to corporate clients, provident funds, trusts in smaller lots. This was not possible in the physical environment, as splitting of securities involved considerable amount of time.

As on March 2006, debentures/bonds worth Rs. 3,337,880 million were available in demat form. 652 issuers have issued 17,508 debentures/bonds in demat form. 379 issuers have issued 7,357 commercial papers in demat form.

Constituent SGL Accounts

Subsidiary General Ledger (SGL) account is a facility provided by RBI to large banks and financial institutions. This facility maintains records of investment in Government securities and T-bills in electronic book entry form. These institutions can settle their trades for securities held in SGL through a DvP mechanism, which ensures movement of funds and securities simultaneously. As all investors in government securities do not have an access to the SGL accounting system, RBI has permitted such investors to hold their securities in physical form. They are also permitted to open a constituent SGL account with any entity authorised by RBI for this purpose. These client accounts are referred to as constituent SGL accounts or SGL II accounts. Through a constituent SGL account, an entity can participate in the primary and secondary markets for government securities. It also avails of the dematerialized holding and DvP settlement facilities. RBI has permitted NSCCL, NSDL, CDSL, SCHIL, Banks and PDs to offer constituent SGL account facility. All entities regulated by RBI [including FIs, PDs, cooperative banks, RRBs, local area banks, NBFCs] should necessarily hold their investments in government securities in either SGL (with RBI) or CSGL account.

Clearing and Settlement

All trades in government securities are reported to RBI-SGL for settlement. The trades are settled on gross basis through the D*v*P system, where funds and securities are transferred simultaneously. Central Government securities and T-bills are held as dematerialised entries in the SGL of RBI. The PDO, which oversees the settlement of transactions through the SGL, transfers securities from one participant to another. Transfer of funds is effected by crediting/debiting the current account of the seller/buyer, maintained with the RBI.

Clearing Corporation of India Limited

The Clearing Corporation of India Ltd. (CCIL) is India's first exclusive clearing and settlement institution to provide guaranteed settlement facility for transactions in

Government securities and Foreign exchange. The Company was set up at the initiative of the Reserve Bank of India (RBI), which constituted a core committee in June 2000, with representatives from major banks, All-India financial institutions, and industry associations like FIMMDA (Fixed Income Money Market and derivatives Association of India), PDAI (Primary Dealers Association of India), FEDAI (Foreign exchange Dealers Association of India), AMFI (Association of Mutual Funds in India) and RBI itself, to initiate the process of setting up a clearing corporation.

CCIL was incorporated on April 30, 2001 as an essential infrastructure for orderly development of securities, Money & Forex Markets, with the prime objective of improving efficiency in the transaction settlement process, insulating the financial system from shocks emanating from operations related issues, and to undertake other related activities that would help to broaden and deepen the money, debt and forex markets in the country.

The company started its software development process in July, 2001 and commenced business operations in the securities market on February 15, 2002 along with the operationalization of the Negotiated Dealing System (NDS) of RBI. It has since moved on to cover settlement of forex and other money market operations as well. In addition to its various activities, CCIL also supports through its fully owned subsidiary, Clearcorp Dealing Systems, two trading platforms in the forex and money market segments.

The company has put in place a transparent mechanism for initiating new membership. Specific formats have been prescribed for the various business segments. The applicants are required to remit the applicable one time membership fees to CCIL along with the submission of Membership Application Form. All requests for membership are scrutinized to ensure conformity with the prescribed eligibility criteria. After processing the same, the requests are submitted by the department to MAC for approval of membership.

Upon approval of membership, the legal and documentation formalities relating to admission of a member are carried out by the department. Once the entities become members, they are required to bring in the necessary minimum Settlement Guarantee Fund/ Collateral contribution for their formal initiation into CCIL's Clearing and Settlement System (CSS) through a process of Activation. Membership activation is done after ensuring that the other formalities with regard to admission have been completed and margin/collateral contributions duly received by CCIL from the concerned member.

ELIGIBILITY CRITERIA:

1) Government Securities Segment:

All the members of RBI-NDS are eligible for membership to the government securities segment. The other eligibility criteria have been prescribed in the Bye-Laws, Rules and Regulations of CCIL.

2) NDS-OM - Trading Platform:

Initially, trading on NDS-OM was restricted to Banks, Primary Dealers and Financial Institutions regulated by RBI and holding NDS membership. The same was later extended to Insurance entities (October 2005). It was further extended in February 2006 to qualified Mutual Funds, Provident Funds and Pension Funds. In April 2006 trading on this platform was extended to all Mutual Funds, large pension/provident funds through opening temporary current/SGL account with the Reserve Bank. A Membership to CCIL's Securities Segment is a pre-condition for trading on NDS-OM trading platform.

3) Money Market Segment:

The membership of CBLO segment initially covered only those entities who were already members of Reserve Bank of India's Negotiated Dealing System. CBLO membership has been extended to cover other market players such as Co-operative Banks, NBFC's, Corporates, etc. who are not members of RBI- NDS. Such Non-NDS members are eligible to be admitted as Associate Members to CCIL's CBLO segment.

A. CBLO - for NDS Members:

The eligibility criteria for admission of members to the CBLO segment (NDS Members) remain the same as is applicable for admission to Securities Segment. The Members are required to open Gilt Account with CCIL for depositing securities which are offered as collateral/margin for borrowing and lending of funds.

B. CBLO - for Non-NDS Members:

The eligibility criteria for an Associate Member are:

– Not be eligible, as per RBI guidelines, to open SGL Account and/or Current Account with RBI;
– Open Gilt Account with Clearing Corporation when required;
– Maintain Current Account with a bank(s) designated as settlement bank(s) by Clearing Corporation for settlement transaction(s);
– Be familiar with treasury operations and have sizeable liquid funds to deploy on regular basis;
– Have experienced and qualified personnel in its treasury and/or finance departments who have the requisite experience required for undertaking trading, clearing and settlement operations;
– Have adequate risk management system in place;
– Not have any record of failure in honoring its obligations to the market intermediary, which shall be duly certified by its internal auditors;
– Not have been subject to an order of statutory disqualifications or an order of similar effect issued by a regulatory authority.
– Be a profitable organization and must have reported net profits in at least preceding three financial years;

– Have sufficient tangible net worth which in the opinion of Clearing Corporation is adequate to support its proposed level of activities in money market/treasury operations.

The Associate member has to dessignate a Settlement Bank and open a Current account with the designated Settlement Bank to facilitate settlement of funds. It needs to maintain a Gilt Account either with the designated Settlement Bank and/ or any other CSGL service provider, in addition to a Gilt account with CCIL, for deposit/withdrawal of securities with/ from CCIL in respect of collateral transactions in the CBLO Segment.

4) Forex Segment:

All the authorized dealers are eligible for membership to the Forex settlement segment. They are also required to conform to the other eligibility criteria prescribed for Forex Segment under Bye-Laws, Rules and Regulations of CCIL to become a member of this segment.

5) FX-CLEAR Dealing Platform:

All the members of the forex settlement segment are eligible for membership to the FX CLEAR Dealing Platform.

One- time membership fees for CCIL's various segments:

Segment	One-time Membership Fees
Securities	INR 100,000
Securities	INR 100,000
Forex Settlement	INR 100,000
CBLO -NDS Members	INR 50,000
CBLO - Non-NDS Members (i) Co-operative Banks accessing CBLO dealing platform through designated Settlement Bank. (Eligible for Associate Membership) (ii) Other Associate Members	INR 10,000 to 25,000 (based on deposit size) INR 50,000
FX CLEAR	No Cost

The other fees and charges are as follows:

Sr. No.	Particulars	Charges
1	SECURITIES (Outright)	Rs. 150 per crore of face value, Minimum Rs. 25/- Maximum Rs. 5000/- per Trade
2	TREASURY BILLS (Outright)	Rs. 75 per crore of face value, MinimumRs. 25/- Maximum Rs. 5000/- per Trade
3	Settl OVER NIGHT REPO	Rs. 10/- per crore of face value for over nightrepo trades subject to Minimum of Rs. 20/-and Maximum of Rs. 1000/- for each leg

Contd...

Contd...

The other fees and charges are as follows:

Sr. No.	Particulars	Charges
4	TERM REPO	Rs. 20/- per crore of face value of term repo subject to Minimum of Rs. 20/- and Maximumof Rs. 1000/- for each leg
5	CBLO (AUCTION MARKET)	Rs. 10/- per crore of face value per deal per Member subject to minimum of Rs. 10/- and a maximum of Rs. 1000/- per deal for each Member to be charged at the time of initial borrowing and lending
6	CBLO (NORMAL MARKET)	Rs. 10/- per crore of face value per deal per Member subject to minimum of Rs. 10/- and a maximum of Rs. 1000/- per deal for each member to be charged on the value date
7	Settlement of Forex Transactions	Rs. 100/- per Trade accepted for settlement.
8	Settlement of CLS Transactions	GBP 1.13 + 75 cents
9	Delayed payment of Transaction Charges and System Usage charges. (If payment is made after 10th of a calendar month.)	5 basis point per day on the amount of charges

A. Penalty For Margin Shortfall

1	Delayed deposit of margin shortfall. (based on number of days in a calendar quarter) (Intraday margin shortfall will be treated as a shortfall for one day.)	a) 5 basis point per day on the amount of shortfall for first three days (Chargesbelow Rs. 25/- will be waived). b) 10 basis points per day on the amount of shortfall from day fourth onwards. c) 20 basis points per day on the amount of shortfall from day fourteenth onwards till deposit of shortfall.
2	Delayed deposit of Margin in CBLO	5 basis point per day on the amount of shortfall till the shortfall is met.
3	Delayed payment of Transaction Charges and System Usage charges for Forex Transactions	5 basis point per day on the amount of charges.

B. Payment to be made by the defaulting member when trade settled by CCIL

1	For Securities Default	a) 5 basis point per day, on the amount of default till the replenishment of the security. & b) Charges incidental to meet such security default.
2	For Funds Default	a) 5 basis point on the amount of default till the default is fully met. & b) Line of Credit (LOC) charges incurred by Clearing Corporation to meet such funds default.

Contd...

Contd...

3	Default (CBLO)	5 basis point per day on the amount of default till the default is fully met; of which, 3 basis points per day will be payable to the non defaulting Member in case the shortage is allocated to such a non-defaulting Member.
4	Default (Forex)	a) Bank Rate plus 5% p.a. per day on the amount of default (INR or USD) till thedefault is fully met & b) Line of Credit (LOC) charges incurred by Clearing Corporation to meet such (INRor USD) default.

CCIL has in place a comprehensive risk management system. It encompasses strict admission norms, measures for risk mitigation (in the form of exposure limit, settlement guarantee fund, liquidity arrangements, continuous position monitoring and loss allocation procedure), penalties in case of default. During the settlement process, CCIL assumes certain risks, which may arise due to a default by a member to honour its obligations. Settlement being on DvP basis, the risk from a default is the market risk, i.e. change in price of the concerned security. The margining system in CCIL are so designed that they cover such risks. CCIL collects Initial Margin and Mark to Market (MTM) margin from members in respect of their outstanding trades. Initial Margin is collected to cover the likely risk from future adverse movement of prices of the concerned securities. Mark to Market margin is collected to cover the notional loss (i.e. the difference between the current market price and the contract price of the security covered by the trade) already incurred by any member. Both the margins are computed trade-wise and then aggregated member-wise. In addition, CCIL in case of unusual volatility in the market may also collect volatility margin. Each member contributes collaterals to a Settlement Guarantee Fund (SGF), against which CCIL avails of a line of credit from the bank. This enables CCIL to complete settlement in case a situation of shortage resulting from a members default. A summary of the trades settled by CCIL are given below:

Settlement of Trades in Government Securities

(Amount in Rs. million)

Month	Outright Transactions		Repo Transactions		Total	
	No. of Trades	Amount (Face Value)	No. of Trades	Amount (Face Value)	No. of Trades	Amount (Face Value)
2001-02	7,131	389,190	524	159,300	7,655	548,480
2002-03	191,843	10,761,470	11,672	4,682,290	203,515	15,443,760
2003-04	243,585	15,751,330	20,972	9,431,890	264,512	25,183,220
2004-05	160,682	11,342,221	24,364	15,579,066	185,046	26,921,287
2005-06	125,509	8,647,514	25,673	16,945,087	151,182	25,592,601

Source: CCIL Fact Book 2006.

Collateralized Borrowing and Lending Obligation

"Collateralised Borrowing and Lending Obligation (CBLO)", a money market instrument as approved by RBI, is a product developed by CCIL for the benefit of the entities who have either been phased out from inter bank call money market or have been given restricted participation in terms of ceiling on call borrowing and lending transactions and who do not have access to the call money market. CBLO is a discounted instrument issued in electronic book entry form for maturity periods ranging from one day to one year. Members can borrow and lend funds by way of selling and buying CBLOs on the dealing system. CCIL also facilitates clearing and settlement of CBLO transactions concluded on the dealing system by following the concept of multilateral netting. Among the benefi ts flowing to members from their participation in the CBLO market are anonymity, transparency, flexibility in dealing. Other related benefits are efficiency in settlement and reduction in settlement risk as the settlement is guaranteed by CCIL. In order to enable the market participants to borrow and lend funds, CCIL provides a Dealing System through Indian Financial Network (INFINET).

The daily average turnover in CBLO increased from Rs. 51,843 million in April 2005 to Rs. 172,993 million in March 2006. As at end March 2006, there were 152 members in the CCIL's CBLO segment as against 112 in the previous year.

Market Outcome

Primary Market

Resource Mobilisation

During 2005-06, the central government and state governments borrowed Rs. 1,600,180 million and Rs. 217,290 million respectively. The gross borrowings of the central and state governments taken together increased by 24.8% from Rs.1,456,020 million during 2004-05 to Rs. 1,817,470 million during 2005-06 (Table 6-4). Their net borrowings also increased by 42.1% from Rs. 800,280 million (in the previous year) to Rs. 1,136,920 million during 2005-06. The gross and net market borrowings of central government are budgeted to increase further to Rs. 1,818,750 million and Rs. 1,137,780 million, respectively during 2006-07, while those of the state governments are to increase to Rs. 236,630 million and Rs. 171,120 million in the same period.

The Central Government mobilised Rs. 1,310,000 million through issue of dated securities and Rs. 290,180 million through issue of T-bills. After meeting repayment liabilities of Rs.356,300 million for dated securities, and redemption of T-bills of Rs. 261,510 million, net market borrowing of Central Government amounted to Rs. 982,370 million for the year 2005-06. The state governments collectively raised Rs. 217,290 million during 2005-06 as against Rs. 391,010 million in the preceding year. The net borrowings of State Governments in 2005-06 amounted to Rs. 154,550 million.

Yields

The year 2005-06 witnessed a raise in interest rates on market borrowings across maturities. This was largely due to comfortable liquidity position and subdued inflationary

Table 6-4: Market Borrowings of Governments

(Rs. million)

Security	Gross			Repayment			Net		
	2006-07*	2005-06	2004-05	2006-07*	2005-06	2004-05	2006-07*	2005-06	2004-05
1. Central Government (a+b)	1,818,750	1,600,180	1,065,010	680,970	617,810	604,520	1,137,780	982,370	460,490
a) Dated Securities	1,550,180	1,310,000	803,500	390,790	356,300	343,160	1,159,390	953,700	460,340
b) 364-day T-bills	268,570	290,180	261,510	290,180	261,510	261,360	-21,610	28,670	150
2. State Government	236,630	217,290	391,010	65,510	62,740	51,230	171,120	154,550	339,780
Total (1+2)	**2,055,380**	**1,817,470**	**1,456,020**	**746,480**	**680,550**	**655,750**	**1,308,900**	**1,136,920**	**800,270**

* Budget Estimates (BE).
Source: RBI Annual Report, 2005-06

expectations. The yields on primary issues of dated government securities eased during the year with the cut-off yield varying between 6.69% and 7.98% during 2005-06 as against the range of 4.49% to 8.24% during the preceding year. The weighted average yield on government dated securities increased to 7.34% in 2005-06 from 6.11% in 2004-05 (Table 6-5).

Maturity Structure

Government has been consciously trying to lengthen maturity profile. During 2005-06, around 74% of central government borrowings were affected through securities with maturities above 10 years. The maximum maturity of primary issuance has been increased to 30 years. The weighted average maturity of dated securities issued during the year was 16.9 (in years) in 2005-06.

Secondary Market

Turnover

The aggregate secondary market transactions in debt securities (including government and non-government securities) decreased by 12.97% to Rs. 26,053,916 million in 2005-06 from Rs. 29,936,813 million in 2004-05, (Table 6-6). Non-government securities accounted for a meager 0.96% of total turnover in debt market. NSE accounted for about 18.25% of total turnover in debt securities during 2005-06.

The non-government securities are traded on the WDM and CM segments of the NSE, and on the BSE (F Category). Except WDM, the volumes are quite insignificant on other segments. The turnover in non-government securities on WDM of NSE was Rs. 247,219 million in 2005-06, lower by 34.38% than that during the preceding year. BSE reported a turnover of Rs. 2,697 million during 2005-06. NSE accounted for over 99.9% of total turnover in non-government securities during the year.

Table 6-5: Profile of Central Government Dated Securities

(Amount in Rs. mn.)

	Items	2004-05	2005-06
1	Gross Borrowing	803,500	1,310,000
2	Repayments	343,160	356,310
3	Net Borrowings	460,340	953,700
4	Weighted Average Maturity (In years)	14.13	16.90
5	Weighted Average Yield (Per cent)	6.11	7.34
6	(A) Maturity Distribution (Amount)		
	a Upto 5 years	30,000	0
	b Above 5 and upto 10 years	150,000	340,000
	c Above 10 years	623,500	970,000
	Total	803,500	1,310,000
	(B) Maturity Distribution (Per cent)		
	a Upto 5 years	4	0
	b Above 5 and upto 10 years	19	26
	c Above 10 years	77	74
	Total	100	100
7	Price based Auctions Amount	723,500	1,250,000
8	Yield - (Per cent)		
	Minimum	4.49 @ (12 years)	6.69 (5 years, 6 months)
	Maximum	8.24 (27 years, 10 months)	7.98 (29 years, 3 months)
9	Yield - Maturity Distribution-wise		
	(A) Less than 10 years		
	Minimum	5.47 (9 years)	6.69 (5 years, 6 months)
	Maximum	7.20 (5 years, 6 months)	7.06 (8 years, 2 months)
	(B) 10 years		
	Minimum	Nil	Nil
	Maximum	Nil	Nil
	(C) Above 10 years		
	Minimum	4.49 (12 years)	6.91 (10 years 10 months)
	Maximum	8.24 (27 years, 10 months)	7.98 (29 years, 3 months)

Note: Figures in brackets indicate residual maturity in years.
@ FRB is Floating Rate Bonds
Source: RBI Annual Report 2005-06

Table 6-6: Turnover of Debt Securities

(Rs. mn.)

Securities	2004-05	2005-06
Government Securities	**29,552,626**	**25,804,000***
WDM Segment of NSE	8,496,166	4,508,016
Rest of SGL	21,056,460	21,295,984
Non Government Securities	**384,187**	**249,916**
CM Segment of NSE	5,215	–
WDM Segment of NSE	376,771	247,219
'F' Category of BSE	2,202	2,697
Total	**29,936,813**	**26,053,916**

Source: RBI, BSE and NSE.
* includes NDS-OM turnover

The aggregate turnover in (central and state government dated securities and T-bills) through non-repo SGL transactions touched a level of Rs. 7,080,147 million, recording decline of 43.85% from Rs. 12,608,667 million in the previous year (Table 6-7). The details of non-repo SGL transactions in government securities are presented in Annexure 6-1. The volume of transactions in state government securities decreased to Rs. 211,150 million in 2005-06 from Rs. 285,845 million in 2004-05. The monthly turnover in non-repo transactions for the year 2005-06 ranged between Rs. 267,909 million and Rs. 1,298,026 million, with a monthly average of Rs. 590,012 million.

The share of WDM segment of NSE in the total turnover of Non-repo SGL transaction decreased marginally from 67.36% in 2004-05 to 63.67% in 2005-06 (Table 6-8). The share of WDM in turnover of non-repo dated securities (central and state government securities) also witnessed a bit decrease from 73.18% in 2004-05 to 69.31% in 2005-06 (Chart 6-1). The year 2005-06, the share of WDM in turnover of non-repo T-bills has augmented to 50.24% as compared to 46.06% in the previous year.

Table 6-7: Secondary Market Transactions in Government Securities

Year	Total SGL Non-Repo Turnover (Rs. mn.)	Share in Non-Repo Turnover (%)		
		Central Govt Securities	State Govt Securities	T-Bills
1995-96	295,300	59.44	1.57	38.99
1996-97	939,210	63.78	0.63	35.59
1997-98	1,610,900	73.59	0.84	25.58
1998-99	1,875,310	76.31	0.82	22.87
1999-00	4,564,910	88.78	0.80	10.42
2000-01	5,721,456	88.98	0.52	10.50
2001-02	12,119,658	93.94	0.51	5.56
2002-03	13,923,834	93.81	0.68	5.51
2003-04	17,013,632	91.93	1.01	7.06
2004-05	12,608,667	76.27	2.27	21.46
2005-06	7,080,147*	67.44	2.98	29.58

Source: RBI.
*excludes NDS-OM turnover

Chart 6-1: Share of WDM in Non-Repo Government Transaction

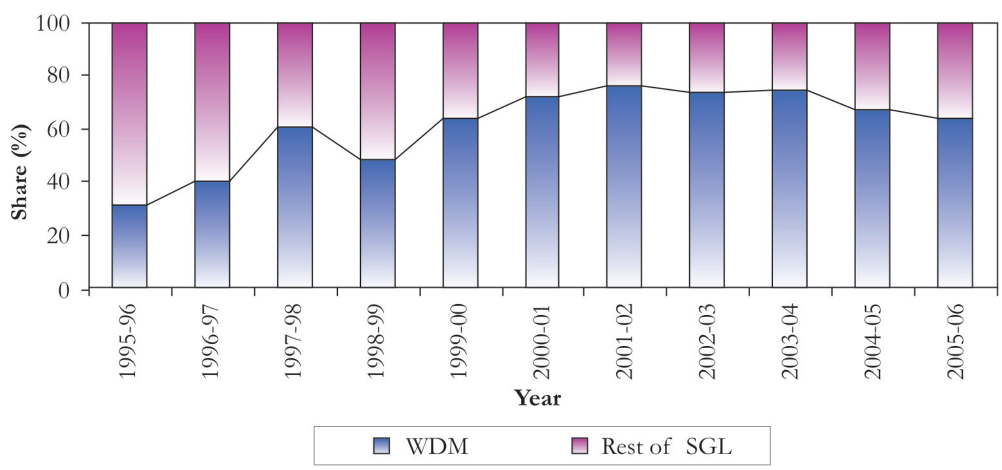


Table 6.8: Share of WDM in Transactions of Government Securities

(Amount in Rs. mn.)

Year	Turnover of Non-Repo Govt Securities			Turnover of Non-Repo Central & State Govt Sec.			Turnover of Non-Repo T-Bills		
	On SGL	On WDM	Share of WDM (%)	On SGL	On WDM	Share of WDM (%)	On SGL	On WDM	Share of WDM (%)
1995-96	295,300	92,433	31.30	180,170	69,885	6.97	115,130	22,548	19.58
1996-97	939,210	381,023	40.57	604,990	271,902	31.84	334,220	109,121	32.65
1997-98	1,610,900	975,152	60.53	1,198,890	804,943	60.21	412,010	170,209	41.31
1998-99	1,875,310	904,158	48.21	1,446,410	798,295	46.29	428,900	105,863	24.68
1999-00	4,564,910	2,915,915	63.88	4,089,160	2,809,475	58.37	475,750	106,440	22.37
2000-01	5,721,456	4,124,958	72.10	5,120,836	3,893,523	62.94	600,620	231,435	38.53
2001-02	12,119,658	9,269,955	76.49	11,446,342	9,015,121	60.91	673,316	254,834	37.85
2003-03	13,923,834	10,305,497	74.01	13,155,989	9,991,507	55.42	767,845	313,990	40.89
2003-04	17,013,632	12741190	74.89	15,813,076	12,185,221	49.01	1,200,556	555,969	46.31
2004-05	12,608,667	8,493,250	67.36	9,902,244	7,246,655	73.18	2,706,422	1,246,595	46.06
2005-06	7,080,147	4,508,016*	63.67	4,986,040	3,455,832	69.31	2,094,107	1,052,184	50.24

Source: RBI & NSE.

*Excludes NDS-OM turnover

Developments in WDM

A total of 564 securities with a total outstanding debt of Rs. 2,712,757.43 million were made available for trading in 2005-06. As at end March 2006, 3,177 securities were available for trading on the WDM Segment. Of which 897 securities were active during 2005-06 as compared to 1,151 in the previous year.

The turnover on WDM segment has been growing over time till the year 2004-05 where it witnessed a decline. The current year 2005-06 the turnover registered a decrease of 46% from Rs.8,872,936 (2004-05) to Rs. 4,755,235. The average daily turnover also decreased from Rs. 30,283 million to Rs. 17,547 million during the same period. However, the average trade size increased from Rs. 71.4 million to Rs. 76.83 million. The business growth of WDM segment is presented in Table 6-9, Chart 6-2 and Annexure 6-2.

Chart 6-2: Growth of WDM Segment

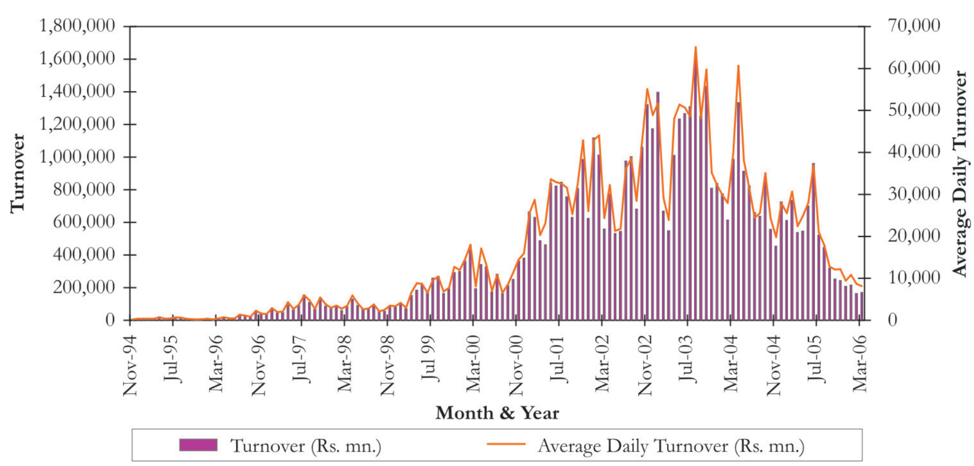


Table 6.9: Business Growth of WDM Segment of NSE

Parameter	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
No. of Active Securities	719	1,071	1,057	1,038	979	1,123	1,078	1,151	897
No. of Trades	16,821	16,092	46,987	64,470	144,851	167,778	189,518	124,308	61,891
No. of Retail Trades	1,390	1,522	936	498	378	1,252	1,400	1,278	892
Turnover (Rs. mn.)	1,112,633	1,054,691	3,042,162	4,285,815	9,471,912	10,687,015	13,160,962	8,872,936	4,755,235*
Average Daily Turnover (Rs. mn.)	3,850	3,650	10,348	14,830	32,775	35,983	44,765	30,283	17,547
Retail Turnover (Rs. mn.)	2,887	3,078	2,185	1,318	1,094	2,995	3,317	4,101	3,104
Share of Retail Trades (%)	0.26	0.29	0.07	0.03	0.01	0.03	0	0.05	0.07
Average Trade Size (Rs. mn.)	66.15	65.54	64.74	66.48	65.39	63.70	69	71.4	76.83
Average Size of Retail Trade (Rs. Mn.)	2.08	2.02	2.33	2.65	2.89	2.39	2	3.21	3.48

Source: NSE.
*excludes NDS-OM turnover

Compared to the previous year 2004-05, the market did not perform remarkably well in this year (2005-06). Only the first few months the volumes were considerably good, thereafter a decline was noticed in the subsequent months. The highest turnover of Rs. 961,083 million was witnessed in June 2005. The average daily turnover ranged between Rs. 8,137 million and Rs. 36,965 million.

Securities Profile

Long-term securities dominated the market during 2005-06 revealing the interest of investors to hold on to long term of assets. Though the turnover in Government securities decreased by 52.3% in 2005-06 as compared to the previous year, yet it accounted for the bulk of trading with a turnover of Rs. 3,455,832 million. Its share in total turnover also decreased marginally to 72.7% from 81.7% in the previous year (Table 6-10). The share of T-Bills in WDM turnover, which has been declining over a time, witnessed a reversal in the trend in the last two years registering 14.07% and 22.13% share in the years 2004-05 and 2005-06 respectively. The PSU bonds witnessed a turnover of Rs. 68,572 million in 2005-06 as against Rs. 109,061 million in 2004-05 (Annexure 6-3). The share of institutional bonds increased marginally from 0.78% in the year 2004-05 to 1.12% in the year 2005-06 (Chart 6-3).

The share of top '10' securities has increased to 59.78% (2005-06) as compared to 57.51% in 2004-05. (Table 6-11). Top 50 securities accounted for over 81.04% of turnover.

Participant Profile

Indian banks, foreign banks and PDs together accounted for over 64.07% of WDM turnover during 2005-06 (Table 6-12). The share of the Indian banks fell from 29.89% to 28.07% in 2005-06. Though the trading member's contribution declined from 33.96% to 32.01%, it proved to be market leader followed by Indian Banks (Annexure 6-3).

Table 6-10: Security wise Distribution of Turnover

Securities	Turnover (Rs. mn.)		% of Turnover	
	2004-05	2005-06	2004-05	2005-06
Government Securities	7,248,097	3,455,832	81.69	72.67
T-Bills	1,248,069	1,052,184	14.07	22.13
PSU Bonds	109,061	68,572	1.23	1.44
Institutional Bonds	69,043	53,119	0.78	1.12
Bank Bonds & CDs	26,917	20,084	0.30	0.42
Corporate Bonds & CPs	168,100	104,184	1.89	2.19
Others	3,650	1,260	0.04	0.03
Total	**8,872,937**	**4,755,235***	**100.00**	**100.00**

Source: NSE.
*excludes NDS-OM turnover

Chart 6.3: Security-wise Distribution of Turnover, 2005-06

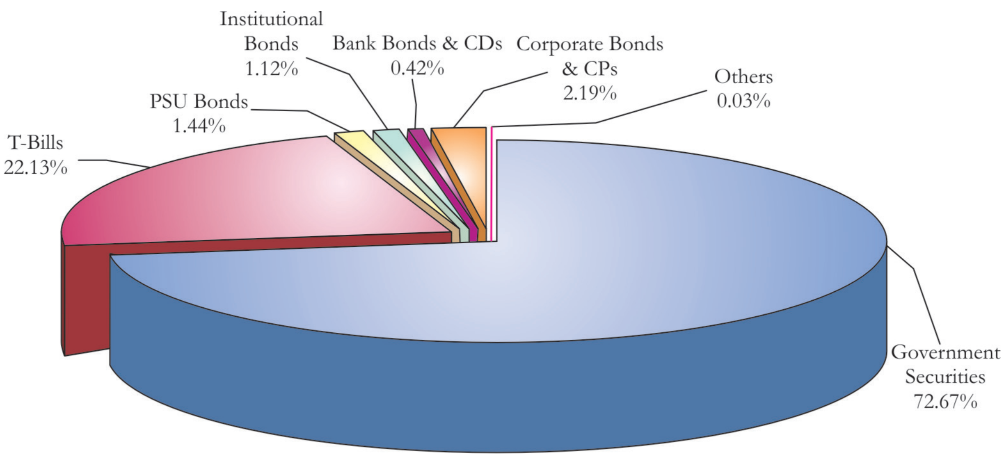


Table 6-11: Share of Top 'N' Securities/Trading Members/ Participants in Turnover in WDM Segment

Year	In Percent				
	Top 5	Top 10	Top 25	Top 50	Top 100
Securities					
1994-95	42.84	61.05	80.46	89.81	97.16
1995-96	57.59	69.46	79.60	86.58	93.24
1996-97	32.93	48.02	65.65	78.32	90.17
1997-98	30.65	46.92	71.25	85.00	92.15
1998-99	26.81	41.89	64.30	78.24	86.66
1999-00	37.11	55.57	82.12	90.73	95.28
2000-01	42.20	58.30	80.73	89.97	95.13
2001-02	51.61	68.50	88.73	94.32	97.19
2002-03	43.10	65.15	86.91	92.74	96.13

Cont...

Cont...

Table 6.11: Share of Top 'N' Securities/Trading Members/ Participants in Turnover in WDM Segment

Year	In Percent				
	Top 5	Top 10	Top 25	Top 50	Top 100
2003-04	37.06	54.43	81.58	90.66	95.14
2004-05	43.70	57.51	71.72	80.59	89.55
2005-06	47.42	59.78	72.02	81.04	89.36
Trading Members					
1994-95	51.99	73.05	95.37	100.00	--
1995-96	44.36	68.58	96.10	100.00	--
1996-97	30.02	51.27	91.57	99.96	100.00
1997-98	27.17	47.85	83.38	99.82	100.00
1998-99	29.87	50.45	86.55	99.98	100.00
1999-00	32.38	53.41	84.46	100.00	--
2000-01	35.17	54.25	86.82	100.00	--
2001-02	35.18	58.68	88.36	100.00	--
2002-03	31.77	53.71	85.49	100.00	--
2003-04	30.72	53.01	86.71	100.00	--
2004-05	35.75	56.84	86.74	100.00	--
2005-06	39.68	60.63	89.38	100.00	–
Participants					
1994-95	18.37	27.38	38.40	42.20	--
1995-96	29.66	47.15	70.49	76.32	76.58
1996-97	25.27	44.92	67.00	76.33	77.10
1997-98	23.60	38.96	65.59	77.96	80.22
1998-99	22.47	37.39	62.79	79.27	84.51
1999-00	15.54	27.87	52.51	74.76	81.32
2000-01	17.51	28.85	50.64	69.72	76.78
2001-02	17.49	29.25	50.19	69.16	76.49
2002-03	17.27	28.29	49.22	68.14	75.20
2003-04	16.66	25.69	44.25	59.87	65.17
2004-05	16.82	28.64	47.24	61.71	66.00
2005-06	17.50	30.53	53.61	65.84	67.97

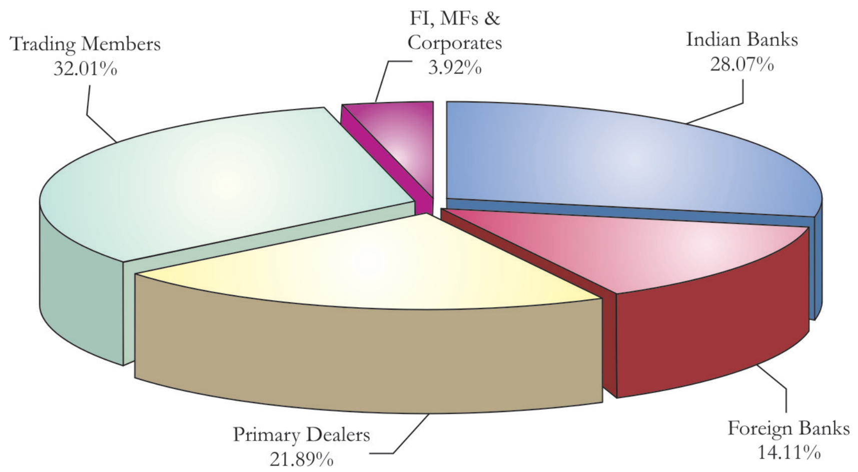
Source: NSE.

Table 6-12: Participant-wise Distribution of Turnover

Participants	2004-05	2005-06
Indian Banks	29.89	28.07
Foreign Banks	12.51	14.11
Primary Dealers	18.50	21.89
Trading Members	33.96	32.01
FI, MFs & Corporates	5.14	3.92
Total	**100.00**	**100.00**

Source: NSE.

Chart 6-4: Participant-wise Distribution of Turnover, 2005-06



Top '50' trading members accounted for the total turnover of WDM in 2005-06, which is indicative of the narrow membership structure of WDM segment (Table 6-11).- As at March 31, 2006, there were 68 members on the WDM segment.

Market Capitalisation

Market capitalisation of the WDM segment has witnessed a constant increase. The total market capitalisation of securities available for trading on WDM segment stood at Rs. 15,675,738 million as at end-March 2006, registering a growth of 7.24% over end-March 2006 (Table 6-13). The relative shares of different securities in market capitalisation maintained the trend of 2004-05. Government securities accounted for 67.61% of total market capitalisation at the end of March 2006 (Chart 6.5). The growth of market capitalisation of WDM is presented in Annexure 6-4.

Chart 6-5: Market Capitalisation of WDM Segment at the end of March 2006

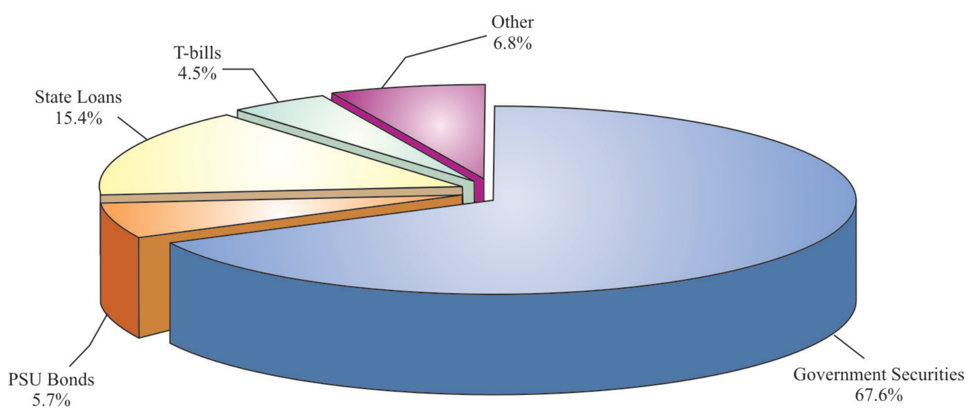


Table 6.13 : Market Capitalisation of WDM Segment

	(In Rs. mn.)		(In per cent)	
Securities	Market Capitalisatoin (end of period)		% to total	
	March-05	March-06	March-05	March-06
Government Securities	10,061,070	10,597,887	68.83	67.61
PSU Bonds	683,981	887,165	4.68	5.66
State Loans	2,232,082	2,419,271	15.27	15.43
T-bills	735,018	701,859	5.03	4.48
Other	905,193	1,069,556	6.19	6.82
Total	**14,617,344**	**15,675,738**	**100.00**	**100.00**

Source: NSE.

Yields

The yields (yield-to-maturity) on government and corporate securities of different maturities of 0-1 year, 5-6 years, 9-10 years and above 10 years are presented in Table 6-14. The yields on government and corporate securities showed an upward trend through out 2005-06.

Zero Coupon Yield Curve

Keeping in mind the requirements of the banking industry, financial institutions, mutual funds, insurance companies, that have substantial investment in sovereign papers, NSE disseminates a 'Zero Coupon Yield Curve' (NSE Zero Curve) to help in valuation of securities across all maturities irrespective of its liquidity in the market. This product has been developed by using Nelson-Siegel model to estimate the term structure of interest rate at any given point of time and been successfully tested by using daily WDM trades data. This is being disseminated daily.

Table 6-14: Yields on Government and Corporate Securities, 2005-06

(In per cent)

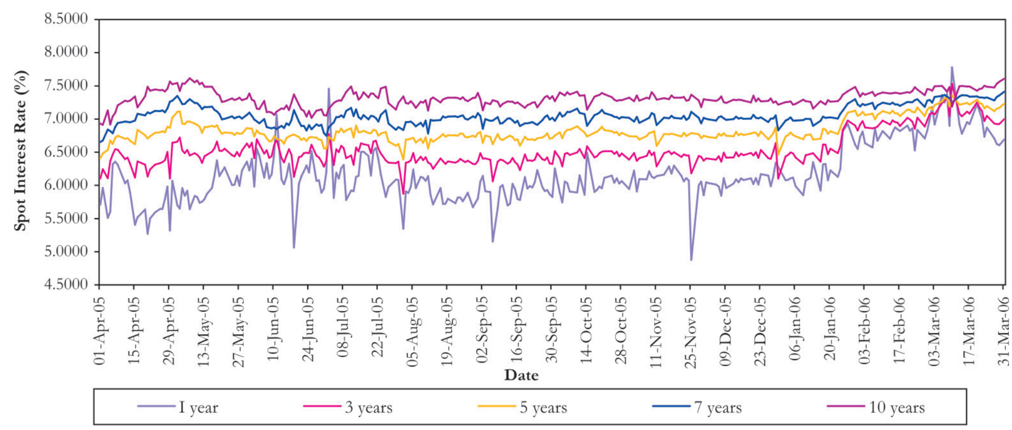
Month/ Year	Government Securities				Corporate Securities			
	0-1 year	5-6 years	9-10 years	Above 10 years	0-1 year	5-6 years	9-10 years	Above 10 years
Apr-05	5.21	6.63	6.89	7.39	5.69	6.76	7.45	7.81
May-05	5.67	6.82	6.99	7.31	5.79	6.61	7.19	8.20
Jun-05	5.70	6.65	6.80	7.05	5.82	7.03	7.16	7.92
Jul-05	5.80	6.71	7.02	7.48	5.91	7.15	7.15	8.05
Aug-05	5.62	6.67	6.93	7.42	5.74	7.11	7.15	7.32
Sep-05	5.62	6.67	6.94	7.31	5.77	6.94	7.09	7.47
Oct-05	5.77	6.74	6.99	7.42	5.98	7.25	7.10	7.38
Nov-05	5.87	6.67	6.93	7.35	6.11	7.25	7.27	7.48
Dec-05	6.03	6.66	6.95	7.30	7.18	7.18	7.31	7.26
Jan-06	6.31	6.71	7.04	7.31	7.27	7.18	7.59	7.73
Feb-06	6.75	7.02	7.21	7.43	7.76	7.71	7.69	7.57
Mar-06	6.65	7.19	7.34	7.49	8.60	8.01	8.19	8.28

Source: NSE.

The ZCYC depicts the relationship between interest rates in the economy and the associated terms to maturity. It provides daily estimates of the term structure of interest rates using information on secondary market trades in government securities from the WDM segment. The term structure forms the basis for the valuation of all fixed income instruments. Modeled as a series of cash flows due at different points of time in the future, the underlying price of such an instrument is calculated as the net present value of the stream of cash flows. Each cash flow, in such a formulation, is discounted using the interest rate for the associated term to maturity; the appropriate rates are read off the estimated ZCYC. Once estimated, the interest rate-maturity mapping is used to compute underlying valuations even for securities that do not trade on a given day. The daily ZCYC captures the changes in term structure, and is used to track the value of portfolios of government securities on a day-to-day basis.

The estimates of daily ZCYC are available from February 1998. Chart 6-6 plots the spot interest rates at different maturities for the year 2005-06.

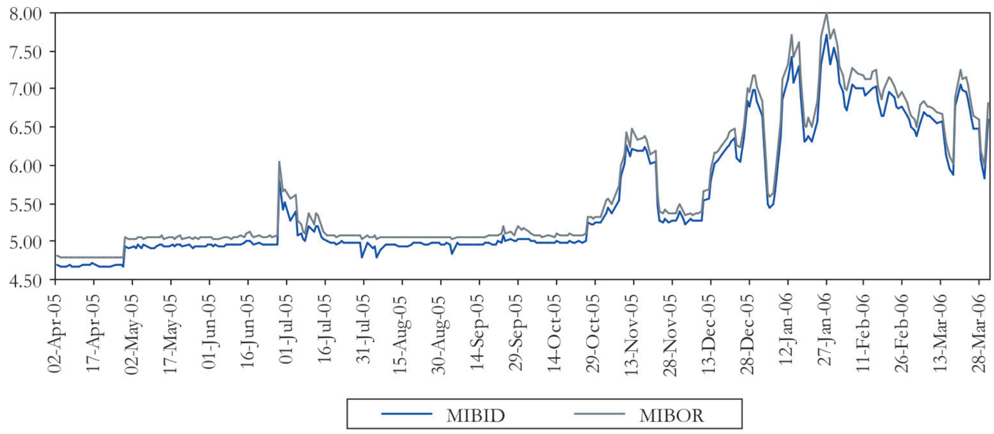
Chart 6-6: Zero Coupon Yield Curve, 2005-06



FIMMDA-NSE MIBID/MIBOR

A reference rate is an accurate measure of the market price. In the fixed income market, it is an interest rate that the market respects and closely matches. On these lines, NSE has been computing and disseminating the NSE Mumbai Inter-bank Bid Rate (MIBID) and NSE Mumbai Inter-bank Offer Rate (MIBOR) for the overnight money market from June 15, 1998, the 14-day MIBID/MIBOR from November 10, 1998 and the 1 month and 3 month MIBID/MIBOR from December 1, 1998. In view of the robust methodology of computation of these rates and their extensive use by market participants, these have been co-branded with Fixed Income and Money Market Dealers Association (FIMMDA) from March 4, 2002. These are now known as FIMMDA-NSE MIBID/MIBOR. Chart 6-7 presents overnight FIMMDA-NSE MIBID/MIBOR from April 2005 to March 2006.

Chart 6-7: Overnight NSE-FIMMDA MIBID/MIBOR Rates, 2005-06



The FIMMDA-NSE MIBID/MIBOR rates for month ends are presented in Annexure 6-5. The daily FIMMDA-NSE MIBID/MIBOR rates are available at **www.nseindia.com**.

The overnight MIBID/MIBOR rates ruled fairly steady within a narrow range during the year 2005-06. These rates touched the peak of 7.35% and 7.56%, respectively, on January 31, 2006 and the low of 4.8% and 5.02%, respectively, on July 30, 2005. The rates have been particularly stable during the current financial year, reflective of a stable interest rate environment, and have been hovering around 5-7%. The stability of the rates in overnight call market may be due to the guidelines issued by RBI moving non-banks from the call market in a phased manner.

FIMMDA-NSE MIBID/MIBOR rates are based on quotes polled by NSE from a representative panel of 29 banks/institutions/primary dealers. Currently, quotes are polled and processed daily by the Exchange at 0940 (IST) for overnight rate and at 1130 (IST) for the 14 day, 1 month and 3 month rates. The rates polled are then processed using the bootstrap method to arrive at an efficient estimate of the reference rates. The overnight rates are disseminated daily to the market at about 0955 (IST) and the 14 day, 1 month and 3 month rates at about 1145 (IST). These are broadcast through NEAT-WDM trading system immediately on release and also disseminated through websites of NSE and FIMMDA and through e-mail. The FIMMDA-NSE MIBID/MIBOR is used as a benchmark rate for majority of deals struck for interest rate swaps, forward rate agreements, floating rate debentures and term deposits.

NSE-VaR System

NSE has developed a VaR system for measuring the market risk inherent in Government of India (GOI) securities. NSE-VaR system builds on the NSE database of daily yield curves (ZCYC) and provides measures of VaR using 5 alternative methods (variance-covariance, historical simulation method, weighted normal, weighted historical simulation and extreme value method). Together, these 5 methods provide a range of options for market participants to choose from.

NSE-VaR system releases daily estimates of security-wise VaR at 1-day and multi-day horizons for securities traded on WDM segment of NSE and all outstanding GoI securities with effect from January 1, 2002. Participants can compute their portfolio risk as weighted average of security-wise VaRs, the weights being proportionate to the market value of a given security in their portfolio. 1-day VaR (99%) measure for GoI Securities traded on NSE-WDM on March 31, 2006 is presented in in Annexure 6-6. The VaR for other GOI securities are available at www.nseindia.com.

Bond Index

Market participants are familiar with the equity Indices such as the S&P CNX Nifty and the BSE Sensex. These have been around for years and are very popular as benchmarks. These are comparatively easy to construct due to the high liquidity of many equities across several industry categories. In contrast, designing debt indices posed as a challenge in India as the breadth and depth of the debt market has not been very promising. There were also a few additional difficulties in construction and maintenance of debt indices. First, on account of the fixed maturity of bonds vis-à-vis the perpetuity of equity, the universe of bonds changes frequently (new issues come in while existing issues are redeemed). Secondly, while market prices for the constituents of an equity index are normally available on all trading days over a long period of time, market prices of constituent bonds in a bond index, irrespective of the selection criteria used, may not be available daily. This is on account of the fact that the liquidity of a security varies over its lifetime and, in addition, can witness significant fluctuations over a short period. However, market participants need an index to compare their performance with as well as the performance of different classes of assets.

A widely tracked benchmark in this context is the ICICI Securities' (Isec) bond index (i-BEX), which measures the performance of the bond markets by tracking returns on government securities NSE's G-Sec Index and NSE's T-Bills Index. These have emerged as the benchmark of choice across all classes of market participants - banks, financial institutions, primary dealers, provident funds, insurance companies, mutual funds and foreign institutional investors. It has two variants, namely, a Principal Return Index (PRI) and Total Return Index (TRI). The PRI tracks the price movements of bonds or capital gains/losses since the base date. It is the movement of prices quoted in the market and could be seen as the mirror image of yield movements. During 2005-06, the PRI of i-BEX and NSE G-Sec Index decreased by 0.92% and 2.57% respectively. The TRI tracks the total returns available in the bond market. It captures both interest accruals and capital gains/losses. In a declining interest rate scenario, the index gains on account of interest accrual and capital gains, while losing on reinvestment income. As against this, during rising interest rate periods, the interest accrual and reinvestment income is offset by capital losses. Therefore, the TRI typically has a positive slope except during periods when the drop in market prices is higher than the interest accrual. During 2005-06, the TRI registered rise of 6.45% and 2.67% for i-BEX and NSE G-Sec Index respectively.

While constructing the NSE-Government Securities Index prices are used from NSE ZCYC so that the movements reflect returns to an investor on account of change in interest rates. The index provides a benchmark for portfolio management by various investment managers and gilt funds. The movements of popular fixed income indices at monthly rates are presented in Table 6-15.

Table 6-15: Debt Market Indices, 2005-06

At the end of the month	I Sec I-BEX (Base August 1, 1994=1000)		NSE-T-Bills Index		NSE-G Sec Index	
	TRI	PRI	TRI	PRI	TRI	PRI
Apr-05	3618.70	1294.29	198.56	198.56	237.68	117.26
May-05	3701.75	1316.10	199.20	199.20	239.46	117.42
Jun-05	3758.31	1328.02	200.23	200.23	243.71	118.92
Jul-05	3758.06	1319.44	201.42	201.42	244.23	118.48
Aug-05	3771.29	1315.55	202.52	202.52	242.50	117.28
Sep-05	3791.01	1313.83	203.31	203.31	243.21	117.16
Oct-05	3820.32	1315.54	204.20	204.20	244.00	117.25
Nov-05	3845.28	1315.63	205.16	205.16	244.79	116.93
Dec-05	3868.40	1314.93	205.75	205.75	249.19	118.38
Jan-06	3851.46	1300.30	206.81	206.81	244.73	115.80
Feb-06	3858.77	1294.54	207.64	207.64	244.56	115.00
Mar-06	3851.96	1282.36	209.16	209.16	244.03	114.25

Source: ICICI Securities and NSE

Annexure 6-1: Secondary Market Transactions in Government Securities

Month/Year	SGL/NDS Non-Repo Transactions				WDM Non-Repo Transactions in Govt. Sec.			
	Dated Securities	State Govt. Securities	Treasury Bills	Total (2+3+4)	Dated Securities	State Govt Securities	Treasury Bills	Total (6+7+8)
1	2	3	4	5	6	7	8	9
1994-95	**113,830**	**2,030**	**97,210**	**213,070**	**29,471**	**793**	**26,337**	**56,601**
1995-96	**175,530**	**4,640**	**115,130**	**295,300**	**68,130**	**1,755**	**22,548**	**92,433**
1996-97	**599,030**	**5,960**	**334,220**	**939,210**	**268,914**	**2,988**	**109,121**	**381,023**
1997-98	**1,185,410**	**13,480**	**412,010**	**1,610,900**	**795,638**	**9,305**	**170,209**	**975,152**
1998-99	**1,430,970**	**15,440**	**428,900**	**1,875,310**	**789,692**	**8,603**	**105,863**	**904,158**
1999-00	**4,052,850**	**36,310**	**475,750**	**4,564,910**	**2,788,655**	**20,820**	**106,440**	**2,915,915**
2000-01	**5,091,125**	**29,711**	**600,620**	**5,721,456**	**3,880,972**	**12,551**	**231,435**	**4,124,958**
2001-02	**11,385,035**	**61,307**	**673,316**	**12,119,658**	**9,001,001**	**14,120**	**254,834**	**9,269,955**
2002-03	**13,061,533**	**94,456**	**767,845**	**13,923,834**	**9,965,825**	**25,682**	**313,990**	**10,305,497**
Apr-03	1154892	5744	112712	1,273,348	918570	908	50009	969,487
May-03	1515036	11042	69404	1,595,482	1149241	2491	37896	1,189,628
Jun-03	1525599	15887	73261	1,614,747	1205540	7315	28835	1,241,690
Jul-03	1548600	9724	106354	1,664,678	1234260	3525	41824	1,279,609
Aug-03	2057602	19766	111201	2,188,569	1531213	7134	42358	1,580,705
Sep-03	1357323	14553	125795	1,497,671	1137665	5543	64704	1,207,912
Oct-03	1789154	15,559	111741	1,916,454	1326757	3176	56189	1,386,122
Nov-03	903041	6373	87211	996,625	738047	3220	46308	787,575
Dec-03	945347	14053	90647	1,050,047	763458	2678	44796	810,932
Jan-04	892785	11521	86428	990,734	699090	4216	46392	749,698
Feb-04	724382	14498	85845	824,725	556191	2774	39453	598,418
Mar-04	1227358	33237	139956	1,400,551	878361	3848	57205	939,414
2003-04	**15,641,119**	**171,957**	**1,200,556**	**17,013,632**	**12,138,393**	**46,828**	**555,969**	**12,741,190**
Apr-04	1,675,727	13,537	126,297	1,815,561	1,230,497	3,383	53,399	1,287,278
May-04	1,042,848	17,468	191,697	1,252,013	792,919	7,595	80,854	881,368
Jun-04	1,019,694	34,065	199,611	1,253,370	686,290	12,822	87,664	786,777
Jul-04	690,184	26,898	194,045	911,127	530,350	8,642	90,343	629,336
Aug-04	712,238	10,396	196,797	919,431	545,141	2,056	63,295	610,492
Sep-04	961,442	27,525	225,008	1,213,975	738,151	6,388	99,226	843,765
Oct-04	579,305	39,790	200,767	819,862	446,924	14,542	75,930	537,396
Nov-04	433,090	22,417	221,927	677,434	310,337	9,090	116,651	436,078
Dec-04	754,370	36,540	263,734	1,054,644	558,937	10,333	121,625	690,896
Jan-05	568,678	32,098	264,172	864,948	443,227	8,443	131,458	583,128
Feb-05	700,335	12,399	294,047	1,006,781	541,361	3,099	157,274	701,734
Mar-05	473,595	12,712	333,212	819,519	332,980	3,148	168,875	505,003
2004-05	**9,611,506**	**285,845**	**2,711,314**	**12,608,665**	**7,157,115**	**89,540**	**1,246,595**	**8,493,250**
Apr-05	477,327	10,484	401,936	889,747	305,690	267	217,476	523,434
May-05	680,869	32,385	279,760	993,014	504,102	9,160	159,214	672,476
Jun-05	1,100,412	31,777	165,837	1,298,026	853,811	11,783	62,078	927,673
Jul-05	597,429	9,288	124,668	731,385	450,853	2,816	44,693	498,363
Aug-05	384,844	17,981	275,567	678,392	259,584	8,985	147,328	415,896
Sep-05	302,592	26,159	165,387	494,138	210,368	11,732	69,228	291,328
Oct-05	194,399	17,224	177,061	388,684	144,237	7,709	84,735	236,681
Nov-05	241,736	11,990	135,150	388,876	158,599	7,246	68,440	234,286
Dec-05	222,453	10,560	107,360	340,373	127,913	5,816	59,985	193,714
Jan-06	213,664	9,235	99,262	322,161	139,022	2,886	58,079	199,986
Feb-06	191,215	12,378	64,316	267,909	122,164	2,319	32,623	157,106
Mar-06	167,951	21,687	97,803	287,441	105,559	3,210	48,305	157,073
2005-06	**4,774,890**	**211,150**	**2,094,107**	**7,080,147**	**3,381,903**	**73,929**	**1,052,184**	**4,508,016**

Annexure 6 -2: Business Growth of WDM Segment

Month/Year	All Trades					Retail Trades		
	No. of Active Securities	Number of Trades	Average Daily Turnover (Rs. mn.)	Turnover (Rs. mn.)	Average Trade Size (Rs. mn.)	Number of Trades	Turnover (Rs. mn.)	Share in Total Turnover (%)
1994- 95 (June-March)	**183**	**1,021**	**304**	**67,812**	**66.42**	**168**	**306**	**0.45**
1995-96	**304**	**2,991**	**408**	**118,677**	**39.68**	**1,115**	**2,072**	**1.75**
1996-97	**524**	**7,804**	**1,453**	**422,776**	**54.17**	**1,061**	**2,005**	**0.47**
1997-98	**719**	**16,821**	**3,850**	**1,112,633**	**66.15**	**1,390**	**2,887**	**0.26**
1998-99	**1,071**	**16,092**	**3,650**	**1,054,691**	**65.54**	**1,522**	**3,078**	**0.29**
1999-2000	**1,057**	**46,987**	**10,348**	**3,042,162**	**64.74**	**936**	**2,185**	**0.07**
2000-2001	**1,038**	**64,470**	**14,830**	**4,285,815**	**66.48**	**498**	**1,318**	**0.03**
2001-02	**979**	**144,851**	**32,775**	**9,471,912**	**65.39**	**378**	**1,094**	**0.01**
Apr-02	254	12,164	32,222	773,337	63.58	32	73	0.01
May-02	206	8,662	21,298	532,461	61.47	30	99	0.02
Jun-02	237	8,875	21,791	544,774	61.38	22	68	0.01
Jul-02	230	14,996	36,195	977,254	65.17	46	158	0.02
Aug-02	232	15,483	38,548	1,002,256	64.73	56	164	0.02
Sep-02	251	10,439	28,446	682,692	65.40	81	209	0.03
Oct-02	265	16,587	42,457	1,061,424	63.99	143	406	0.04
Nov-02	260	21,052	55,092	1,322,216	62.81	172	349	0.03
Dec-02	245	18,807	48,909	1,173,826	62.41	152	359	0.03
Jan-03	253	21,335	51,747	1,397,180	65.49	131	322	0.02
Feb-03	229	10,728	29,119	669,736	62.43	115	238	0.04
Mar-03	276	8,650	23,907	549,858	63.57	272	550	0.10
2002-03	**1,123**	**167,778**	**35,983**	**10,687,014**	**63.70**	**1,252**	**2,995**	**0.03**
Apr-03	282	15,512	48,120	1,010,522	65.10	180	412	0.04
May-03	290	18,651	51,400	1,233,590	66.14	148	305	0.02
Jun-03	310	18,400	50,669	1,266,717	68.84	127	290	0.02
Jul-03	271	18,220	48,528	1,310,268	71.91	122	298	0.02
Aug-03	306	22,753	65,095	1,627,371	71.50	127	255	0.02
Sep-03	334	17,152	48,153	1,251,987	72.99	115	251	0.02
Oct-03	275	20,465	59,752	1,434,039	70.07	81	265	0.02
Nov-03	233	11,737	35,175	809,029	68.93	89	282	0.03
Dec-03	247	12,529	32,272	839,059	66.97	57	142	0.02
Jan-04	280	11,407	29,820	775,328	67.97	123	338	0.04
Feb-04	241	8,675	27,954	614,989	70.89	79	211	0.03
Mar-04	372	14,017	39,523	988,064	70.49	152	268	0.03
2003-04	**1,078**	**189,518**	**44,765**	**13,160,962**	**69.44**	**1,400**	**3,317**	**0.03**

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Annexure 6.2: Business Growth of WDM Segment

Month/Year	All Trades					Retail Trades		
	No. of Active Securities	Number of Trades	Average Daily Turnover (Rs. mn.)	Turnover (Rs. mn.)	Average Trade Size (Rs. mn.)	Number of Trades	Turnover (Rs. mn.)	Share in Total Turnover (%)
Apr-04	285	19,075	60,672	1,334,778	69.98	33	112	0.01
May-04	275	13,097	38,058	913,397	69.74	27	79	0.01
Jun-04	347	11,382	31,712	824,528	72.44	56	176	0.02
Jul-04	302	9,303	24,449	660,124	70.96	55	167	0.03
Aug-04	243	9,241	25,523	638,063	69.05	68	212	0.03
Sep-04	288	12,659	35,078	876,945	69.27	103	368	0.04
Oct-04	291	8,437	24,248	557,698	66.10	79	365	0.07
Nov-04	329	5,767	19,801	455,414	78.97	134	436	0.10
Dec-04	333	10,321	27,921	725,933	70.34	154	406	0.06
Jan-05	273	8,384	25,502	612,049	73.00	131	450	0.07
Feb-05	251	10,156	30,662	735,883	72.46	133	432	0.06
Mar-05	303	6,486	22,422	538,124	82.97	305	899	0.17
2004-05	**1,151**	**124,308**	**30,283**	**8,872,936**	**71.38**	**1,278**	**4,101**	**0.05**
Apr-05	204	6,079	24,826	546,165	89.8	98	371	0.07
May-05	256	9,376	28,045	701,135	74.8	120	440	0.06
Jun-05	268	14,213	36,965	961,083	67.6	108	270	0.03
Jul-05	185	8,042	20,924	523,090	65.0	52	128	0.02
Aug-05	274	5,361	17,887	447,174	83.4	108	361	0.08
Sep-05	258	4,127	12,784	319,599	77.4	68	243	0.08
Oct-05	192	2,987	12,089	253,872	85.0	57	216	0.09
Nov-05	186	2,822	12,180	243,597	86.3	46	203	0.08
Dec-05	222	2,505	9,441	207,711	82.9	60	275	0.13
Jan-06	180	2,572	10,804	216,071	84.0	54	169	0.08
Feb-06	145	2,075	8,677	164,854	79.4	39	169	0.10
Mar-06	224	1,732	8,137	170,886	98.7	82	259	0.15
2005-06	**897**	**61,891**	**17,547**	**4,755,235**	**76.8**	**892**	**3,104**	**0.07**

Source: NSE.

Annexure 6-3: Security-wise and Participant wise Distribution of WDM Trades

(In percent)

Month/ Year	Security-wise Distribution				Participant-wise Distribution				
	Government Securities	T-Bills	PSU/Inst. Bonds	Others	Trading Members	FIs/MFs/ Corporates	Primary Dealers	Indian Banks	Foreign Banks
1994-95 (June-March)	**44.63**	**38.84**	**12.15**	**4.38**	**57.82**	**6.43**	**0.02**	**14.16**	**21.57**
1995-96	**65.13**	**19.04**	**9.69**	**6.14**	**23.48**	**7.60**	**1.16**	**30.07**	**37.69**
1996-97	**64.70**	**25.92**	**6.55**	**2.84**	**22.95**	**3.81**	**6.10**	**30.01**	**37.13**
1997-98	**76.14**	**16.96**	**3.64**	**3.26**	**19.75**	**4.30**	**12.06**	**41.24**	**22.65**
1998-99	**80.19**	**10.15**	**4.78**	**4.88**	**15.48**	**4.93**	**14.64**	**42.12**	**22.83**
1999-00	**92.99**	**3.62**	**1.60**	**1.79**	**18.63**	**4.18**	**19.42**	**42.72**	**15.05**
2000-01	**91.22**	**5.40**	**1.84**	**1.54**	**23.24**	**4.18**	**22.14**	**33.54**	**16.90**
2001-02	**95.24**	**2.70**	**1.16**	**0.91**	**23.52**	**4.16**	**22.50**	**36.60**	**13.22**
2002-03	**93.62**	**3.02**	**1.87**	**1.49**	**24.81**	**3.77**	**22.03**	**38.77**	**10.62**
Apr-03	91.01	4.95	2.67	1.37	32.55	3.40	18.65	35.91	9.49
May-03	93.36	3.07	2.09	1.48	32.28	3.83	18.74	36.89	8.26
Jun-03	95.80	2.32	1.11	0.77	33.59	3.58	19.03	37.08	6.72
Jul-03	94.48	3.20	1.67	0.65	33.15	5.10	17.77	37.37	6.61
Aug-03	94.53	2.60	2.15	0.72	33.34	4.97	16.34	39.09	6.26
Sep-03	91.32	5.17	2.56	0.95	36.13	5.33	15.32	37.01	6.21
Oct-03	92.74	3.92	2.40	0.94	35.78	5.81	16.38	35.86	6.17
Nov-03	91.62	5.72	1.68	0.98	40.68	5.16	14.61	33.90	5.65
Dec-03	91.31	5.34	2.24	1.11	35.49	4.25	16.00	37.65	6.61
Jan-04	90.71	5.98	1.66	1.65	35.78	4.47	17.38	34.85	7.52
Feb-04	90.89	6.42	1.78	0.91	36.32	3.93	17.28	32.54	9.93
Mar-04	89.29	5.79	2.48	2.44	36.21	3.96	16.30	33.82	9.71
2003-04	**92.60**	**4.23**	**2.06**	**1.11**	**34.80**	**4.56**	**17.03**	**36.36**	**7.25**
Apr-04	92.46	4.01	1.72	1.81	33.75	5.69	18.92	35.71	5.93
May-04	87.67	8.89	1.89	1.55	32.90	5.24	17.88	35.57	8.41
Jun-04	84.82	10.63	2.55	2.00	30.78	6.03	19.60	33.96	9.63
Jul-04	81.72	13.72	2.07	2.49	33.33	7.03	19.15	28.88	11.61
Aug-04	85.79	10.04	2.15	2.02	32.27	6.04	20.60	25.23	15.86
Sep-04	84.90	11.32	1.54	2.24	33.97	4.99	21.49	25.79	13.76
Oct-04	82.74	13.61	1.58	2.07	34.17	4.54	18.64	27.08	15.57
Nov-04	70.14	25.61	1.96	2.29	36.30	4.28	16.73	23.30	19.39
Dec-04	78.42	16.75	1.88	2.95	39.94	3.33	18.10	23.94	14.69
Jan-05	73.80	21.48	2.15	2.57	34.07	4.04	16.80	26.64	18.45
Feb-05	73.99	21.37	2.51	2.13	34.26	4.66	15.27	29.74	16.07
Mar-05	62.46	31.38	2.42	3.74	33.15	4.73	16.91	33.49	11.72
2004-05	**81.69**	**14.07**	**2.01**	**2.23**	**33.96**	**5.14**	**18.50**	**29.89**	**12.51**
Apr-05	56.02	39.82	1.87	2.29	31.34	4.28	17.15	31.77	15.46
May-05	73.2	22.71	1.42	2.67	31.72	4.29	23.11	28.21	12.67
Jun-05	90.06	6.46	1.86	1.62	30.05	3.72	22.71	29.07	14.45
Jul-05	86.73	8.54	2.32	2.41	30.93	2.43	26.42	25.71	14.51
Aug-05	60.06	32.95	3.4	3.59	34.44	3.81	19.56	27.82	14.37
Sep-05	69.49	21.66	4.52	4.33	35.57	5.83	18.74	31.77	8.09
Oct-05	59.85	33.38	4.21	2.56	35.34	2.66	21.77	27.15	13.08
Nov-05	68.08	28.1	2.32	1.5	29.18	4.99	21.29	29.98	14.56
Dec-05	64.38	28.88	3.31	3.43	34.37	4.4	18.84	30.9	11.49
Jan-06	65.68	26.88	3.38	4.06	29.92	3.32	24.79	22.11	19.86
Feb-06	75.51	19.79	1.13	3.57	31.84	3.71	26.57	21.17	16.71
Mar-06	63.65	28.27	5.57	2.51	35.76	4.16	22.1	20.47	17.51
2005-06	**72.67**	**22.13**	**2.56**	**2.64**	**32.01**	**3.92**	**21.89**	**28.07**	**14.11**

Annexure 6-4: Market Capitalisation of WDM Securities

Month/ Year (end of period)	(In Rs. mn.)						(In per cent)				
	Govt. Securities	PSU bonds	State loans	T-bills	Others	Total	Govt. securities	PSU bonds	State loans	T-bills	Others
Mar-95	**861,748**	**256,750**	**58,674**	**171,294**	**233,344**	**1,581,810**	**54.48**	**16.23**	**3.71**	**10.83**	**14.75**
Mar-96	**1,254,925**	**300,740**	**138,497**	**84,523**	**299,150**	**2,077,835**	**60.40**	**14.47**	**6.67**	**4.07**	**14.40**
Mar-97	**1,698,298**	**362,111**	**188,914**	**134,599**	**543,797**	**2,927,719**	**58.01**	**12.37**	**6.45**	**4.60**	**18.57**
Mar-98	**1,962,904**	**353,226**	**239,892**	**174,973**	**700,910**	**3,431,905**	**57.20**	**10.29**	**6.99**	**5.10**	**20.42**
Mar-99	**2,600,017**	**349,936**	**305,161**	**112,918**	**746,665**	**4,114,697**	**63.19**	**8.50**	**7.42**	**2.74**	**18.15**
Mar-00	**3,198,650**	**393,570**	**394,770**	**153,450**	**799,890**	**4,940,330**	**64.75**	**7.97**	**7.99**	**3.11**	**16.19**
Mar-01	**3,972,280**	**363,650**	**446,240**	**177,250**	**848,940**	**5,808,360**	**68.39**	**6.26**	**7.68**	**3.05**	**14.62**
Mar-02	**5,426,010**	**399,440**	**613,850**	**238,490**	**890,160**	**7,567,950**	**71.70**	**5.28**	**8.11**	**3.15**	**11.76**
Mar-03	**6,580,017**	**383,828**	**720,940**	**349,188**	**610,839**	**8,644,812**	**76.12**	**4.44**	**8.34**	**4.04**	**7.06**
Apr-03	6,849,121	396,611	722,953	328,804	621,630	8,919,119	76.79	4.45	8.11	3.69	6.96
May-03	7,104,199	420,145	702,136	321,470	621,100	9,169,050	77.48	4.58	7.66	3.51	6.77
Jun-03	7,435,606	421,653	718,456	328,090	635,140	9,538,945	77.95	4.42	7.53	3.44	6.66
Jul-03	7,838,750	424,775	719,503	325,150	638,590	9,946,768	78.81	4.27	7.23	3.27	6.42
Aug-03	7,988,496	449,448	746,743	365,203	651,400	10,201,290	78.31	4.41	7.32	3.58	6.38
Sep-03	8,070,012	444,392	763,531	402,549	619,900	10,300,384	78.35	4.31	7.41	3.91	6.02
Oct-03	9,562,953	445,440	770,372	407,028	610,920	11,796,713	81.06	3.78	6.53	3.45	5.18
Nov-03	9,542,587	444,861	771,543	365,070	602,230	11,726,291	81.83	3.79	6.58	3.11	4.69
Dec-03	9,599,031	464,356	772,923	326,392	626,560	11,789,262	81.42	3.94	6.56	2.77	5.31
Jan-04	9,673,514	461,211	783,046	322,324	680,600	11,920,695	81.15	3.87	6.57	2.70	5.71
Feb-04	9,681,552	492,235	790,358	322,291	715,071	12,001,507	80.67	4.10	6.59	2.69	5.95
Mar-04	**9,593,017**	**568,319**	**793,403**	**326,920**	**876,979**	**12,158,638**	**78.90**	**4.67**	**6.53**	**2.69**	**7.21**
Apr-04	9,725,430	540,010	763,911	405,555	687,034	12,121,940	80.23	4.45	6.30	3.35	5.67
May-04	9,690,356	615,908	771,051	488,246	716,340	12,281,901	78.90	5.01	6.28	3.98	5.83
Jun-04	9,902,437	660,797	775,886	561,549	792,093	12,692,762	78.02	5.21	6.11	4.42	6.24
Jul-04	9,856,949	673,996	1,798,584	594,616	806,840	13,730,985	71.79	4.91	13.10	4.33	5.87
Aug-04	9,757,119	677,634	1,858,639	598,941	815,104	13,707,437	71.18	4.94	13.56	4.37	5.95
Sep-04	9,971,626	676,059	1,853,590	606,082	832,916	13,940,273	71.53	4.85	13.30	4.35	5.97
Oct-04	9,874,540	685,464	1,837,708	637,550	842,065	13,877,327	71.16	4.94	13.24	4.59	6.07
Nov-04	9,812,375	676,668	1,834,617	608,970	834,637	13,767,267	71.27	4.92	13.33	4.42	6.06
Dec-04	9,963,410	679,400	2,145,190	620,830	866,230	14,275,060	69.80	4.76	15.03	4.35	6.06
Jan-05	10,020,056	678,127	2,148,977	636,791	862,398	14,346,348	69.84	4.73	14.98	4.44	6.01
Feb-05	10,109,360	672,550	2,233,950	696,600	894,930	14,607,390	69.21	4.60	15.29	4.77	6.13
Mar-05	**10,061,070**	**683,981**	**2,232,082**	**735,018**	**905,193**	**14,617,344**	**68.83**	**4.68**	**15.27**	**5.03**	**6.19**
Apr-05	10,033,390	679,340	2,235,130	786,240	909,830	14,643,930	68.52	4.64	15.26	5.37	6.21
May-05	10,105,690	723,880	2,165,850	823,780	905,120	14,724,320	68.63	4.92	14.71	5.59	6.15
Jun-05	10,145,580	746,990	2,244,750	906,790	908,140	14,952,250	67.85	5.00	15.01	6.06	6.08
Jul-05	10,258,140	757,010	2,244,020	842,490	936,570	15,038,230	68.21	5.03	14.92	5.60	6.24
Aug-05	10,360,040	762,480	2,247,170	873,720	935,590	15,179,000	68.25	5.02	14.80	5.76	6.17
Sep-05	10,206,120	761,900	2,331,340	1,022,800	948,620	15,270,780	66.83	4.99	15.27	6.70	6.21
Oct-05	10,209,750	781,170	2,330,380	1,033,520	947,550	15,302,370	66.72	5.10	15.23	6.75	6.20
Nov-05	10,442,870	781,820	2,359,910	984,000	974,440	15,543,040	67.19	5.03	15.18	6.33	6.27
Dec-05	10,515,210	787,210	2,362,820	818,430	1,009,810	15,493,480	67.87	5.08	15.25	5.28	6.52
Jan-06	10,584,610	842,070	2,368,430	721,070	1,035,610	15,551,790	68.06	5.41	15.23	4.64	6.66
Feb-06	10,586,810	835,730	2,404,270	672,570	1,035,100	15,534,480	68.15	5.38	15.48	4.33	6.66
Mar-06	**10,597,890**	**887,160**	**2,419,270**	**701,860**	**1,069,560**	**15,675,740**	**67.61**	**5.66**	**15.43**	**4.48**	**6.82**

Annexure 6-5: FIMMDA NSE MIBID/MIBOR Rates

Month/Date	OVERNIGHT AT 9.40 a.m.*		14 DAY AT 11.30 a.m.**		1 MONTH RATE AT 11.30 a.m.***		3 MONTH RATE AT 11.30 a.m.***	
	MIBID	MIBOR	MIBID	MIBOR	MIBID	MIBOR	MIBID	MIBOR
29-Jun-98	6.81	7.12	–	–	–	–	–	–
31-Jul-98	3.25	4.18	–	–	–	–	–	–
31-Aug-98	8.59	8.88	–	–	–	–	–	–
30-Sep-98	8.18	8.38	–	–	–	–	–	–
30-Oct-98	8.63	8.81	–	–	–	–	–	–
30-Nov-98	8.00	8.06	8.44	9.06	–	–	–	–
31-Dec-98	–	–	8.87	9.45	9.45	10.24	10.43	11.28
30-Jan-99	8.33	8.51	8.80	9.34	9.32	10.04	10.40	11.08
27-Feb-99	9.12	9.27	9.23	9.82	9.87	10.46	10.94	11.45
31-Mar-99	10.87	12.97	9.09	10.06	9.44	10.35	10.30	11.20
29-Apr-99	8.25	8.45	8.25	9.01	8.93	9.72	9.83	10.63
31-May-99	8.04	8.19	8.44	8.93	9.01	9.78	9.80	10.72
30-Jun-99	–	–	8.48	9.11	9.11	9.84	9.89	10.68
31-Jul-99	8.18	8.31	8.36	8.86	8.79	9.37	9.36	10.09
31-Aug-99	9.93	10.09	9.24	9.83	9.46	10.11	9.86	10.57
30-Sep-99	–	–	9.11	9.64	9.57	10.20	10.06	10.70
30-Oct-99	8.10	8.26	8.82	9.62	9.45	10.17	10.31	11.08
30-Nov-99	7.95	8.04	8.40	9.02	9.08	9.75	10.05	10.70
31-Dec-99	7.07	7.57	8.61	9.27	9.12	9.89	9.76	10.53
31-Jan-00	8.09	8.19	8.33	8.85	8.78	9.32	9.60	10.31
29-Feb-00	8.99	9.10	8.76	9.66	8.98	9.80	9.38	10.24
31-Mar-00	14.10	16.52	9.98	10.93	9.90	10.82	9.96	10.96
29-Apr-00	6.96	7.06	7.35	8.11	8.03	8.68	8.78	9.47
31-May-00	6.92	7.02	7.76	8.66	8.25	9.12	8.92	9.64
30-Jun-00	–	–	9.80	11.25	9.71	10.92	9.78	11.13
31-Jul-00	8.20	8.33	9.14	10.11	9.62	10.49	10.28	11.11
31-Aug-00	13.94	14.31	13.02	14.33	12.54	13.61	11.58	12.67
30-Sep-00	10.10	10.28	10.29	11.23	10.55	11.49	10.75	11.76
31-Oct-00	8.10	8.26	8.77	9.48	9.34	10.16	9.89	10.73
30-Nov-00	7.98	8.06	8.68	9.33	9.12	9.82	9.73	10.54
29-Dec-00	8.24	8.46	9.21	9.96	9.49	10.20	9.85	10.64
31-Jan-01	9.66	9.85	9.41	10.05	9.63	10.28	10.00	10.57
28-Feb-01	7.71	7.84	8.11	8.80	8.67	9.38	9.40	10.10
31-Mar-01	10.22	12.18	9.03	9.89	9.08	9.86	9.26	10.25
30-Apr-01	7.25	7.39	7.55	8.33	8.15	8.83	8.83	9.54
31-May-01	6.79	6.95	7.40	8.04	7.89	8.57	8.41	9.08
29-Jun-01	7.20	7.34	7.25	7.85	7.69	8.41	8.16	8.87
31-Jul-01	6.91	7.04	7.29	7.88	7.58	8.17	7.99	8.66
31-Aug-01	6.92	7.03	7.01	7.40	7.34	7.82	7.82	8.32
28-Sep-01	7.77	8.21	7.52	8.14	8.07	8.70	8.33	8.98
31-Oct-01	8.47	8.77	7.15	7.72	7.39	8.03	7.61	8.37
29-Nov-01	6.42	6.59	6.74	7.23	7.26	7.80	7.77	8.32
31-Dec-01	7.80	8.11	7.42	8.04	7.63	8.26	7.88	8.57
31-Jan-02	6.51	6.64	6.89	7.40	7.15	7.73	7.73	8.41
28-Feb-02	6.94	7.16	6.84	7.33	7.23	7.78	7.79	8.37
30-Mar-02	7.44	11.09	7.41	8.06	7.39	8.05	7.63	8.29
30-Apr-02	6.45	6.61	6.58	7.13	7.01	7.63	7.53	8.19
31-May-02	6.01	6.16	6.64	7.29	7.17	7.79	7.48	8.24
28-Jun-02	4.99	5.35	6.04	6.56	6.35	6.98	6.80	7.50
31-Jul-02	5.65	5.75	5.80	6.16	6.01	6.42	6.35	6.84

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Annexure 6.5: FIMMDA NSE MIBID/MIBOR Rates

Month/Date	OVERNIGHT AT 9.40 a.m.*		14 DAY AT 11.30 a.m.**		1 MONTH RATE AT 11.30 a.m.***		3 MONTH RATE AT 11.30 a.m.***	
	MIBID	MIBOR	MIBID	MIBOR	MIBID	MIBOR	MIBID	MIBOR
31-Aug-02	5.67	5.75	5.73	6.02	5.98	6.34	6.37	6.81
28-Sep-02	5.70	5.77	5.73	6.07	5.91	6.32	6.28	6.81
31-Oct-02	5.45	5.53	5.50	5.71	5.65	5.87	5.85	6.23
30-Nov-02	5.21	5.39	5.45	5.65	5.59	5.82	5.77	6.10
31-Dec-02	5.59	5.71	5.50	5.69	5.60	5.90	5.80	6.21
31-Jan-03	6.02	6.20	5.60	5.97	5.67	6.04	5.82	6.30
28-Feb-03	6.29	6.52	5.62	5.92	5.66	6.13	5.73	6.27
31-Mar-03	6.69	7.13	5.66	6.30	5.83	6.37	5.73	6.36
30-Apr-03	4.61	4.88	5.00	5.32	5.18	5.51	5.33	5.76
31-May-03	4.78	4.96	4.93	5.26	5.03	5.36	5.19	5.60
30-Jun-03	4.76	4.99	4.91	5.14	4.96	5.30	5.14	5.52
31-Jul-03	4.83	5.00	4.97	5.13	5.01	5.23	5.06	5.39
31-Aug-03	4.37	4.50	4.50	4.66	4.53	4.73	4.69	4.94
30-Sep-03	4.45	4.59	4.41	4.63	4.49	4.73	4.64	4.94
31-Oct-03	4.42	4.53	4.69	4.96	4.73	5.02	4.82	5.21
30-Nov-03	4.25	4.48	4.47	4.62	4.54	4.70	4.66	4.93
31-Dec-03	4.31	4.50	4.45	4.62	4.50	4.72	4.66	4.91
31-Jan-04	4.27	4.49	4.47	4.67	4.57	4.77	4.70	5.00
29-Feb-04	4.29	4.47	4.45	4.63	4.56	4.72	4.72	5.00
31-Mar-04	4.30	4.51	4.44	4.68	4.57	4.82	4.73	5.05
30-Apr-04	4.11	4.46	4.37	4.55	4.45	4.65	4.59	4.90
31-May-04	4.27	4.50	4.35	4.55	4.44	4.64	4.56	4.83
29-Jun-04	4.24	4.49	4.33	4.51	4.41	4.62	4.55	4.83
31-Jul-04	4.22	4.49	4.37	4.56	4.46	4.67	4.62	4.89
31-Aug-04	4.25	4.46	4.44	4.65	4.53	4.76	4.67	4.94
29-Sep-04	4.45	4.59	4.50	4.69	4.58	4.81	4.74	5.03
30-Oct-04	4.68	4.84	4.78	5.03	4.85	5.11	5.00	5.31
30-Nov-04	4.74	4.85	4.99	5.30	5.05	5.39	5.16	5.57
31-Dec-04	5.54	5.78	5.22	5.49	5.20	5.48	5.38	5.68
31-Jan-05	4.69	4.80	4.87	5.13	5.00	5.30	5.35	5.70
28-Feb-05	4.66	4.77	4.87	5.25	5.01	5.51	5.44	6.10
31-Mar-05	4.77	4.92	5.06	5.46	5.23	5.63	5.62	6.11
30-Apr-05	4.90	5.04	5.13	5.33	5.28	5.55	5.56	5.98
31-May-05	4.97	5.06	5.14	5.33	5.27	5.51	5.49	5.93
30-Jun-05	5.51	5.69	5.32	5.46	5.39	5.63	5.60	5.94
30-Jul-05	4.80	5.02	5.05	5.27	5.22	5.50	5.54	6.02
31-Aug-05	4.97	5.05	5.20	5.36	5.32	5.51	5.66	5.96
30-Sep-05	5.03	5.14	5.32	5.53	5.46	5.73	5.71	6.06
31-Oct-05	5.26	5.33	5.35	5.47	5.48	5.65	5.85	6.10
30-Nov-05	5.32	5.43	5.56	5.82	5.68	5.98	5.98	6.30
31-Dec-05	6.83	7.03	6.25	6.76	6.20	6.78	6.27	6.88
31-Jan-06	7.35	7.56	6.92	7.42	7.08	7.53	7.08	7.62
28-Feb-06	6.61	6.73	6.80	7.15	6.92	7.31	7.20	7.65
31-Mar-06	6.60	6.81	7.30	7.91	7.63	8.24	7.86	8.48

Note:
* Overnight : Disseminated since June 15, 1998.
** 14 Day : Disseminated since November 10, 1998.
*** 1 month : Disseminated since December 1, 1998.
*** 3 month : Disseminated Since December 1, 1998.

Annexure 6-6: 1-day VaR (99%) for GoI Securities Traded on NSE-WDM as on March 31, 2006

Security Type	Security Name	Issue Name	VaR (%)					Clean Price (off NSE-ZCYC)
			Normal	Weighted Normal	Historical Simul-ation	Weighted Historical Simul-ation	EVT	
GS	CG2008	11.40%	0.7180	0.7710	0.9400	0.5850	0.8230	109.4650
GS	CG2008	12%	0.7000	0.7420	0.9770	0.5890	0.8180	109.5840
GS	CG2009	11.99%	0.7390	0.7880	0.9360	0.5400	0.8030	113.0640
GS	CG2009	6.65%	0.7630	0.8110	0.9630	0.7160	0.8330	98.7700
GS	CG2009	6.96%	0.7610	0.8100	0.9600	0.5580	0.8320	99.6060
GS	CG2009	7.33%	0.7560	0.8070	0.9520	0.5470	0.8270	100.5950
GS	CG2010	6.20%	0.8230	0.8010	0.9580	0.5170	0.8370	96.6470
GS	CG2010	7.55%	0.8350	0.7800	0.9650	0.4570	0.8150	101.0800
GS	CG2011	9.39%	0.9290	0.6950	0.9290	0.5780	0.7930	108.7730
GS	CG2012	6.85%	1.0740	0.6520	1.0310	0.5020	0.8060	97.2830
GS	CG2014	7.37%	1.3380	0.6120	1.1770	1.1190	0.9160	98.8950
GS	CG2017	8.07%	1.6390	0.7960	1.4910	0.6830	1.1150	102.7940
GS	CG2021	10.25%	1.9520	1.0530	1.9300	0.7590	1.5100	121.6260
GS	CG2022	8.35%	2.1720	1.2060	2.2840	0.8410	1.7300	104.7140
GS	CG2035	7.40%	3.8250	2.5890	4.9340	2.1530	3.5520	93.5530
TB	364D	101106	0.4260	0.3890	0.5760	0.2490	0.5150	96.0180
TB	364D	140406	0.0410	0.0320	0.0530	0.0380	0.0480	99.7500
TB	91D	190506	0.1300	0.1050	0.1710	0.1310	0.1550	99.1280

Derivatives Market

Introduction

The first step towards introduction of derivatives trading in India was the promulgation of the Securities Laws (Amendment) Ordinance, 1995. It withdrew the prohibition on options in securities. The market for derivatives however, did not take off, as there was no regulatory framework to govern trading of derivatives. SEBI set up a 24 -member committee under the Chairmanship of Dr. L. C. Gupta on November 18, 1996 to develop regulatory framework for derivatives trading in India. In its report, the committee prescribed necessary pre-conditions for introduction of derivatives trading in India; it recommended that derivatives should be declared as 'securities' so that the regulatory framework applicable to trading of 'securities' could also govern trading of securities. SEBI also set up a group in June 1998 under the Chairmanship of Prof. J. R. Varma to recommend measures for risk containment in derivatives market. The Report worked out the operational details of margining system, methodology for charging initial margins, broker net worth, deposit requirement and real-time monitoring requirements.

The Securities Contract Regulation Act SC(R)A was amended in December 1999 to include derivatives within the ambit of 'securities'. Thereafter a regulatory framework was developed for governing the trading in derivatives. Derivatives were formally defined to include: *(a) a security derived from a debt instrument, share, loan whether secured or unsecured, risk instrument or contract for differences or any other form of security, and (b) a contract which derives its value from the prices, or index of prices, or underlying securities*. The Act also made it clear that derivatives are legal and valid, but only if such contracts are traded on a recognised stock exchange. The Government also rescinded in March 2000 the three-decade old notification, which prohibited forward trading in securities.

Derivatives trading commenced in India after SEBI granted the final approval to commence trading and settlement in approved derivative contracts on the NSE and BSE. NSE started operations in the derivatives segment on June 12, 2000. Initially, NSE introduced futures contracts on Nifty index. However, the basket of instruments has widened considerably. Now trading in futures and options is based on not only on Nifty index but also on other indices viz., CNX IT Index and Bank Index as well as options and futures on single stocks (currently on 122 stocks)[1] and also futures on interest rates.

[1] 122 securities as on end October 2006

Global Derivatives Markets [2]

As per the *FIA Annual Volume Survey* the global overall futures and options contract volume was up nearly 11.67% in 2005. The individual futures and options contract volume registered a growth of 13.44% and 10.53%, respectively, in the year 2005.

Year Wise Trend of Derivatives Trading (in terms of contracts)

(in millions)

Year	US Exchanges	Non-US Exchanges	Global
1992	550.39	387.83	938.22
1993	523.36	538.36	1,061.72
1994	807.87	779.83	1,587.70
1995	776.64	905.99	1,682.63
1996	793.63	975.34	1,768.97
1997	905.16	1,025.07	1,930.23
1998	1,033.20	1,142.65	2,175.81
1999	1,100.86	1,301.98	2,405.84
2000	1,313.65	1,675.80	2,989.45
2001	1,578.62	2,768.70	4,347.32
2002	1,844.90	4,372.38	6,217.28
2003	2,172.52	5,990.22	8,162.54
2004	2,795.21	6,069.50	8,864.71
2005	3,525.00	6,374.78	9,899.78

Looking at the individual sectors, growth have been fairly strong across the board with the main exception being precious and non-precious metals. The trading in foreign currency/index has grown by 57.06% in 2005, followed by Individual equities which registered growth of 18.04%.

Global Futures and Options Volume

(in million)

GLOBAL	2005	2006	% Change
Equity Indices	4080	3779.4	7.95
Interest Rate	2536.76	2271.25	11.69
Individual Equities	2356.87	1996.66	18.04
Energy Products	274.79	243.46	12.87
Ag Commodities	330.85	301.91	9.59
Non-Precious Metals	98	105.23	-6.87
Foreign Currency/Index	165.51	105.38	57.06
Precious Metals	55.34	60.56	-8.62
Other	1.67	0.86	94.19
Total Volume	**9,899.79**	**8,864.71**	**11.68**

[2] Data source is Futures Industry Magazine, March/April 2004

The details for the top 20 contracts for the year 2005 are presented in Table 7-1. Kospi 200 options of Kofex led the table with more than 2.5 billion contracts in 2005 followed by Euro-Dollar Futures of CME. TIIE 28 Futures MexDer has witnessed a huge decline of 51.55% which skipped down its position to number 13.

NSE, too, has been making huge strides by moving upwards in the global ranking. NSEIL ranked first (1st) in the single stock future category (Table 7-2) in the year 2005. NSE has been ranked 14th in the global futures and options volume in 2005 against its rank of 17th in the previous year (Table 7-3). In the top 40 Futures Exchanges of the World, NSE stands at the 7th position in 2005 as against 10th in the year 2004 (Table 7-4).

Table 7-1: Top 20 Contracts for the year 2005

(in miilions - net of individual equities)

Rank	Contract	2005	2004	Volume Change	% Change
1	Kospi 200 Options, Korea Exchange	2,535.20	2,521.56	13.64	0.54
2	Eurodollar Futures, CME	410.36	297.58	112.78	37.90
3	Euro-Bund Futures, Eurex	299.29	239.79	59.50	24.81
4	10-Year T-Note Futures, CBOT	215.12	196.12	19.00	9.69
5	E-mini S&P 500 Index Futures, CME	207.1	167.20	39.90	23.86
6	Eurodollar Options, CME	188.00	130.60	57.40	43.95
7	Euribor Futures, Euronext.liffe	166.68	157.75	8.93	5.66
8	Euro-Bobl Futures, Eurex	158.26	159.17	-0.91	-0.57
9	Euro-Schatz Futures, Eurex	141.23	122.93	18.30	14.89
10	DJ Euro Stoxx 50 Futures, Eurex	139.98	121.66	18.32	15.06
11	5 Year T-Note Futures, CBOT	121.91	105.47	16.44	15.59
12	1-Day Interbank Deposit Futures, BM&F	121.25	100.29	20.96	20.90
13	TIIE 28-Day Interbank Rate Futures, Mexder	99.83	206.03	-106.20	-51.55
14	DJ Euro Stoxx 50 Options, Eurex	90.81	71.41	19.40	27.17
15	30-Year T-Bond Futures, CBOT	86.93	72.95	13.98	19.16
16	Taiex Options, Taifex	80.10	43.82	36.28	82.79
17	E-mini Nasdaq 100 Futures, CME	72.45	77.17	-4.72	-6.12
18	S&P 500 Index Options, CBOE	71.80	49.47	22.33	45.14
19	Sterling Futures, Euronext.liffe	68.03	51.32	16.71	32.56
20	TA-25 Index Options, TASE	63.10	36.92	26.18	70.91

Source: FI Futures Industry, March/April 2006. The monthly magazine of the FIA.

Table 7-2 : Futures on Individual Equities (Stock Futures)

(Number of Contracts)

Exchange	2004	2005
National Stock Exchange of India	**44,020,670**	**68,911,754**
JSE South Africa	8,883,587	24,434,415
Spanish Exchange (BME)	12,054,799	18,813,689
Euronext	13,491,781	12,158,093
Borsa Italiana	1,734,256	5,957,674

*Source:*WFE 2005 Annual Report and Statistics.

Table 7-3: Global Futures and Options Volume

Rank		Exchange	Volume		% Change
2005	2004		2005	2004	
1	1	Korea Exchange	2,593,088,445	2,586,818,602	0.2
2	2	Eurex	1,248,748,152	1,065,639,010	17.2
3	3	Chicago Mercantile Exchange	1,090,351,711	805,341,681	35.4
4	4	Euronext.liffe	757,926,860	790,761,844	-4.2
5	5	Chicago Board of Trade	674,651,393	599,994,386	12.4
6	6	Chicago Board of Options Exchange	468,249,301	361,086,774	29.7
7	7	International Securities Exchange	448,695,669	360,852,519	24.3
8	8	Bovespa	268,620,460	235,349,514	14.1
9	12	New York Mercantile Exchange	204,611,537	163,157,807	25.4
10	10	American Stock Exchange	201,631,832	202,680,929	-0.5
11	11	Bolsa de Mercadorias & Futuros	199,446,464	183,427,938	8.7
12	13	Philadelphia Stock Exchange	162,596,932	133,401,278	21.9
13	14	Pacific Exchange	144,780,498	103,262,458	40.2
14	**17**	**National Stock Exchnage of India**	**131,651,692**	**75,093,629**	**75.3**
15	9	Mexican Derivatives Exchange	108,177,276	210,395,264	-48.6
16	15	OMX Exchanges	103,509,936	95,047,814	8.9
17	16	Dalian Commodity Exchange	99,174,714	88,034,153	12.7
18	20	Taiwan Futures Exchange	92,659,768	59,146,376	56.7
19	19	London Metal Exchange	78,628,852	71,906,901	9.3
20	34	Boston Options Exchange	78,202,185	20,741,271	277.0
21	22	Tel-Aviv Stock Exchange	70,088,945	43,375,943	61.6
22	21	Sydney Futures Exchange	63,324,966	53,969,445	17.3
23	18	The Tokyo Commodity Exchange	61,814,289	74,511,734	-17.0
24	24	JSE Securities Exchange South Africa	51,318,175	38,347,861	33.8
25	27	Osaka Securities Exchange	44,172,264	32,626,063	35.4
26	25	ICE Futures (Formerly IPE)	42,055,085	35,540,783	18.3
27	29	MEFF Renta Variable	40,217,657	28,740,007	39.9
28	28	New York Board of Trade	37,945,585	31,729,591	19.6
29	23	Shanghai Futures Exchange	33,789,754	40,577,373	-16.7
30	33	Bourse De Montreal	28,685,391	21,815,128	31.5
31	32	Zhengzhou Commodity Exchange	28,472,570	24,237,274	17.5
32	30	Singapore Exchange	26,026,128	28,418,757	-8.4
33	38	Italian Derivatives Market	25,870,521	18,272,516	41.6
34	31	Tokyo Grain Exchange	25,600,339	25,744,922	-0.6
35	36	Hong Kong Exchanges & Clearing	25,523,007	19,629,692	30.0
36	37	Tokyo Stock Exchange	24,349,760	19,612,565	24.2
37	35	Australian Stock Exchange	23,587,690	20,485,729	15.1
38	26	Central Japan Commodity Exchangs	21,949,566	33,193,259	-33.9
39	39	Mercado a Termino de Roasario	13,415,449	8,163,545	64.3
40	40	Tokyo Financial Exchange	11,098,338	7,657,510	44.9
41	43	Budapest Stock Exchange	8,916,470	4,254,595	109.6
42	42	Oslo Stock Exchange	6,200,067	5,351,734	15.9
43	45	Warsaw Stock Exchange	5,587,515	3,687,877	51.5
44	52	One Chicago	5,528,046	1,922,726	187.5
45	46	Kansas City Board of Trade	3,953,536	3,089,103	28.0
46	49	Bursa Malaysia Derivatives Exchange Berhad	2,459,745	2,632,543	-6.6

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Table 7.3: Global Futures and Options Volume

Rank 2005	Rank 2004	Exchange	Volume 2005	Volume 2004	% Change
47	41	Eurex US	2,200,384	6,186,808	-64.4
48	51	Winnipeg Commodity Exchange	2,076,630	2,054,296	1.1
49	44	Osaka Mercantile Exchange	1,602,257	3,842,553	-58.3
50	53	Minneapolis Grain Exchange	1,422,386	1,416,282	0.4
51	50	Wiener Boerse	1,045,306	2,242,475	-53.4
52	56	New Zealand Futures Exchange	986,073	497,181	98.3
53	48	Kansai Commodities Exchange	937,201	2,806,740	-66.6
54	47	Fukuoka Futures Exchange	891,549	3,036,733	-70.6
55	54	Budapest Commodity Exchange	569,479	1,300,726	-56.2
56	55	Yokohama Commodity Exchange	384,069	1,164,811	-67.0
57	57	CBOE Futures Exchange	177,632	91,332	94.5
58	58	Mercado a Termino de Buenos Aires	135,736	85,593	58.6

Source: Futures Industry, March / April 2005. The monthly magazine of the FIA.

Table 7-4: Top 40 Futures Exchanges ***(Volume figures do not include options on futures)***

Rank 2005	Rank 2004	Exchange	Volume 2005	Volume 2004	% Change
1	2	Chicago Mercantile Exchange	883,118,526	664,884,607	32.8
2	1	Eurex	784,896,954	684,630,502	14.6
3	3	Chicago Board of Trade	561,145,938	489,230,144	14.7
4	4	Euronext.liffe	343,829,658	311,053,230	10.5
5	6	Bolsa de Mercandorias & Futuros	187,850,634	173,553,508	8.2
6	7	New York Mercantile Exchange	166,608,642	133,284,248	25.0
7	**10**	**National Stock Exchange of India**	**116,286,968**	**67,406,562**	**72.5**
8	5	Mexican Derivatives Exchange	107,989,126	210,355,031	-48.7
9	8	Dalian Commodity Exchange	99,174,714	88,034,153	12.7
10	11	London Metal Exchange	70,444,665	67,171,973	4.9
11	9	The Tokyo Commodity Exchange	61,780,446	74,447,426	-17.0
12	13	Sydney Futures Exchange	60,091,807	50,968,901	17.9
13	12	Korea Futures Exchange	57,883,098	65,261,326	-11.3
14	15	ICE Futures (Formerly IPE)	41,936,609	35,466,941	18.2
15	22	JSE Securities Exchange South Africa	36,456,767	19,811,664	84.0
16	18	OMX Exchanges	34,142,225	27,819,175	22.7
17	14	Shanghai Futures Exchange	33,789,754	40,577,373	-16.7
18	21	New York Board of Trade	29,013,416	23,955,212	21.1
19	20	Zhengzhou Commodity Exchange	28,472,570	24,237,274	17.5
20	17	Singapore Exchange	25,867,661	28,169,379	-8.2
21	19	Tokyo Grain Exchange	25,573,238	25,705,687	-0.5
22	24	MEFF Renta Variable	24,894,965	17,592,164	41.5
23	23	Tokyo Stock Exchange	22,630,719	18,331,928	23.4
24	16	Central Japan Commoity Exchange	21,949,566	33,193,259	-33.9
25	27	Bourse de Montréal	18,240,633	12,900,821	41.4

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Table 7-4: Top 40 Futures Exchanges ***(Volume figures do not include options on futures)***

Rank		Exchange	Volume		% Change
2005	2004		2005	2004	
26	26	Osaka Securities Exchange	18,070,352	14,583,283	23.9
27	28	Hong Kong Exchanges & Clearing	13,433,386	11,884,152	13.0
28	29	Mercado a Termino de Rosario	13,051,248	7,735,890	68.7
29	30	Tokyo Financial Exchange	11,057,134	7,655,510	44.4
30	31	Italian Derivatives Market	10,832,975	6,551,211	65.4
31	25	Taiwan Futures Exchange	10,107,749	14,911,839	-32.2
32	33	Budapest Stock Exchange	8,913,470	4,254,595	109.5
33	41	One Chicago	5,528,046	1,922,726	187.5
34	35	Warsaw Stock Exchange	5,378,517	3,609,125	49.0
35	37	Kansas City Board of Trade	3,690,025	2,834,799	30.2
36	39	Bursa Malasia Derivatives Berhad	2,459,745	2,632,543	-6.6
37	42	Oslo Stock Exchange	2,359,161	1,748,742	34.9
38	32	Eurex US	2,200,384	6,186,008	-64.4
39	40	Winnipeg Commodity Exchange	2,047,183	2,030,455	0.8
40	34	Osaka Mercantile Exchange	1,602,257	3,842,553	-58.3

Source: FI Futures Industry, March/April 2006. The monthly magazine of the FIA.

Policy Developments

I. Review of the eligibility criteria of stocks for derivatives trading especially on account of corporate restructuring.

Regarding the adjustment in derivative contracts at the time of corporate action, it is advised that the exchanges shall apply the eligibility criteria in line with the principles followed in the case of introduction of derivatives on stocks of large companies immediately upon listing. The eligibility criteria for stocks for derivatives trading on account of corporate restructuring shall be as under:

All the following conditions shall be met in the case of shares of a company undergoing restructuring through any means for eligibility to re-introduce derivative contracts on that company from the first day of listing of the post restructured company/(s) 's (as the case may be) stock (herein referred to as post restructured company) in the underlying market

– The Futures and options contracts on the stock of the original (pre restructure) company were traded on any exchange prior to its restructuring;

– The pre restructured company had a market capitalisation of at least Rs.1000 crores prior to its restructuring;

– The post restructured company would be treated like a new stock and if it is, in the opinion of the exchange, likely to be at least one-third the size of the pre restructuring company in terms of revenues, or assets, or (where appropriate) analyst valuations; and

– In the opinion of the exchange, the scheme of restructuring does not suggest that the post restructured company would have any characteristic (for example extremely low free float) that would render the company ineligible for derivatives trading,

If the above conditions are satisfied, then the exchange shall take the following course of action in dealing with the existing derivative contracts on the pre-restructured company and introduction of fresh contracts on the post restructured company

– In the contract month in which the post restructured company begins to trade, the Exchange shall introduce near month, middle month and far month derivative contracts on the stock of the restructured company.
– In subsequent contract months, the normal rules for entry and exit of stocks in terms of eligibility requirements would apply. If these tests are not met, the exchange shall not permit further derivative contracts on this stock and future month series shall not be introduced.

Market Design

Only two exchanges in India have been permitted to trade in derivatives contracts, the NSE and the BSE. Over the years, however, statistics show that the BSE's contribution to the total derivatives turnover in the market has been declining. Hence, the market design enumerated in this section is the derivative segment of NSE (hereafter referred to as the F&O segment).

Trading Mechanism

The derivatives trading system at NSE is called NEAT-F&O system, which provides a fully automated screen-based, anonymous order driven trading system for derivatives on a nationwide basis. It provides tremendous flexibility by allowing users to place orders with their own time and price related conditions. Nevertheless, trading in derivatives segment is essentially similar to that of CM segment.

There are four entities in the trading system:

1. *Trading members:* Trading members can trade either on their own account or on behalf of their clients including participants. They are registered as members with NSE and are assigned an exclusive Trading member ID.
2. *Clearing members:* Clearing Members are members of NSCCL. They carry out risk management activities and confirmation/inquiry of trades through the trading system. These clearing members are also trading members and clear trades for themselves and/or others.
3. *Professional clearing members:* A professional clearing member (PCM) is a clearing member who is not a trading member. Typically, banks and custodians become PCMs and clear and settle for their trading members.
4. *Participants:* A participant is a client of trading members like financial institutions. These clients may trade through multiple trading members, but settle their trades through a single clearing member only.

Membership Criteria

The members are admitted by NSE for its F&O segment in accordance with the rules and regulations of the Exchange and the norms specified by the SEBI. NSE offers a composite membership of two types for trading in the derivatives segment viz., membership of 'CM and F&O segment' or of 'CM, WDM and F&O segment'. Trading and clearing members are admitted separately. While, the trading members (TMs) execute the trades, the clearing members (CM) do the clearing for all his TMs, undertake risk management and perform actual settlement. The eligibility criteria for membership on F&O segment are summarized in Table 7-5. The trading members are required to have qualified users and sales persons, who have passed a certification programme approved by SEBI. At the end of March 2006, there were 767 members in the F&O segment.

Table 7-5 A: Eligibility Criteria for Membership on F&O Segment of NSE

Particulars	New Members		Existing Members
	CM and F&O Segment	CM, WDM and F&O Segment	
Net Worth[1]	Rs. 100 lakh	Rs. 200 lakh	Rs. 100 lakh
Interest Free Security Deposit (IFSD)[2]	Rs. 125 lakh	Rs. 275 lakh	Rs. 8 lakh
Collateral Security Deposit (CSD)[2]	Rs. 25 lakh	Rs. 25 lakh	-
Annual Subscription	Rs. 1 lakh	Rs. 2 lakh	Rs. 1 lakh

Note: 1. Net worth of Rs. 300 lakh is required for clearing membership.
2. Additional Rs. 25 lakh is required for clearing membership. In addition, the clearing member is required to bring in IFSD of Rs. 2 lakh and CSD of Rs. 8 lakh per trading member in the F&O segment.

Table 7-5 B: Requirements for Professional Clearing Membership

Particulars	F&O Segment	CM and F&O Segment
Eligibility	Trading members of NSE/SEBI registered custodians/recognised banks	
Net Worth	Rs. 300 lakh	
Interest Free Security Deposit (IFSD)	Rs. 25 lakh	Rs. 34 lakh
Collateral Security Deposit (CSD)	Rs. 25 lakh	Rs. 50 lakh
Annual Subscription	Nil	Rs. 2.5 lakh

Note: Note: The PCM is required to bring in IFSD of Rs. 2 lakh and CSD of Rs. 8 lakh per trading member in the F&O segment.
Source: NSE.

Contract Specifications

The Index Futures and index options contracts traded on NSE are based on S&P CNX Nifty Index, CNX IT Index and Bank Nifty Index, while stock Futures and options are based on individual securities. Presently Stock Futures and Options are available on 122 securities. Interest rate Futures rate contracts are available on Notional 10 year bond (6% coupon), Notional 10 year zero coupon bond and Notional 91 day T-Bill. While the index option are European style, stock options are American style. There are a minimum of 7 strike prices, (three ' in the money', one 'at the money' and three 'out of the money' for every call and put option. The strike price is the price at which the buyer has the right to purchase or sell the underline. For the number of strikes provided in options on Nifty Index is related to the range in which previous day's closing value if Nifty index falls as per the following table.

Nifty Index Level	Strike Interval	Scheme of strikes to be introduced (ITM-ATM-OTM)
> 1500 up to 2000	10	5-1-5
> 2000 up to 2500	10	7-1-7
> 2500	10	9-1-9

Contract specifications for derivatives contracts are summarised in annexure 7-1.

In respect of equity derivatives, at any point of time, contracts with one month, two month and three months to expiry are available for trading. These contracts expire on last Thursday of the respective expiry months. A new contract is introduced on the next trading day following the expiry of the near month contract. All the derivatives contracts are presently cash settled.

The interest rate futures contracts are available for a period of one year maturity with three months continuous contracts and fixed quarterly contracts for the entire year. New contracts are introduced on the trading day following the expiry of the near month contract. These contracts expire on the last Thursday of the expiry month. In case of the last Thursday being a holiday, the contracts expire on the previous trading day.

Charges

The maximum brokerage chargeable by a trading member in relation to trades effected in the contracts admitted to the dealing on the F&O segment of NSE is fixed at 2.5% of the contract value in case of index futures and stock futures. In case of index options and stock options, it is 2.5% of notional value of the contract [(Strike price + Premium) × Quantity)] exclusive of statutory levies.

The transaction charges payable to the exchange by the trading member for the trades executed by him on the F&O segment are fixed at Rs. 2 per lakh of turnover (0.002%) subject to a minimum of Rs. 1,00,000 per year. However for the transactions in the options sub-segment the transaction charges will be levied on the premium value at the rate of 0.05% (each side) instead of on the strike price as levied earlier.

The trading members contribute to Investor Protection Fund of F&O segment at the rate of Rs. 10 per crore of turnover (0.0001%).

The trading members are also required to pay securities transaction tax (STT) on non-delivery transactions at the rate of 0.017% (payable by the seller) for derivatives W.e.f June 1, 2006[3]

[3] This rate was 0.0133 % prior to the revision

Clearing and Settlement

National Securities Clearing Corporation Limited (NSCCL) undertakes clearing and settlement of all trades executed on the futures and options (F&O) segment of the NSE. It also acts as legal counterparty to all the trades on the F&O segment and guarantees their settlement. The Clearing and Settlement process comprises of three main activities *viz.*, Clearing, Settlement and Risk Management.

Clearing Mechanism

The first step in clearing process is working out open positions and obligations of clearing (self-clearing/trading-cum-clearing/professional clearing) members (CMs). The open positions in the contracts traded of CMs are arrived at by aggregating the open positions of all the TMs and all custodial participants (CPs) clearing through him. The open position of a TM is arrived at by summing up his proprietary open position and his clients' open positions. While entering orders on the trading system, TMs identify the orders as either proprietary or client through 'Pro/Cli' indicator provided in the order entry screen. Proprietary positions are calculated on net basis for each contract and that of clients' are arrived at by summing together net positions of each individual client. A TM's open position is the sum of proprietary open position, client open long position and client open short position. Table 7-6 illustrates determination of open position of a CM, who clears for two TMs having two clients.

Table 7.6 : Determination of Open Position of a Clearing Member

TMs clearing through CM	Proprietary Trades			Trades: Client 1			Trades: Client 2			Open Position	
	Buy	Sell	Net	Buy	Sell	Net	Buy	Sell	Net	Long	Short
ABC	4000	2000	2000	3000	1000	2000	4000	2000	2000	6000	--
PQR	2000	3000	-1000	2000	1000	1000	1000	2000	-1000	1000	2000
Total	**6000**	**5000**	**2000**	**5000**	**2000**	**3000**	**5000**	**4000**	**2000**	**7000**	**2000**

Settlement Mechanism

The underlying for index futures/options on the index cannot be delivered; therefore, they have to be settled in cash. Futures and options on individual securities can be delivered as in the spot market. However, it has been currently mandated that stock options and futures would also be cash settled. The settlement amount for a clearing member is netted across all their TMs/clients, across various settlements. For the purpose of settlement, all CMs are required to open a separate bank account with NSCCL designated clearing banks for F&O segment.

Settlement of Futures Contracts on Index or Individual Securities

Futures contracts have two types of settlements, the MTM settlement which happens on a continuous basis at the end of each day, and the final settlement, which is on the last trading day of the futures contract.

MTM Settlement for futures

All futures contracts for each member are marked-to-market (MTM) to the daily settlement price of the relevant futures contract at the end of each day. The CMs who have suffered a loss are required to pay MTM loss amount in cash, which is passed on to the clearing members who have made a MTM profit. This is known as the daily mark-to-market settlement. CMs are responsible to collect and settle the daily MTM profits/losses incurred by the TMs and their clients clearing and settling through them. Similarly, TMs are responsible to collect/pay losses/profits from/to their clients by the next day. The pay-in and pay-out of the mark-to-market settlement are affected on the day following the trade day (T+1). After completion of daily settlement computations, all the open positions are reset to the daily settlement price. These positions become the open positions for the next day.

The settlement price for the contract for today is assumed to be 105. The table 7-7 gives the MTM charged on various positions. The margin charged on the brought forward contract is the difference between the previous day's settlement price of Rs.100 and today's settlement price of Rs.105. Hence on account of the position brought forward, the MTM shows a profit of Rs. 500. For contracts executed during the day, the difference between the buy price and the sell price determines the MTM. In this example, 200 units are bought @Rs. 100 and 100 units sold @Rs. 102 during the day. Hence the MTM for the position closed during the day shows a profit of Rs. 200. Finally, the open position of contracts traded during the day, is margined at the day's settlement price and the profit of Rs.500 credited to the MTM account. So the MTM account shows a profit of Rs. 1,200.

Table 7-7: Computation of MTM at the end of the day

Trade details	Quantity bought/sold	Settlement price	MTM
Brought forward from previous day	100@100	105	500
Traded during day			
Bought	200@100		
Sold	100@102	102	200
Open position (not squared up)	100@100	105	500
Total			**1200**

Final Settlement of Futures

After the close of trading hours on the expiry day, NSCCL marks all positions of a CM to the final settlement price and the resulting profit/loss is settled in cash. Final settlement loss/profit amount is debited/credited to the relevant CM's clearing bank account on the day following expiry day of the contract.

Settlement of Options Contracts on Index or Individual Securities

Options contracts have three types of settlements, daily premium settlement, interim exercise settlement in case of option contracts on securities and final settlement.

Daily Premium Settlement for options

Buyer of an option is obligated to pay the premium towards the options purchased by him. Similarly, the seller of an option is entitled to receive the premium for the option sold by him. The premium payable and receivable are netted to compute the net premium payable or receivable for each client for each option contract. The CMs, who have a premium payable positions are required to pay the premium amount to NSCCL, which in turn is passed on to the members who have a premium receivable position. This is known as daily premium settlement. CMs are also responsible to collect and settle for the premium amounts from the TMs and their clients clearing and settling through them. The pay-in and pay-out of the premium settlement is on T+1 day. The premium payable and receivable are directly debited/credited to the CMs clearing bank account.

Interim Exercise Settlement

Interim exercise settlement takes place only for option contracts on individual securities. An investor can exercise his in-the-money options at any time during trading hours through his TM. Interim exercise settlement is effected for such options at the close of the trading hours, on the day of exercise. Valid exercised option contracts are assigned to short positions in the option contract with the same series (i.e. having the same underlying, same expiry date and same strike price) randomly at the client level. The CM, who has exercised the option, receives the exercise settlement value per unit of the option from the CM who has been assigned the option contract. The interim exercise settlement value is the difference between the strike price and the settlement price of the relevant option contract. Exercise settlement value is debited/credited to the relevant CMs clearing bank account on T+2 day (T=exercise date).

Final Exercise Settlement

Final exercise settlement is effected for option positions at in-the-money strike prices existing at the close of trading hours on the day of expiry of the contract. All long positions at in-the-money strike prices are automatically assigned to short positions in option contracts with the same series, on a random basis. Index options are exercised using European style, while stock options using American style. Final Exercise is Automatic on expiry of the option contracts. Final settlement loss/profit amount for option contracts on Index is debited/credited to the relevant CMs clearing bank account on T+1 day (T= expiry day). On the other hand, final settlement loss/profit amount for option contracts on Individual Securities is debited/credited to the relevant CMs clearing bank account on T+2 day (T=expiry day). Open positions, in option contracts, cease to exist after their expiration day.

Settlement of Custodial Participant (CP) Deals

NSCCL provides a facility to entities like institutions/foreign institutional investors (FIIs)/ MFs to execute trades through any TM, which may be cleared and settled by their own CM. These entities are known as Custodial Participants (CPs). To avail of this facility, a CP is required to register with NSCCL through his CM. A unique CP code is allotted to him by NSCCL. All trades executed by a CP through any TM are required to have the CP code in the relevant field on the trading system at the time of order entry itself. These trades have to be confirmed by their own CM within the time specified by NSE through the on-line confirmation facility on the same day. Only then he is responsible for clearing and settling of deals of such custodial clients. Unless CP confirms the trade, the same is considered as a trade of the TM and the responsibility of settlement of such trade vests with CM of the TM.

FIIs have been permitted to trade in all the exchange traded derivative contracts within the position limits prescribed for them and their sub-accounts. A FII/a sub-account of the FII, intending to trade in the F&O segment of the exchange, are required to obtain a unique Custodial Participant (CP) code from the NSCCL. The FII/sub-account of FII should ensure that all orders placed by them on the Exchange carry the relevant CP code allotted by NSCCL.

Risk Management

NSCCL has developed a comprehensive risk containment mechanism for the F&O segment. The salient features of risk containment mechanism on the F&O segment are:

1. The financial soundness of the members is the key to risk management. Therefore, the requirements for membership in terms of capital adequacy (net worth, security deposits) are quite stringent.
2. NSCCL charges an upfront initial margin for all the open positions of a CM. It specifies the initial margin requirements for each futures/options contract on a daily basis. It also follows VaR based margining computed through SPAN. The CM in turn collects the initial margin from the TMs and their respective clients.
3. The open positions of the members are marked to market based on contract settlement price for each contract. The difference is settled in cash on a T+1 basis.
4. NSCCL's on-line position monitoring system monitors a CM's open position on a real-time basis. Limits are set for each CM based on his base capital. The on-line position monitoring system generates alerts whenever a CM reaches a position limit set up by NSCCL. NSCCL monitors the CMs for MTM value violation, while TMs are monitored for contract-wise position limit violation.
5. CMs are provided with a trading terminal for the purpose of monitoring the open positions of all the TMs clearing and settling through him. A CM may set exposure limits for the TM clearing and settling through him. NSCCL assists the CM to monitor the intra-day exposure limits set up by a CM and whenever a TM exceed the limits, it stops that particular TM from further trading.
6. A member is alerted of his position to enable him to adjust his exposure or bring in additional capital. Position violations result in disablement of trading facility for all TMs of a CM in case of a violation by the CM.
7. A separate settlement guarantee fund for this segment has been created out of the base capital of members.

The most critical component of risk containment mechanism for F&O segment is the margining system and on-line position monitoring. The actual position monitoring and margining is carried out on-line through Parallel Risk Management System (PRISM). PRISM uses SPAN®[4] (Standard Portfolio Analysis of Risk). SPAN system is for the purpose of computation of on-line margins, based on the parameters defined by SEBI.

Risk Containment Measures

Position Limits : The market wide limit of open position (in terms of the number of underlying stock) on futures and option contracts on a particular underlying stock will be 20% of the number of shares held by non-promoters in the relevant underlying security i.e. free-float holding. This limit will be applicable on all open positions in all futures and option contracts on a particular underlying stock. The requirement for doubling the price scan range and volatility scan range when the total open interest in a contract reaches 80% of the market wide limit in that contract stands revoked. The Exchanges enforces the market wide limits in the following manner:

- At end of the day the exchange tests whether the market wide open interest for any scrip exceeds 95% of the market wide position limit for that scrip. In case it does so, the exchange will take note of open position of all client/TMs as at end of that day for that scrip and from next day onwards they will trade only to decrease their positions through offsetting positions.
- At the end of each day during which the ban on fresh positions is in force for any scrip, the Exchange tests whether any member or client has increased his existing positions or has created a new position in that scrip. If so, that client will be subject to a penalty equal to a specified percentage (or basis points) of the increase in the position (in terms of notional value). The penalty will be recovered before trading begins next day.
- The normal trading in the scrip will be resumed after the open outstanding position comes down to 80% or below of the market wide position limit.

Further, the Exchange also checks on a monthly basis, whether a stock has remained subject to the ban on new position for a significant part of the month consistently for three months. If so, then the Exchange will phase out derivative contracts on that underlying.

Trading Member wise Position Limits

Futures and Option contracts on Equity index : Trading Member Position limits in equity index option contracts: The trading member position limits in equity index option contracts shall be higher of Rs.500 Crore or 15% of the total open interest in the market in equity index option contracts. This limit would be applicable on open positions in all option contracts on a particular underlying index.

Trading Member Position limits in equity index futures contracts: The trading member position limits in equity index futures contracts shall be higher of Rs.500 Crore or 15% of the total open interest in the market in equity index futures contracts. This limit would be applicable on open positions in all futures contracts on a particular underlying index.

[4] SPAN ® is a registered trademark of the Chicago Mercantile (CME) used here under license.

Futures and Option contracts on individual securities :

i. For stocks having applicable market-wise position limit (MWPL) of Rs. 500 crores or more, the combined futures and options position limit shall be 20% of applicable MWPL or Rs. 300 crores, whichever is lower and within which stock futures position cannot exceed 10% of applicable MWPL or Rs. 150 crores, whichever is lower.

ii. For stocks having applicable market-wise position limit (MWPL) less than Rs. 500 crores, the combined futures and options position limit would be 20% of applicable MWPL and futures position cannot exceed 20% of applicable MWPL or Rs. 50 crore which ever is lower.

Client Level Position Limits

The gross open position for each client, across all the derivative contracts on a underlying, should not exceed:

– 1% of the free float market capitalization (in terms of number of shares) or

– 5% of the open interest in all derivative contracts in the same underlying stock (in terms of number of shares)

whichever is higher

FIIs and MFs trading in Exchange traded derivatives

The position limits for FII, Mutual Funds shall be as under:

1. *FII n MF Position limits in Index options contracts:* FII & MF position limit in all index options contracts on a particular underlying index shall be Rs.500 Crores or 15 % of the total open interest of the market in index options, whichever is higher. This limit would be applicable on open positions in all options contracts on a particular underlying index.

2. *FII & MF Position limits in Index futures contracts :* FII & MF position limit in all index futures contracts on a particular underlying index shall be Rs.500 crores or 15 % of the total open interest of the market in index futures, whichever is higher. This limit would be applicable on open positions in all futures contracts on a particular underlying index.

   In addition to the above, FIIs & MF's shall take exposure in equity index derivatives subject to the following limits:

   a) Short positions in index derivatives (short futures, short calls and long puts) not exceeding (in notional value) the FII's / MF's holding of stocks.

   b) Long positions in index derivatives (long futures, long calls and short puts) not exceeding (in notional value) the FII's / MF's holding of cash, government securities, T-Bills and similar instruments.

3. *Stock Futures & Options:*

a) For stocks having applicable market-wise position limit (MWPL) of Rs. 500 crores or more, the combined futures and options position limit shall be 20% of applicable MWPL or Rs. 300 crores, whichever is lower and within which stock futures position cannot exceed 10% of applicable MWPL or Rs.150 crores, whichever is lower.

b) For stocks having applicable market-wise position limit (MWPL) less than Rs. 500 crores, the combined futures and options position limit would be 20% of applicable MWPL and futures position cannot exceed 20% of applicable MWPL or Rs. 50 crore which ever is lower.

Eligibility Criteria for selection of stocks and indices for futures and options contracts

The following criteria will be adopted by the Exchange w.e.f September 22, 2006, for selecting stocks and indices on which Futures & Options contracts would be introduced.

1. Eligibility criteria of stocks

   – The stock shall be chosen from amongst the top 500 stocks in terms of average daily market capitalisation and average daily traded value in the previous six months on a rolling basis.

   – The stock's median quarter-sigma order size over the last six months shall be not less than Rs. 0.10 million (Rs. 1 lac). For this purpose, a stock's quarter-sigma order size shall mean the order size (in value terms) required to cause a change in the stock price equal to one-quarter of a standard deviation.

   – The market wide position limit in the stock shall not be less than Rs. 500 million (Rs. 50 crores). The market wide position limit (number of shares) shall be valued taking the closing prices of stocks in the underlying cash market on the date of expiry of contract in the month. The market wide position limit of open position (in terms of the number of underlying stock) on futures and option contracts on a particular underlying stock is :

     o 20% of the number of shares held by non-promoters in the relevant underlying security i.e. free-float holding.

   – If an existing security fails to meet the eligibility criteria for three months consecutively, then no fresh month contract shall be issued on that security.

   – Further, the members may also refer to circular no. NSCC/F&O/C&S/365 dated August 26, 2004, issued by NSCCL regarding Market Wide Position Limit, wherein it is clarified that a stock which has remained subject to a ban on new position for a significant part of the month consistently for three months, shall be phased out from trading in the F&O segment.

     However, the existing unexpired contracts may be permitted to trade till expiry and new strikes may also be introduced in the existing contract months.

2. Eligibility criteria of Indices

   – Futures & Options contracts on an index can be introduced only if 80% of the index constituents are individually eligible for derivatives trading. However, no single ineligible stock in the index shall have a weightage of more than 5% in the index. The index on which futures and options contracts are permitted shall be required to comply with the eligibility criteria on a continuous basis.

   – SEBI has subsequently modified the above criteria, vide its clarification issued to the Exchange "The Exchange may consider introducing derivative contracts on an index if the stocks contributing to 80% weightage of the index are individually eligible for derivative trading. However, no single ineligible stocks in the index shall have a weightage of more than 5% in the index."

   – The above criteria is applied every month, if the index fails to meet the eligibility criteria for three months consecutively, then no fresh month contract shall be issued on that index, However, the existing unexpired contacts shall be permitted to trade till expiry and new strikes may also be introduced in the existing contracts.

The following procedure is adopted for calculating the Quarter Sigma Order Size :

1. The applicable VAR (Value at Risk) is calculated for each security based on the J.R. Varma Committee guidelines. (The formula suggested by J. R. Varma for computation of VAR for margin calculation is statistically known as 'Exponentially weighted moving average (EWMA)' method. In comparison to the traditional method, EWMA has the advantage of giving more weight to the recent price movements and less weight to the historical price movements.)
2. Such computed VAR is a value (like 0.03), which is also called standard deviation or Sigma. (The meaning of this figure is that the security has the probability to move 3% to the lower side or 3% to the upper side on the next trading day from the current closing price of the security).
3. Such arrived at standard deviation (one sigma), is multiplied by 0.25 to arrive at the quarter sigma. (For example, if one sigma is 0.09, then quarter sigma is $0.09 \times 0.25 = 0.0225$)
4. From the order snapshots (taken four times a day from NSE's Capital Market Segment order book) the average of best buy price and best sell price is computed which is called the average price.
5. The quarter sigma is then multiplied with the average price to arrive at quarter sigma price. The following example explains the same :

Security	XYZ
Best Buy (in Rs.)	306.45
Best Sell (in Rs.)	306.90
Average Price	306.70
One Sigma	0.009
Quarter sigma	0.00225
Quarter sigma price (Rs.) (Average Price × Quarter sigma)	0.70

6. Based on the order snapshot, the value of the order (order size in Rs.), which will move the price of the security by quarter sigma price in buy and sell side is computed. The value of such order size is called Quarter Sigma order size. (Based on the above example, it will be required to compute the value of the order (Rs.) to move the stock price to Rs. 306.00 in the buy side and Rs. 307.40 on the sell side. That is Buy side = average price – quarter sigma price and Sell side = average price + quarter sigma price). Such an exercise is carried out for four order snapshots per day for all stocks for the previous six months period.
7. From the above determined quarter sigma order size (Rs.) for each order book snap shot for each security, the median of the order sizes (Rs.) for buy side and sell side separately, are computed for all the order snapshots taken together for the last six months.
8. The average of the median order sizes for buy and sell side are taken as the median quarter sigma order size for the security.
9. The securities whose median quarter sigma order size is equal to or greater than Rs. 0.1 million (Rs. 1 Lac) qualify for inclusion in the F&O segment.

Futures & Options contracts may be introduced on new securities which meet the above mentioned eligibility criteria, subject to approval by SEBI.

New securities being introduced in the F&O segment are based on the eligibility criteria which take into consideration average daily market capitalization, average daily traded value, the market wide position limit in the security, the quarter sigma values and as approved by SEBI. The average daily market capitalisation and the average daily traded value would be computed on the 15th of each month, on a rolling basis, to arrive at the list of top 500 securities. Similarly, the quarter sigma order size in a stock would also be calculated on the 15th of each month, on a rolling basis, considering the order book snapshots of securities in the previous six months and the market wide position limit (number of shares) shall be valued taking the closing prices of stocks in the underlying cash market on the date of expiry of contract in the month.

The number of eligible securities may vary from month to month depending upon the changes in quarter sigma order sizes, average daily market capitalisation & average daily traded value calculated every month on a rolling basis for the past six months and the market wide position limit in that security.

NSE-SPAN®

The objective of NSE-SPAN® is to identify overall risk in a portfolio of all futures and options contracts for each member. The system treats futures and options contracts uniformly, while at the same time recognizes the unique exposures associated with options portfolios, like extremely deep out-of-the-money short positions and inter-month risk. Its over-riding objective is to determine the largest loss that a portfolio might reasonably be expected to suffer from one day to the next day based on 99% VaR methodology. SPAN considers uniqueness of option portfolios. The following factors affect the value of an option:

1. Underlying market price
2. Strike price
3. Volatility (variability) of underlying instrument

4. Time to expiration
5. Interest rate

As these factors change, the value of options within the portfolio also changes. Thus, SPAN constructs scenarios of probable changes in underlying prices and volatilities in order to identify the largest loss, a portfolio might suffer from one day to the next. Then it sets the margin requirement to cover this one-day loss. These complex calculations (e.g. the pricing of options) are executed using SPAN. The results of these calculations are called risk arrays. Risk arrays and other data inputs required for margin calculation are provided to members daily in a file called the SPAN Risk parameter file. Members can apply the data contained in the risk parameter files, to their specific portfolios of futures and options contracts, to determine their SPAN margin requirements. Hence, members need not execute complex option pricing calculations, which are performed by NSCCL.

Margins

The margining system for F&O segment is explained below:

- *Initial Margin*: Margin in the F&O segment is computed by NSCCL upto client level for open positions of CMs/TMs. These are required to be paid up-front on gross basis at individual client level for client positions and on net basis for proprietary positions. NSCCL collects initial margin for all the open positions of a CM as computed by NSE-SPAN. A CM is required to ensure collection of adequate initial margin from his TMs up-front, in turn the TM collects it from his clients.
- *Premium Margin*: In addition to initial margin, premium margin is charged at client level. This margin is required to be paid by a buyer of an option till the premium settlement is complete.
- *Assignment Margin for Options on Securities*: Assignment margin is levied in addition to initial margin and premium margin. It is required to be paid on assigned positions of CMs towards interim and final exercise settlement obligations for option contracts on individual securities, till such obligations are fulfilled. The margin is charged on the net exercise settlement value payable by a CM towards interim and final exercise settlement.
- *Client Margins*: NSCCL intimates all members of the margin liability of each of their client. Additionally members are also required to report details of margins collected from clients to NSCCL, which holds in trust client margin monies to the extent reported by the member as having been collected form their respective clients.

Margin/Position Limit Violations

PRISM, the Parallel Risk Management System, is the real-time position monitoring and risk management system for the F&O market segment. The risk of each trading and clearing member is monitored on a real time basis by generating various alerts whenever a CM exceeds any limits set up by NSCCL. These are detailed below:

- *Initial Margin Violation*: The initial margin is computed on a real time basis i.e. for each trade the amount of initial margin is reduced from the effective deposits of the CM held with the clearing corporation. For this purpose, effective deposits are computed by reducing the total deposits of the CM by Rs. 50 lakh (referred to as minimum liquid net worth). The CM receives warning messages on his terminal when 70%, 80% and 90% of the effective deposits are utilized. At 100% the clearing facility provided to a CM is automatically withdrawn. Withdrawal of clearing facility of a CM in case of a violation leads to automatic withdrawal of trading facility for all TMs and/or custodial participants clearing and settling through such CM.

Similarly, the initial margins on positions taken by a TM is also computed on a real time basis and compared with the TM limits set by his CM. As the TM limit is used up to 70%, 80%, and 90%, the member receives a warning message on his terminal. At 100%, the trading facility provided to the TM is automatically withdrawn.

A member is provided with adequate warnings on the violation before his trading/ clearing facility is withdrawn. A CM may appropriately reduce his exposure to contain the violation or alternately bring in additional base capital.

- *Member-wise Position Limit Violation (Future and Option contracts on Equity index):* The member-wise position limit on open position of a TM is supervised by PRISM. The open position in all index futures and index option contracts of any TM, cannot exceed 15% of the total open interest of the market or Rs. 250 crore, whichever is higher at any time, including during trading hours. This limit shall be applicable on open positions in all option contracts on a particular underlying index.

- *Member-wise Position Limit Violation (Future and Option contracts on Individual Securities):* The TM position limits in equity index futures contracts shall be higher of Rs. 250 crore or 15% of the total open interest in the market in equity index futures contracts. This limit would be applicable on open positions in all future contracts on a particular underlying index.

- *Exposure Limit Violation:* PRISM monitors exposure of members on all futures and option contracts, which cannot exceed 33.33 times the liquid net worth for index options and index futures contracts. For option and futures contract on individual securities, the exposure limits of, which is higher, 5% or 1.5 standard deviation of the notional value of gross open position in futures on individual securities and gross short open positions in options on individual securities in a particular underlying should be collected/adjusted from the liquid networth of a member on a real time basis.

- *Market-wide Position Limit Violation:* PRISM monitors market wide position limits for futures and option contracts on individual securities. The open position across all members, across all contracts cannot exceed lower of the following limits: 30 times the average number of shares traded daily in the previous calendar month or 20% of the number of shares held by non-promoters in the relevant underlying security i.e. 20% of the free float in terms of the number of shares of a company. When the total open interest in an option contract, across all members, reaches 60% of the market wide position limit for a contract, the price scan range and volatility scan range (for SPAN margin) are doubled. NSCCL specifies the market-wide position limits once every month, at the beginning of the month, which is applicable for the subsequent month.

- *Client-wise Position Limit Violation:* Whenever the open position of any client exceeds 1% of the free float market capitalization (in terms of no. of shares) or 5% of the open interest (in terms of number of shares) whichever is higher, in all the futures and option contracts on the same underlying security, then it is termed as client-wise position limit violation. The TM/CM through whom the client trades/clears his deals should be liable for such violation and penalty may be levied on such TM/CM which he may in turn recover from the client. In the event of such a violation, TM/CM should immediately ensure that the client does not take fresh positions and reduces the positions of those clients within the permissible limits.
- *Misutilisation of TM/Constituent's Collateral and/or Deposit:* It is a violation, if a CM utilizes the collateral of one TM and/or constituent towards the exposure and/or obligations of a TM and/or constituent.
- *Violation of Exercised Positions:* When option contracts are exercised by a CM, where no open long positions for such CM/TM and/or constituent exist at the end of the day, at the time the exercise processing is carried out, it is termed as violation of exercised positions.

Market Outcome

Trading Volumes

Derivatives are traded in India on only two exchanges viz., the NSE and the BSE (Table 7-8). The total exchange traded derivatives volume witnessed an increase (88.14%) to Rs. 48,242,592 million during 2005-06 as against Rs.25,641,269 million during the preceding year. NSE emerged as a market leader in the Indian Market by accounting for about 99.9% of total turnover. Since more than 99% of volumes came from NSE, the further detailed analysis is based on NSE data.

During 2005-06, the F&O segment of NSE reported a total turnover for Rs. 48,242,504 million as against Rs. 25,470,526 million during the preceding year. The number of contracts traded in 2005-06 amounted to 158 millions as against 77 millions in the previous year. The segment witnessed a record turnover of Rs. 292,908 million on September 29, 2005 and record daily number of trades to the tune of 5.4 lakh on September 29, 2005. The monthly turnover increased from Rs. 1,956,690 million in April 2005 to Rs 7,348,489 million in March 2006. Though this segment witnessed a downtrend in the month of November-05 yet it pulled back and started on its upward trend in the later months of the fiscal. The average daily turnover increased from Rs.97,984 million in April 2005 to Rs. 334,022 million in March 2006. The business growth of the F&O segment is presented in Annexure 7-2. It is evident from the statistics as presented in the Annexure 7-2 and the Chart 7-1 that the futures are more popular than options; contracts on securities are more popular than those on indices; and call options are more popular than put options.

Open Interest

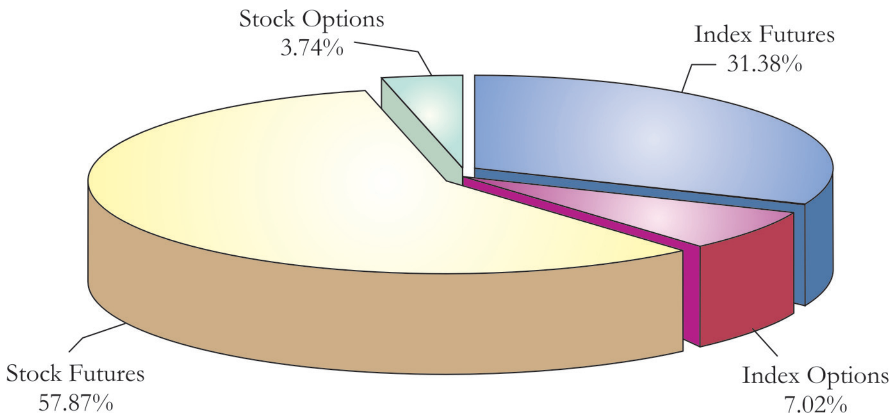
Open interest is the total number of outstanding contracts that are held by market participants at the end of each day. Putting it simply, open interest is a measure of how

Table 7-8: Trade Details of Derivatives Market*

Month/Year	NSE		BSE		TOTAL	
	No. of Contracts Traded	Turnover (Rs. mn.)	No. of Contracts Traded	Turnover (Rs.mn.)	No. of Contracts Traded	Turnover (Rs. mn.)
Apr-03	2,205,470	500,196	5,280	873	2,210,750	501,069
May-03	2,252,050	534,233	1,155	229	2,253,205	534,462
Jun-03	2,750,294	730,173	423	92	2,750,717	730,265
Jul-03	3,720,563	1,098,495	4,718	1,031	3,725,281	1,099,526
Aug-03	4,314,098	1,403,625	23,634	5090	4,337,732	1,408,715
Sep-03	5,481,939	1,851,509	34,274	8509	5,516,213	1,860,018
Oct-03	5,989,205	2,303,645	30,668	8574	6,019,873	2,312,219
Nov-03	4,769,938	1,921,714	31,337	9287	4,801,275	1,931,001
Dec-03	5,724,035	2,389,067	107,545	36840	5,831,580	2,425,907
Jan-04	6,976,023	3,240,630	103,573	37869	7,079,596	3,278,499
Feb-04	5,696,541	2,728,392	22,212	7,299	5,718,753	2,735,691
Mar-04	7,006,620	2,604,813	17,439	505	7,024,059	2,605,318
2003-04	**56,886,776**	**21,306,492**	**382,258**	**116,198**	**57,269,034**	**21,422,690**
Apr-04	6,568,668	2,202,995	2,892	850	6,571,560	2,203,845
May-04	6,481,198	1,947,629	1,146	390	6,482,344	1,948,019
Jun-04	5,822,819	1,583,055	0	0	5,822,819	1,583,055
Jul-04	6,134,513	1,753,454	10	3	6,134,523	1,753,457
Aug-04	5,978,503	1,760,057	0	0	5,978,503	1,760,057
Sep-04	5,931,706	1,783,796	39,788	20,560	5,971,494	1,804,356
Oct-04	5,666,914	1,822,237	115,298	32,900	5,782,212	1,855,137
Nov-04	5,314,655	1,758,045	157,458	46,950	5,472,113	1,804,995
Dec-04	7,515,469	2,682,275	154,902	49,470	7,670,371	2,731,745
Jan-05	7,246,915	2,652,899	43,942	14,150	7,290,857	2,667,049
Feb-05	6,661,661	2,535,514	9,213	3,040	6,670,874	2,538,554
Mar-05	7,694,164	2,988,571	7,070	2,430	7,701,234	2,991,001
2004-05	**77,017,185**	**25,470,526**	**531,719**	**170,743**	**77,548,904**	**25,641,269**
Apr-05	8,628,497	1,959,690	100	32	8,628,597	1,959,722
May-05	9,137,619	2,083,803	0	0	9,137,619	2,083,803
Jun-05	10,653,067	2,712,461	0	0	10,653,067	2,712,461
Jul-05	11,198,617	3,081,662	0	0	11,198,617	3,081,662
Aug-05	12,764,213	3,723,073	0	0	12,764,213	3,723,073
Sep-05	13,253,741	3,997,562	0	0	13,253,741	3,997,562
Oct-05	15,176,424	4,336,601	0	0	15,176,424	4,336,601
Nov-05	13,055,656	3,958,528	0	0	13,055,656	3,958,528
Dec-05	16,181,118	5,238,073	0	0	16,181,118	5,238,073
Jan-06	14,681,719	4,875,837	0	0	14,681,719	4,875,837
Feb-06	14,098,382	4,926,724	2	0.9	14,098,384	4,926,725
Mar-06	18,790,218	7,348,489	101	54.8	18,790,319	7,348,544
2005-06	**157,619,271**	**48,242,504**	**203**	**87.7**	**157,619,474**	**48,242,592**

Source: NSE and SEBI Annual Report

Chart 7-1: Product-wise Distribution of Turnover of F&O Segment of NSE, 2005-06

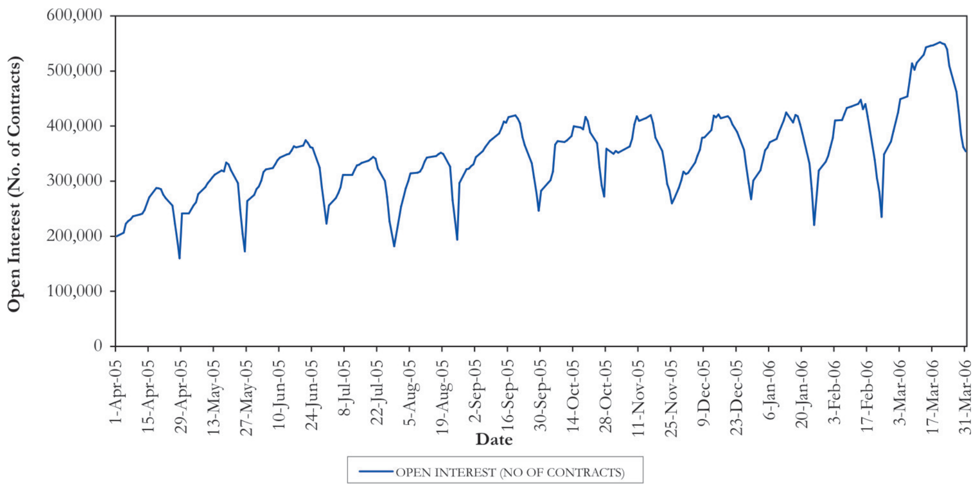


much interest is there in a particular option or future. Increasing open interest means that fresh funds are flowing in the market, while declining open interest means that the market is liquidating. The highest open interest in index futures at NSE was recorded at 552,261 contracts on March 20, 2006. The daily open interest for near month index futures at NSE is presented in Chart 7-2.

Implied Interest Rate

In the futures market, implied interest rate or cost of carry is often used inter-changeably. Cost of carry is more appropriately used for commodity futures, as by definition it means the total costs required to carry a commodity or any other good forward in time. The costs involved are storage cost, insurance cost, transportation cost and the financing cost. In case of equity futures, the carry cost is the cost of financing minus the dividend returns. Assuming zero dividend, the only relevant factor is the cost of financing.

Chart 7.2. Daily Open Interest for Near Month Nifty Futures for 2005-06



Implied interest rate is the percentage difference between the future value of an index and the spot value, annualised on the basis of the number of days before the expiry of the contract. Carry cost or implied interest rate plays an important role in determining the price differential between the spot and the futures market. By comparing the implied interest rate and the existing interest rate level, one can determine the relative cost of futures' market price. Implied interest rate is also a measure of profitability of an arbitrage position. Theoretically, if the futures price is less than the spot price plus cost of carry or if the futures price is greater than the spot price plus cost of carry, arbitrage opportunities exist.

The futures prices are available for different contracts at different points of time. Chart 7-3 presents Nifty futures close prices for the near month contracts, and the spot Nifty close values from April 2005 to March 2006. The difference between the future and the spot price is called basis. As the time to expiration approaches, the basis reduces. Daily implied interest rate for Nifty futures from April 2005 to March 2006 is presented in Chart 7-4. The implied interest rate for near month Nifty futures as on last trading of the month is presented in Table 7-9.

Implied Volatility

Volatility is one of the important factors, which is taken into account while pricing options. It is a measure of the amount and the speed of price change. To estimate future volatility, a time series analysis of historical volatility may be carried out to know the future movements of the underlying. Alternatively, one could work out implied volatility by entering all parameters into an option pricing model and then solving it for volatility. For example, the Black Scholes model solves for the fair price of the option by using the following parameters-days to expiry, strike price, spot price, volatility of underlying, interest rate, and dividend. This model could be used in reverse to arrive at implied volatility by putting the current price of the option prevailing in the market.

Putting it simply, implied volatility is the estimate of how volatile the underlying will be from the present until the currency of option. If volatility is high, then the options

Chart 7.3. Nifty Futures and Spot Price (2005-06)

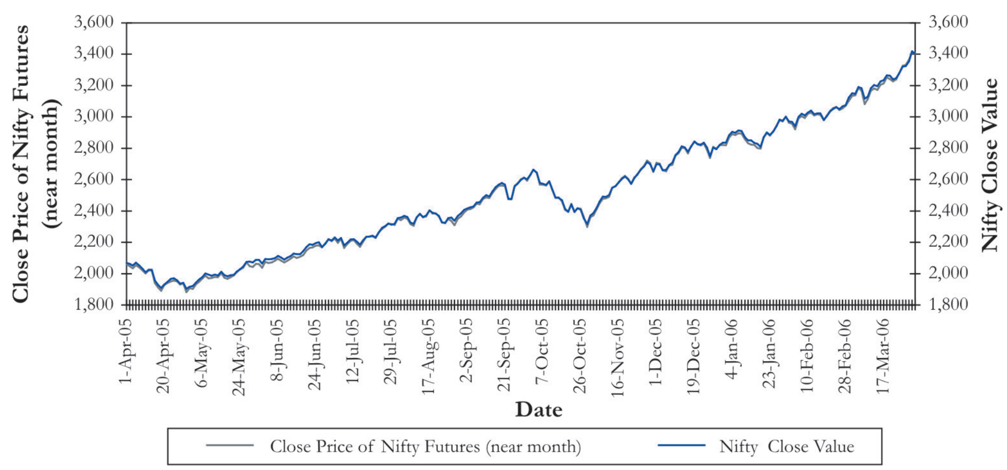


Chart 7.4. Implied Interest Rate for Near Month Nifty Futures (April 1, 2005 to March 31, 2006)

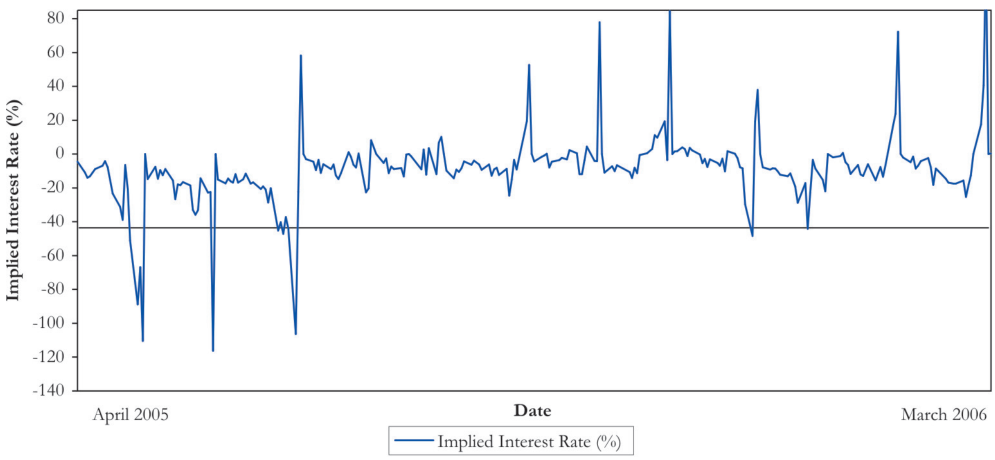


Table 7-9: Implied Interest Rate for Near Month Nifty Futures (April 2005 - March 2006)

Month	Expiry Date of near month Contract	Closing Future Price	Closing Spot Price	Implied Interest Rate (%)
Apr-05	26-May-05	1881.85	1902.50	-14.75
May-05	30-Jun-05	2063.00	2087.55	-14.39
Jun-05	29-Jul-05	2219.20	2220.60	58.24
Jul-05	29-Jul-05	2316.85	2312.30	0.00
Aug-05	29-Sep-05	2364.75	2384.65	-10.55
Sep-05	27-Oct-05	2593.00	2601.40	-4.37
Oct-05	24-Nov-05	2359.65	2370.95	-7.27
Nov-05	29-Dec-05	2649.65	2652.25	-1.23
Dec-05	25-Jan-06	2820.80	2836.55	-7.82
Jan-06	23-Feb-06	3002.25	3001.10	0.61
Feb-06	30-Mar-06	3071.05	3074.70	-1.45
Mar-06	27-Apr-06	3403.60	3402.55	0.42

Note: (1) The implied interest rate is calculated on the last trading day of the month for Near Month Nifty Futures (2) Number of days in a year have been taken as 365
Source: NSE.

premiums are relatively expensive and vice-versa. However, implied volatility estimate can be biased, especially if they are based upon options that are thinly traded samples.

Settlement

All derivative contracts are currently cash settled. During 2005-06, the cash settlement amounted to Rs. 258,218.20 million with settlement of futures and of options accounting for Rs. 261,834 million and Rs. 23,384.20 million, respectively. The detail of the settlement statistics in the F&O segment is presented in Table 7-10.

Table 7-10: Settlement Statistics in F&O Segment

(In Rs. mn.)

Month/Year	Index/Stock Futures		Index/Stock Options		Total
	MTM Settlement	Final Settlement	Premium Settlement	Exercise Settlement	
2000-01	**840.84**	**19.29**	**--**	**--**	**860.13**
Apr-01	80.43	0.88	--	--	81.31
May-01	37.76	1.13	--	--	38.88
Jun-01	48.52	0.10	14.69	2.75	66.07
Jul-01	66.95	1.35	58.76	14.28	141.35
Aug-01	45.94	1.36	98.31	50.62	196.22
Sep-01	336.87	5.00	156.22	139.09	637.18
Oct-01	112.69	1.01	179.61	114.22	407.53
Nov-01	283.75	7.09	245.55	202.14	738.52
Dec-01	789.41	37.62	174.67	82.14	1,083.84
Jan-02	1,125.28	21.69	305.71	177.55	1,630.22
Feb-02	1,088.70	122.14	244.00	88.57	1,543.42
Mar-02	1,036.18	19.88	170.08	68.10	1,294.25
2001-02	**5,052.49**	**219.25**	**1,647.58**	**939.46**	**7,858.79**
Apr-02	1,065.60	41.50	173.00	86.50	1,366.60
May-02	1,665.40	18.40	215.30	143.50	2,042.60
Jun-02	1,240.50	34.40	197.00	103.50	1,575.40
Jul-02	1,608.80	17.00	236.00	106.70	1,968.50
Aug-02	1,021.00	28.80	204.60	138.90	1,393.30
Sep-02	1,198.30	14.40	233.10	134.60	1,580.40
Oct-02	1,282.40	77.90	258.00	166.40	1,784.70
Nov-02	1,109.30	86.80	337.10	353.40	1,886.60
Dec-02	1,640.40	53.30	446.40	168.20	2,308.30
Jan-03	2,184.19	29.92	383.92	229.38	2,827.41
Feb-03	1,484.20	16.80	289.30	131.40	1,922.70
Mar-03	1,878.93	38.38	338.39	196.35	2,452.05
2002-03	**17,379.02**	**457.60**	**3,312.11**	**1,958.83**	**23,108.56**
Apr-03	2,058.06	47.93	459.95	300.07	2,866.01
May-03	1,635.92	57.42	380.39	304.30	2,378.03
Jun-03	2,202.33	38.58	487.81	464.99	3,193.71
Jul-03	3,897.88	80.24	694.32	447.68	5,120.12
Aug-03	5,696.01	85.82	773.16	588.14	7,143.14
Sep-03	10,318.74	92.38	781.23	304.09	11,496.44
Oct-03	11,880.49	141.09	991.48	603.07	13,616.13
Nov-03	9,393.49	238.60	634.00	221.13	10,487.22
Dec-03	9,054.58	178.99	699.91	410.95	10,344.44
Jan-04	26,682.05	128.24	1074.58	426.73	28,311.59
Feb-04	13,296.98	164.00	682.56	244.20	14,387.74
Mar-04	12,103.23	136.18	930.00	445.84	13,615.25
2003-04	**108,219.77**	**1,389.48**	**8,589.38**	**4,761.19**	**122,959.81**

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Table 7.10: Settlement Statistics in F&O Segment

(In Rs. mn.)

Month/Year	Index/Stock Futures		Index/Stock Options		Total
	MTM Settlement	Final Settlement	Premium Settlement	Exercise Settlement	
Apr-04	8,372.79	156.72	647.04	252.90	9,429.45
May-04	25,561.30	134.70	912.90	358.20	26,967.10
Jun-04	5,352.50	200.50	468.10	98.50	6,119.60
Jul-04	4,511.50	151.40	721.30	427.70	5,811.90
Aug-04	5,480.10	86.60	509.00	146.50	6,222.20
Sep-04	4,801.20	126.30	562.10	397.40	5,887.00
Oct-04	8,378.20	231.80	685.00	310.00	9,605.00
Nov-04	6,911.70	102.10	768.20	419.50	8,201.50
Dec-04	12,385.80	223.10	1,040.90	565.40	14,215.20
Jan-05	23,176.90	317.40	963.60	423.70	24,881.60
Feb-05	9,916.30	106.20	963.50	393.00	11,379.00
Mar-05	15,393.50	438.20	1,169.00	765.90	17,766.60
2004-05	**130,241.79**	**2,275.02**	**9,410.64**	**4,558.70**	**146,486.15**
Apr-05	17369.1	311.5	828.3	303.2	18812.1
May-05	9436.9	417.4	725.4	449.5	11029.2
Jun-05	10957.9	351.8	931.6	713.2	12954.5
Jul-05	15675.2	384.9	928.6	588.5	17577.2
Aug-05	25448	365.6	1189.4	267.8	27270.8
Sep-05	23667	173.1	1359.1	958.5	26157.7
Oct-05	34791	1204.6	1439.2	792	38226.8
Nov-05	18314	321.7	1226.3	757.1	20619.1
Dec-05	24878	227.4	1397.2	670.5	27173.1
Jan-06	20346	1071.7	1395.2	520.6	23333.5
Feb-06	18866	444.7	1466.8	568.6	21346.1
Mar-06	36106	704.5	2318.7	1588.9	40718.1
2005-06	**255,855.10**	**5,978.90**	**15,205.80**	**8,178.40**	**285,218.20**

Annexure 7.1: Contract Specification for F&O

Particulars	Index Futures	Stock Futures	Index Options	Stock Options	Interest Rate Futures
Security Description	FUTIDX	FUTSTK ----	OPTIDX	OPTSTK	FUTINT
Underlying	S&P CNX Nifty Index/ CNX IT Index/Bank Index	Individual Securities	S&P CNX Nifty Index/ CNX IT Index/Bank Index	Individual Securities	Notional 10 year bond (6% coupon), Notional 10 year zero coupon bond and Notional 91 day T-Bill
Style of Option	NA	NA	European	American	NA
Contract Size	As specified by NSE subject to minimum value of Rs. 2 lakh	As specified by NSE subject to minimum value of Rs. 2 lakh	As specified by NSE subject to minimum value of Rs. 2 lakh	As specified by NSE subject to minimum value of Rs. 2 lakh	Permitted lot size is 2000
Price Steps	Rs. 0.05				Rs. 0.01
Expiration Months	3 near months				One year
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				The contracts shall be for a period of a maturity of one year with three months continuous contracts for the first three months and fixed quarterly contracts for the entire year
Last Trading/Expiration Day	Last Thursday of the expiry month or the preceding trading day, if last Thursday is a trading holiday				Last Thursday of the expiry month. If last Thursday is a trading holiday, the contract shall expire on previous trading day. Further, where the last Thursday falls on the annual or half yearly closing dates of the bank, the contract shall expire on previous trading day.
Price Bands	Operating range of 10% of the base price	Operating range of 20% of the base price	Operating range of 99% of the base price	Operating range of 99% of the base price	NA
No. of Strike Prices	NA	NA	Minimum of 7 (three 'in the money', one 'at the money' and three 'out of the money') for every option type (i.e. call and put)	Minimum of 7 (three 'in the money', one 'at the money' and three 'out of the money') for every option type (i.e. call and put)	NA
Strike Price Interval (in Rs.)	NA	NA	10	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	Daily Mark-to-Market settlement and Final Settlement will be on T+1 basis
Daily Settlement Price	Closing price of futures contract on the trading day	Closing price of futures contract on the trading day	Premium Value (net)	Premium Value (net)	As may be stipulated by NSCCL in this regard from time to time
Final Settlement Price	Closing value underlying index/ security on the last trading day of the futures contract.	Closing value underlying index/ security on the last trading day of the futures contract.	Closing value of such underlying security (index) on the last trading day of the options contract.	Closing value of such underlying security (index) on the last trading day of the options contract.	As may be stipulated by NSCCL in this regard from time to time
Settlement Day	Last trading day				
Margins	Up-front initial margin on daily basis				

NA: Not applicable

Annexure 7.2: Business Growth of Derivatives Segment

Month/ Year	Index Futures		Stock Futures		Interest Rate Futures		Index Options				Stock Option				Total		Average Daily Turnover (Rs. mn.)	Open Interest at the end of	
							Call		Put		Call		Put						
	No. of Contracts Traded	Turnover (Rs.mn.)	No. of Contracts Traded	Turnover (Rs. mn.)	No. of Contracts Traded	Trading Value (Rs. mn.)	No. of Contracts Traded	Notional Turnover (Rs. mn.)	No. of Contracts Traded	Notional Turnover (Rs. mn.)	No. of Contracts Traded	Notional Turnover (Rs. mn.)	No. of Contracts Traded	Notional Turnover (Rs. mn.)	No. of Contracts Traded	Turnover (Rs. mn.)		No. of Contracts	Turnover (Rs. mn.)
Jun-00 to Mar-01	**90,580**	**23,650**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**90,580**	**23,650**	**116**		
Apr-01	13,274	2,917	-	-	-	-	-	-	-	-	-	-	-	-	13,274	2,917	154	1,430	319
May-01	10,048	2,305	-	-	-	-	-	-	-	-	-	-	-	-	10,048	2,305	105	2,033	471
Jun-01	26,805	5,902	-	-	-	-	5,232	1,185	3,429	766	-	-	-	-	35,466	7,854	374	4,071	904
Jul-01	60,644	13,086	-	-	-	-	8,613	1,908	6,221	1,352	13,082	2,902	4,746	1,057	93,306	20,306	967	14,040	2,948
Aug-01	60,979	13,046	-	-	-	-	7,598	1,653	5,533	1,193	38,971	8,437	12,508	2,633	125,589	26,962	1,284	19,096	3,961
Sep-01	154,298	28,571	-	-	-	-	12,188	2,432	8,262	1,687	64,344	13,221	33,480	6,900	272,572	52,810	2,640	16,204	2,780
Oct-01	131,467	24,848	-	-	-	-	16,787	3,263	12,324	2,329	85,844	16,319	43,787	8,015	290,209	54,775	2,608	25,051	4,628
Nov-01	121,697	24,835	125,946	28,114	-	-	14,994	3,099	7,189	1,453	112,499	23,722	31,484	6,379	413,809	87,601	4,380	60,414	13,291
Dec-01	109,303	23,393	309,755	75,147	-	-	12,890	2,866	5,513	1,184	84,134	19,859	28,425	6,740	550,020	129,187	6,799	37,891	8,024
Jan-02	122,182	26,598	489,793	132,610	-	-	11,285	2,528	3,933	853	133,947	38,361	44,498	12,529	805,638	213,479	9,282	78,384	17,753
Feb-02	120,662	27,472	528,947	139,395	-	-	13,941	3,235	4,749	1,068	133,630	36,347	33,055	8,643	834,984	216,159	10,808	89,560	20,104
Mar-02	94,229	21,846	503,415	139,890	-	-	10,446	2,487	4,773	1,113	101,708	28,628	37,387	10,936	751,958	204,899	10,784	93,917	21,499
2001-02	**1,025,588**	**214,819**	**1,957,856**	**515,155**	**-**	**-**	**113,974**	**24,657**	**61,926**	**12,998**	**768,159**	**187,795**	**269,370**	**63,830**	**4,196,873**	**1,019,254**	**4,127**	**93,917**	**21,499**
Apr-02	73,635	16,562	552,727	150,651	-	-	11,183	2,600	5,389	1,215	121,225	34,004	40,443	11,704	804,602	216,736	9,852	66,922	15,540
May-02	94,312	20,223	605,284	159,810	-	-	13,070	2,945	7,719	1,687	126,867	34,901	57,984	16,432	905,236	235,998	10,727	55,839	12,053
Jun-02	99,514	21,228	616,461	161,783	-	-	10,272	2,229	7,805	1,662	123,493	33,246	48,919	13,173	906,464	233,320	11,666	65,834	15,315
Jul-02	122,663	25,133	789,290	212,047	-	-	16,637	3,498	7,688	1,616	154,089	43,406	65,530	18,369	1,155,897	304,069	13,220	85,369	17,997
Aug-02	152,375	29,778	726,310	178,806	-	-	15,967	3,178	10,124	2,000	147,646	38,367	65,630	17,255	1,118,052	269,383	12,828	71,655	16,602
Sep-02	144,303	28,357	700,051	175,011	-	-	16,578	3,318	12,543	2,507	151,291	40,160	80,038	22,051	1,104,804	271,404	13,570	67,261	13,858
Oct-02	164,934	31,448	856,930	212,134	-	-	23,628	4,594	13,910	2,671	214,027	55,953	104,659	27,612	1,378,088	334,413	15,924	135,239	30,228
Nov-02	175,567	35,000	970,251	254,630	-	-	25,413	5,090	17,191	3,360	261,600	71,060	104,529	29,220	1,554,551	398,360	20,966	94,615	22,134
Dec-02	277,403	59,580	1,217,873	355,316	-	-	30,261	6,601	19,973	4,274	309,573	95,524	111,756	34,907	1,966,839	556,201	26,486	110,431	28,933
Jan-03	258,955	55,567	1,304,122	382,988	-	-	26,376	5,769	16,805	3,635	322,876	101,743	132,021	41,790	2,061,155	591,400	25,717	100,764	23,888
Feb-03	237,803	50,403	1,198,564	324,448	-	-	26,501	5,711	17,681	3,749	268,156	76,444	114,512	33,192	1,863,217	493,948	25,997	109,192	27,378
Mar-03	325,299	66,237	1,138,980	297,698	-	-	53,788	11,165	35,739	7,397	255,658	71,634	140,540	39,186	1,950,004	493,317	24,666	97,025	21,943
2002-03	**2,126,763**	**439,516**	**10,676,843**	**2,865,321**	**-**	**-**	**269,674**	**56,698**	**172,567**	**35,772**	**2,456,501**	**696,441**	**1,066,561**	**304,891**	**16,768,909**	**4,398,548**	**17,524**	**97,025**	**21,943**
Apr-03	362,157	69,939	1,291,493	297,492	-	-	54,890	10,914	31,107	6,157	297,270	74,713	168,553	40,981	2,205,470	500,196	25,010	121,089	25,877
May-03	325,784	62,826	1,354,581	327,517	-	-	53,198	10,387	30,109	5,784	332,529	88,606	155,849	39,113	2,252,050	534,233	25,440	101,396	20,066
Jun-03	439,151	93,475	1,694,505	465,047	9,768	1,819	55,874	12,065	34,895	7,351	383,603	113,026	132,498	37,390	2,750,294	730,173	34,770	132,383	36,892
Jul-03	641,002	147,430	2,282,426	705,146	963	193	87,149	20,395	50,669	11,634	495,853	161,801	162,501	51,895	3,720,563	1,098,495	47,761	254,332	74,811
Aug-03	990,731	249,886	2,620,897	912,876	50	10	96,875	24,769	54,649	13,616	434,526	160,276	116,370	42,191	4,314,098	1,403,625	70,181	161,027	55,300
Sep-03	1,676,358	458,610	3,122,432	1,138,735	0	0	110,014	30,877	69,920	19,250	401,660	163,785	101,555	40,252	5,481,939	1,851,509	84,160	192,544	66,084
Oct-03	1,866,407	564,351	3,469,563	1,463,771	0	0	89,794	27,613	60,330	18,128	405,706	185,581	97,405	44,201	5,989,205	2,303,645	100,158	179,670	66,773
Nov-03	1,557,909	494,862	2,761,725	1,224,630	0	0	71,696	23,135	48,281	15,342	269,032	133,135	61,295	30,610	4,769,938	1,921,714	96,086	179,704	69,197

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Annexure 7.2: Business Growth of Derivatives Segment

Month/ Year	Index Futures		Stock Futures		Interest Rate Futures		Index Options				Stock Option				Total		Average Daily Turnover (Rs. mn.)	Open Interest at the end of	
							Call		Put		Call		Put						
	No. of Contracts Traded	Turnover (Rs.mn.)	No. of Contracts Traded	Turnover (Rs. mn.)	No. of Contracts Traded	Trading Value (Rs. mn.)	No. of Contracts Traded	Notional Turnover (Rs. mn.)	No. of Contracts Traded	Notional Turnover (Rs. mn.)	No. of Contracts Traded	Notional Turnover (Rs. mn.)	No. of Contracts Traded	Notional Turnover (Rs. mn.)	No. of Contracts Traded	Turnover (Rs. mn.)		No. of Contracts	Turnover (Rs. mn.)
Dec-03	1,875,468	653,777	3,334,468	1,509,326	0	0	87,683	31,002	68,394	23,552	294,596	140,951	63,426	30,460	5,724,035	2,389,067	108,594	230,109	100,038
Jan-04	2,611,649	998,776	3,791,114	1,957,883	0	0	105,431	41,204	72,869	27,929	327,135	178,041	67,825	36,797	6,976,023	3,240,630	154,316	182,708	76,158
Feb-04	2,339,950	863,590	2,868,432	1,614,639	0	0	98,938	37,536	74,933	27,912	238,517	138,731	75,771	45,984	5,696,541	2,728,392	143,600	166,794	70,504
Mar-04	2,505,102	887,101	3,777,206	1,442,431	0	0	132,352	48,115	92,364	33,567	367,722	143,090	131,874	50,509	7,006,620	2,604,813	118,401	235,792	71,876
2003-04	**17,191,668**	**5,544,625**	**32,368,842**	**13,059,493**	**10,781**	**2,022**	**1,043,894**	**318,011**	**688,520**	**210,222**	**4,248,149**	**1,681,736**	**1,334,922**	**490,384**	**56,886,776**	**21,306,492**	**83,884**	**235,792**	**71,876**
Apr-04	2,164,528	795,603	3,829,403	1,210,478	0	0	115,378	43,469	80,733	29,681	292,628	96,401	85,998	27,363	6,568,668	2,202,995	110,150	249,845	76,677
May-04	2,551,985	821,494	3,322,799	926,276	0	0	196,198	68,238	100,430	34,689	246,630	77,171	63,156	19,762	6,481,198	1,947,629	92,744	179,487	46,958
Jun-04	2,152,644	640,171	3,125,283	783,916	0	0	158,784	49,141	117,041	35,589	193,687	53,395	75,380	20,843	5,822,819	1,583,055	71,957	201,871	53,673
Jul-04	1,971,231	611,250	3,492,774	940,092	0	0	189,179	60,590	124,352	38,561	262,755	76,138	94,222	26,823	6,134,513	1,753,454	79,702	206,709	59,639
Aug-04	1,803,263	579,263	3,577,911	995,909	0	0	127,779	41,921	98,618	31,927	284,013	84,991	86,919	26,044	5,978,503	1,760,057	80,003	261,185	73,317
Sep-04	1,463,682	495,001	3,768,178	1,071,234	0	0	124,547	42,825	93,808	31,642	365,187	107,626	116,304	35,469	5,931,706	1,783,796	81,082	446,299	133,535
Oct-04	1,320,173	471,906	3,660,047	1,116,951	0	0	138,099	50,298	97,628	35,003	357,625	116,838	93,342	31,241	5,666,914	1,822,237	91,112	321,545	98,451
Nov-04	1,023,111	382,770	3,600,135	1,135,246	0	0	131,218	49,794	102,223	38,135	363,158	119,710	94,810	32,390	5,314,655	1,758,045	87,902	371,842	122,392
Dec-04	1,447,464	583,330	5,238,498	1,793,867	0	0	130,557	53,553	108,650	43,561	481,349	169,515	108,951	38,449	7,515,469	2,682,275	116,621	426,606	152,211
Jan-05	1,931,290	761,508	4,551,564	1,595,642	0	0	176,682	71,877	143,416	57,857	362,345	135,017	81,618	30,998	7,246,915	2,652,899	139,626	388,354	136,037
Feb-05	1,729,103	715,456	4,167,787	1,517,428	0	0	168,594	71,280	144,627	59,982	367,707	138,902	83,843	32,465	6,661,661	2,535,514	126,776	404,809	149,005
Mar-05	2,076,975	863,983	4,708,687	1,753,635	0	0	213,632	90,743	211,385	89,179	369,895	144,955	113,590	46,075	7,694,164	2,988,571	135,844	592,646	210,523
2004-05	**21,635,449**	**7,721,735**	**47,043,066**	**14,840,674**	**0**	**0**	**1,870,647**	**693,729**	**1,422,911**	**525,807**	**3,946,979**	**1,320,660**	**1,098,133**	**367,921**	**77,017,185**	**25,470,526**	**100,674**	**592,646**	**210,523**
Apr-05	3,332,361	655,981	4,225,623	1,061,289	0	0	361,544	72,946	295,020	59,805	307,994	82,032	105,955	27,638	8,628,497	1,959,690	97,984	576,056	122,430
May-05	3,545,971	704,653	4,466,404	1,128,823	0	0	382,530	77,258	353,975	70,560	288,137	76,415	100,602	26,094	9,137,619	2,083,803	94,718	670,705	158,634
Jun-05	3,626,288	772,182	5,783,428	1,630,956	0	0	421,480	90,919	331,753	70,413	385,640	116,772	104,478	31,220	10,653,067	2,712,461	117,933	997,984	245,448
Jul-05	3,451,684	773,987	6,537,794	1,996,376	0	0	358,867	81,297	389,154	86,423	376,129	117,352	84,989	26,227	11,198,617	3,081,662	154,083	1,024,749	271,976
Aug-05	4,278,829	1,008,132	7,124,266	2,348,166	0	0	444,294	106,199	485,001	113,723	350,370	119,352	81,453	27,502	12,764,213	3,723,073	169,231	892,678	247,879
Sep-05	4,701,774	1,189,051	6,995,169	2,369,450	0	0	523,948	133,697	583,081	145,498	363,872	129,171	85,897	30,695	13,253,741	3,997,562	190,360	783,718	230,629
Oct-05	6,849,732	1,701,003	6,526,919	2,143,982	0	0	695,311	176,322	715,208	179,542	309,120	107,530	80,134	28,222	15,176,424	4,336,601	216,830	803,773	210,831
Nov-05	5,238,175	1,354,777	6,252,736	2,165,257	0	0	595,900	155,818	604,657	154,908	287,136	100,691	77,052	27,077	13,055,656	3,958,528	197,926	821,223	241,655
Dec-05	6,613,032	1,832,931	7,571,377	2,802,833	0	0	775,216	218,616	764,964	211,253	361,268	136,301	95,261	36,140	16,181,118	5,238,073	238,094	808,768	253,231
Jan-06	5,760,999	1,661,273	7,134,199	2,650,419	0	0	663,684	193,916	666,782	191,294	365,493	142,648	90,562	36,287	14,681,719	4,875,837	243,792	925,680	300,780
Feb-06	5,186,835	1,563,590	7,443,178	2,887,148	0	0	506,714	155,261	559,682	168,049	326,233	123,502	75,740	29,175	14,098,382	4,926,724	259,301	1,023,343	344,001
Mar-06	5,952,206	1,920,348	10,844,400	4,732,507	0	0	683,979	224,068	772,372	246,904	444,604	185,759	92,657	38,903	18,790,218	7,348,489	334,022	1,028,003	384,695
2005-06	**58,537,886**	**15,137,907**	**80,905,493**	**27,917,206**	**0**	**0**	**6,413,467**	**1,686,317**	**6,521,649**	**1,698,371**	**4,165,996**	**1,437,524**	**1,074,780**	**365,178**	**157,619,271**	**48,242,504**	**192,201**	**1,028,003**	**384,695**

Note:

1. Notional Turnover = (Strike Price + Premium) * Quantity.
2. Index Futures, Index Options, Stock Options and Stock Futures were introduced in June 2000, June 2001, July 2001 and November 2001, respectively.

Knowledge Initiatives

Several initiatives have been taken over the last few years with a view to develop the skills of market intermediaries, educate the investors and promote high quality research in the securities market. In order to further improve the skills and widen the knowledge base of people involved in the securities market, SEBI has set up the National Institute of Securities Markets (NISM). NISM would design and implement the entire gamut of educational initiatives, including education, training, certification, research and consultancy in the area of securities market and allied subjects for securities market professionals in India and neighboring countries.

Quality Intermediation

In some of the developed and developing markets, there is a system of testing and certification for persons joining market intermediaries. This ensures that these personnel have a minimum required knowledge about the market and the existing regulations. The benefits of this system are wide spread. While the intermediaries are assured of qualified staff, the employees get an opportunity to improve their career prospects. This in turn instills confidence in the investors to be associated with the securities market.

The formal educational or training programme on securities markets is not adequate to cover their areas of operations. For instance, no academic course teaches how to maintain depository accounts or to sell mutual fund products, issue contract notes or clear and settle trades on a stock exchange. As a result, a need for certification was being increasingly felt by the regulators as well as by the securities industry.

NSE's Certification in Financial Markets

National Stock Exchange's Certification in Financial Markets (NCFM), a testing and certification mechanism, has become extremely popular and is sought after by the candidates as well as employers due to its unique on-line testing and certification programme. It offers all the certifications mandated by SEBI, NSDL, AMFI, FIMMDA and NSE itself. The entire process from generation of question paper, invigilation, testing, assessing, scores reporting and certifying is fully automated-there is absolutely no human intervention. It allows tremendous flexibility in terms of testing centres, dates and timing by providing easy accessibility and convenience to candidates as they can be tested at any time and from any location. The purpose is to test the practical knowledge and skills that are required to operate in the financial markets, in a very secure and unbiased manner.

NCFM offers a comprehensive range of modules covering many different areas in finance. Some of these modules enjoy regulatory and /or industry patronage. More than 3.5 lakh candidates have taken tests of different modules of NCFM as at end October 2006. NCFM currently tests expertise in the modules mentioned below in table 8-1.

Through a system of certification, it can be ensured that intermediation is carried out by trained personnel. This would induce investors to use their services. Industry/SROs/Regulators have made a modest beginning, but adequate attention is not given to this dimension of the market. Though NCFM has been offering a wide range of modules, there is still scope to offer such certifications for each category of intermediary/activity. SEBI also specified certification as a mandatory requirement for all operational level employees for all types of intermediaries. Thus, it is required that all new employees joining the intermediaries and all intermediaries joining the market, should be certified. The employees should also be required to update their skills and expertise by seeking certification at intervals of five years. There should be an arrangement to maintain a database of certified professionals and enforce a code of conduct for them so as to enable prospective employers access the database to meet their personnel requirements. This would enhance the knowledge and skill of the intermediaries (including regulators and SROs), who, in turn, can educate and guide the investors in securities and issuers of securities.

Table 8-1: NCFM currently tests expertise in the following modules

Sl. No.	Name of Modules
1.	Financial Markets: A Beginners' Module
2.	Derivatives Market (Dealers) Module
3.	Capital Market (Dealers) Module
4.	Securities Market (Basic) Module
5.	FIMMDA-NSE Debt Market (Basic) Module
6.	Surveillance in Stock Exchanges Module
7.	NSDL - Depository Operations Module
8.	Commodities Market Module
9.	AMFI - Mutual Fund (Basic) Module
10.	AMFI - Mutual Fund (Advisors) Module
11.	Corporate Governance Module
12.	Compliance Officers (Brokers) Module
13.	Compliance Officers (Corporates) Module
14.	Information Security Auditors Module (Part-1)
	Information Security Auditors Module (Part-2)

Research Initiatives

Knowledge management is very important in today's competitive world. It acts as a tool which helps to acquire the cutting edge in a globalised financial market. The regulators and SROs have been actively promoting academicians and market participants to carry out research about various topics in the various segments of securities market.

NSE Research Initiative

NSE administers a scheme called the NSE Research Initiative. This aims at improving the market efficiency further. The initiative fosters research with a purpose to support and facilitate stock exchanges to design market microstructure, to help participants frame their strategies, assist regulators to frame regulations, and in general to broaden the knowledge horizon of the securities market. The initiative has received tremendous response from the academics as well as the market participants from within and outside the country. The studies completed under the research initiative are presented in Table 8-2.

Table 8-2: Studies under the NSE Research Initiative

Sl. No.	Title of Study
Completed Papers	
1.	Econometric Estimation of Systematic Risk of S&P CNX Nifty Constituents
1	Econometric Estimation of Systematic Risk of S&P CNX Nifty Constituents
2	Stock Market Development and its Impact on the Financing Pattern of the Indian Corporate Sector
3	Efficiency of the Market for Small Stocks
4	Determinants of Financial Performance of Indian Corporate Sector in the Post-Liberalization Era: An Exploratory Study
5	Should pension funds invest in equities? An analysis of risk-return tradeoff and asset allocation decisions
6	Changes in liquidity following exposure to foreign shareholders: The effect of foreign listings, inclusion in country funds and issues of American Depositary Receipts
7	Is the Spread Between E/P Ratio and Interest Rate Informative for Future Movement of Indian Stock Market?
8	Merger Announcements and Insider Trading Activity in India: An Empirical Investigation
9	Achieving an Individual Investor Friendly System using the power of the Internet
10	Improved Techniques for using Monte Carlo in VaR estimation
11	Short selling and its Regulation in India in International Perspective
12	Empirical investigation of multi-factor asset pricing models using Artificial Neural Network
13	Idiosyncratic Factors in Pricing Sovereign Bonds: An Analysis of the Government of India Bond Market
14	The Extreme Value Volatility Estimators and Their Empirical Performance in Indian Capital Markets
15	Equity Market Interlinkages: Transmission of Volatility - A Case Of US and India
16	Institutional Investors and Corporate Governance in India
17	Dividend policy of Indian Corporate Firms : An Analysis of Trends & Determinants
18	Market Microstructure Effects of Transparency of Indian Banks
19	Futures Trading, Information and Spot Price Volatility of NSE-50 Index Futures Contract
20	Measuring productive efficiency of stock exchanges using price adjustment coefficients
21	Do Futures and Options trading increase stock market volatility?
22	Section switching stock market price effect in the Indian capital market and the policy implications thereof
23	Study of Common Stochastic Trend and Co-integration in the Emerging Markets - A case study India, Singapore and Taiwan
24	Market Discipline in the Indian Banking Sector: An Empirical Exploration
25	Conditional CAPM and Cross sectional returns - A study on Indian Securities Market
26	Evaluating index fund implementation in India
27	Measuring Volumes in the Indian Financial Markets Some Terminological and Conceptual Issues

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Table 8-2: Studies under the NSE Research Initiative

Sl. No.	Title of Study
28	Corporate Social Responsibility Initiatives by NSE NIFTY Companies - Content, Implementation Strategies & Impact.
29	Measures for Improving Common Investor Confidence in Indian Primary Market : A Survey
30	Informational Content of Trading Volume And Open Interest – An Empirical Study of Stock Options Market In India
31	An analysis of the Dynamic Relationships Between South Asian and Developed Equity Markets
32	Corporate Governance and Market reactions
33	Insider Ownership, Corporate Governance and Corporate Performance
34	Improving Index Fund Implementation in India
35	Seasoned Capital Offerings: Earnings Management and Long-Run Operating Performance of Indian Firms
36	Volatility Spillovers Across Stock, Call Money And Foreign Exchange Markets
37	Understanding the Microstructure in Indian Markets
38	Price and Volume Effects of S&P CNX Nifty Index Reorganization
39	Lead-Lag relationship between Equities and Stock Index Futures Market and its variation around Information Release: Empirical Evidence from India
40	On The New Transformation-Based Approach To Measuring Value-At-Risk: An Application To Forex Market In India

Data Dissemination

NSE compiles, maintains and disseminates high quality data to market participants, researchers and policy-makers. This acts as a valuable input for formulating strategy, doing research and making policies. NSE has been maintaining the historical database of all the details of every order placed on its trading system and every trade executed. This data is disseminated through monthly CD releases which are priced at a nominal rate. The following information is available on CDs:

- Summary information about each security's high price, low price, closing price and last traded price, turnover (value and volume), and number of trades for each trading day.
- Database of stock market indices computed by IISL. Both intra day and end of day information is available for Nifty, Nifty Junior and Defty.
- Snapshots of limit order book of NSE at different points during a day.
- Database of circulars issued during the month. Every development in the market in terms of market design is documented in these circulars.

Besides, NSE's web-site itself is a storehouse of information.

Investor Protection Fund

Despite the various efforts taken by the regulators and exchange, some problems do arise. A cushion in the form of Investor Protection Funds (IPFs) is set up by the stock exchanges. The purpose of the IPF is to take care of investor claims, which may arise out of non-settlement of obligations by the trading members. The IPF is also used to settle claims of such investors whose trading member has been declared a defaulter. Further, the stock exchanges have been allowed to utilise interest income earned on IPF for investor education, awareness and research.

The Companies Act, 1956 also provides for an Investor Education and Protection Fund (IEPF) to protect the interests of small shareholders. The fund is utilised for conducting direct education programmes, organising seminars, promoting research activities and providing legal assistance to genuine investor litigants through investor grievances forums. The fund is managed by a committee comprising both government and non-government members. The IEPF is constituted from grants received from the government and from the unclaimed dividends, share application money, matured deposits and unclaimed debentures of the corporates.

IEPF provides financial assistance to any organisation/entity/person with a viable project proposal on investors' education and protection. The eligible entities are those registered under the Societies Registration Act or formed as Trusts or incorporated Companies. They should be in existence for a minimum period of 2 years employing a minimum of 20 members and be governed by properly established rules, regulations and or by-laws prior to its date of application for registration. In addition, they should not be a profit making entity. The limit for each entity for assistance would be subject to 5% of the budget of IEPF during that financial year and not exceeding 50% of the amount to be spent on the proposed programme/activity.

NOTES

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